Report of Phase II Environmental Services

Dorothea Dix Campus
Raleigh, North Carolina

Prepared For

City of Raleigh
Raleigh, North Carolina

Prepared By

Duncklee & Dunham, P.C.
Cary, North Carolina

February 28, 2014

DUNCKLEE
& DUNHAM

ENVIRONMENTAL GEOLOGISTS & ENGINEERS
511 KEISLER DRIVE – SUITE 102
CARY, NORTH CAROLINA 27518
OFFICE: (919) 858–9898
WWW.DUNCKLEEDUNHAM.COM

Sent via email: stephen.bentley@raleighnc.gov

February 28, 2014

Mr. Stephen C. Bentley, Superintendent
City of Raleigh Parks, Recreation & Cultural Resources Department
P. O. Box 590
Raleigh, North Carolina 27602-0590

Reference: **Report of Phase II Environmental Services**
Dorothea Dix Campus
Raleigh, North Carolina

Dear Mr. Bentley:

Duncklee & Dunham, P.C. (Duncklee & Dunham) is pleased to submit this *Report of Phase II Environmental Services* for the above-referenced site. We prepared this report in accordance with the scope of work described in our proposal dated November 12, 2013. Our services were authorized under contract Amendment 3 between the City of Raleigh and Duncklee & Dunham, dated January 7, 2014. A remediation cost estimate requested by the City of Raleigh is being submitted under separate cover.

Duncklee & Dunham appreciates the opportunity to be of service to the City of Raleigh. Please contact Daphne Jones at (919) 858-9898 or daphne@dunckleedunham.com if you have any questions or comments.

Sincerely,

Duncklee & Dunham, P.C.

Daphne M. Jones, P.G., R.S.M.
Brownfields Program Manager

David L. Duncklee, P.G., R.S.M.
Senior Hydrogeologist

Senior Peer Review:

Richard A. Kolb, L.G.
Senior Geologist

Attachment: Report

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List of Acronyms

2L	15A NCAC 2L Groundwater Quality Standards
2B	15A NCAC 2B Surface Water Quality Standards
AST	Aboveground Storage Tank
bgs	Below Ground Surface
COC	Constituent of Concern
CCR	Coal Combustion Residue
DENR	North Carolina Department of Environment and Natural Resources
DRO	Diesel Range Organics
EC	Electrical Conductivity
ECD	Electron Capture Detector
ESA	Environmental Site Assessment
FID	Flame Ionization Detector
GPS	Global Positioning System
GRO	Gasoline Range Organics
IASL	Indoor Air Screening Levels (published by IHSB)
IHSB	Inactive Hazardous Sites Branch
IMAC	Interim Maximum Allowable Concentration
"J" Value	Estimated concentration - above MDL but below RDL
MDL	Method Detection Limit
MGP	Manufactured Gas Plant
MIP	Membrane Interface Probe
MSCC	Maximum Soil Contaminant Concentration (UST Section of DENR)
MS/MSD	Matrix Spike/Matrix Spike Duplicate
MTBE	Methyl tert-butyl ether
OVA	Organic Vapor Analyzer
PAH	Polynuclear Aromatic Hydrocarbon
PCE	Tetrachloroethene (also known as perchloroethylene)
PGW	Protection of groundwater (PSRG)
PID	Photoionization Detector
PPM	Priority Pollutant Metals
PSRG	Preliminary Soil Remediation Goal
QA/QC	Quality Assurance/Quality Control
RDL	Reporting Detection Limit
REC	Recognized Environmental Condition
RPD	Relative Percent Difference
SVOCs	Semivolatile Organic Compounds
UST	Underground Storage Tank
TCE	Trichloroethene
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
VOCs	Volatile Organic Compounds
VPH	Volatile Petroleum Hydrocarbons

Executive Summary
Report of Phase II Environmental Services
Dorothea Dix Campus - Raleigh, North Carolina

Duncklee & Dunham conducted an assessment of groundwater, soil, sediment, and surface water at the subject site. We conducted this assessment to address the recognized environmental conditions and environmental concerns identified in our Report of Phase I Environmental Site Assessment (ESA), dated November 15, 2013. The results of our testing were compared to preliminary site remediation goals (PSRGs) published by the North Carolina Department of Environment and Natural Resources, and reviewed to develop a remediation cost estimate to be submitted under separate cover.

Our assessment detected several inorganic compounds in soil at concentrations that exceeded the calculated site background values, protection-of-groundwater PSRGs, residential PSRGs, and industrial/commercial PSRGs. Levels of metals, including either arsenic, antimony, chromium, hexavalent chromium, or thallium, show an elevated concentration pattern near the steam plant, the garage and former MGP area, the rail spur area north of the waste shed, the paint shop, and the former agricultural field west of the railroad tracks.

The groundwater test results for metals found minimal impacts in the areas tested. However, antimony was detected above groundwater standards in three study areas. Chromium and cadmium were found above standards in one well each. Other than those metal exceedances, the test results documented several detections of compounds of concern in soil or groundwater at concentrations that either exceed the PSRGs, or are indicative of a release in a nearby area. These detections include petroleum hydrocarbon releases downgradient of the fueling/garage area, from an underground storage tank at the Williams Building, and a former land application area. Furthermore, based on our professional experience with hydraulic lifts, and the length of time of their operation, Duncklee & Dunham expects there will be releases from some of five hydraulic elevators that were installed before 1972 (Area 14).

With regard to metals that exceed PSRGs in multiple areas across the site, the literature documents numerous trace metals that are associated with coal combustion residues (CCRs). The metals and concentrations depend on the composition of the coal that was burned, but typically include arsenic, beryllium, cadmium, chromium, hexavalent chromium, lead, mercury, selenium and thallium among others. These compounds of concern can also be naturally occurring, from the decomposition of minerals in the bedrock, saprolite and soil layers, although hexavalent chromium is generally not naturally occurring. Before the regulation of air emissions, the burning of coal spread CCR particulates to areas around the smokestacks. Arsenic is associated with agricultural operations and also naturally occurs.

PAHS can also be present in CCRs as well as MGP wastes, diesel fuel, and exhausts from vehicles with diesel engines. Coal was stored historically on the ground in large piles, as documented by aerial photographs in our Phase I ESA report, and leaching of metals from the coal in these piles and downgradient drainages likely occurred.

The activities described in this report represent the results of initial assessment activities and are not comprehensive enough to answer all the questions related to origin of the COCs, especially the metals, which are likely a mixture of both naturally-occurring and anthropogenic origins. We recommend additional evaluation of naturally-occurring background concentrations of metals along with a request to review our site data by the North Carolina Department of Environment and Natural Resources' (DENR's) toxicologist to determine what concentrations are acceptable for different land uses. This determination by DENR's toxicologist will be very important in determining which areas require remediation or capping, whether the property is utilized for commercial/industrial, recreational or residential use.

Report of Phase II Environmental Services
Dorothea Dix Campus
Raleigh, North Carolina
February 28, 2014

1 Introduction

1.1 Site Background

The subject site comprises approximately 275 acres of the Dorothea Dix Campus in Raleigh, Wake County, North Carolina (Figures 1 and 2). The City of Raleigh provided Duncklee & Dunham, P.C. (Duncklee & Dunham) with a map that shows the approximate boundary of the subject site (Figures 1 and 2). Wake County identifies the entire Dorothea Dix site as parcel no. 1703-05-1169 and shows it comprises 536.35 acres. In our *Report of Phase I Environmental Site Assessment* dated November 15, 2013, we identified a number of recognized environmental conditions (RECs) and areas of concern, with the groundwater and soil areas from this investigation noted parenthetically at the end of the area descriptions below. We have included a table at the end of this section that lists the areas tested to use as a reference when reading this document. The RECs we identified are:

- the area around the former location of the manufactured gas plant (MGP) and former power plant, which includes:
  - wastes generated by the MGP **(groundwater Area 17** and **Area 1)** and
  - the former coal pile and the ash that resulted from burning the coal **(Area 1)**
  - the former hydraulic lift and likely use of hazardous substances in the garage **(Area 12)**
- the area around the Hazardous Waste Storage Area **(groundwater Area 16),** which includes:
  - the former storage areas along both sides of the former rail spur **(Area 8)**
  - the current storage area **(Area 10)**
  - the floor drain in the Grounds Shop **(Area 4)**
  - Paint Shop **(Area 11)**
- the area around the Steam Plant (**groundwater Area 18**), which includes:
  - the abandoned transformer area **(Area 9)**
  - the soil-disposal area **(Area 5)**
  - the fuel tank areas **(Area 18 groundwater testing)**
  - the drop inlet with the red liquid **(Area 18 groundwater testing)**
  - the former coal pile and the ash that resulted from burning the coal **(Area 6)**
- the cylinders for the hydraulic elevators in the Dobbin, Haywood, Hoey, Kirby, and Williams buildings, installed before 1972, without secondary containment for the hydraulic cylinders **(Area 14, not tested)**
- the building formerly located in the open field south of the Williams Building; **(Area 2)**
- the USTs not found and the USTs for which we do not have documentation of closure conditions, which includes the active tanks (**Areas 13-A through F, and 13-H through 13-N)**;
- the single-walled underground fuel lines between the ASTs and generators at the McBryde East and Cold Storage buildings **(Area 13-G, 13 O-P);** and
- the landfill area **(groundwater Area 19 and Area 7)**

In addition, Duncklee & Dunham identified the following potential areas of concern in the "Opinions" section of our Phase I report:

- Certain herbicides and pesticides which were common in the past may be found in site soils and/or groundwater due to past agricultural use. The application of pesticides and herbicides in the course of common agricultural practices is typically considered a *de minimis* condition within the context of E-1527-05. However, based on our experience, land in agricultural use over an extended period of time can accumulate contaminants in surficial soil at concentrations that exceed residential- or parkland-use levels established by DENR. **(Area 3).**
- The cloudy water observed near the stormwater outfall along the Norfolk Southern Railroad tracks suggests contaminants may be migrating onto the tracks from the upgradient Steam Plant **(Area 21).**

Duncklee & Dunham did not sample **Area 14** (hydraulic elevators) because of logistical and safety issues. After discussions concerning the drilling logistics and risk of working in confined spaces as well as the possibility of damage that could compromise the use of the elevators, we decided not to test soil in these areas during this scope of work.

Duncklee & Dunham added **Area 15** to establish background concentrations of metals in soil because we tested soil samples for metals in most areas. Based on historical information gathered during the Phase I ESA and site observations, Duncklee & Dunham chose on-site areas for these samples that were not historically agricultural or near areas of potential contaminants.

Area No.	Area Description
1	Former Manufactured Gas Plant and Former Power Plant/Garage Area
2	Possible Agricultural Mixing Area
3	Former Agricultural Fields
4	Former Drain in Grounds Shop
5	Historic Land Farming Area Northeast of Steam Plant
6	Historic Coal Pile Area West of Steam Plant
7	Landfill West of Cemetery
8	Historic Outside Storage Area North of Current Hazardous Waste Storage Area
9	Transformer Storage Area
10	Former Hazardous Waste Storage Area
11	Paint Shop Area
12	Garage – Former Hydraulic Lifts
13	ASTs/USTs Near Back-up Generators
14	Hydraulic Elevators – not tested
15	Background Samples for Metals
16	Groundwater/MIP Samples: Former Hazardous Waste Storage Area (Soil Areas 4, 8, 10, 11)
17	Groundwater/MIP Samples: Former MGP/Power Plant Area (Soil Areas 1, 12)
18	Groundwater/MIP Samples: Steam Plant Area (Soil Areas 5, 6 9)
19	Groundwater Sample: On-site Landfill Area (Soil Area 7)
20	Temporary Well Points During MIP Work (included in Area 18)
21	Stream Samples West of Power Plant.

1.2 Scope of Work

The City of Raleigh (City) contracted with Duncklee & Dunham to conduct a soil, groundwater and stream assessment at the subject site. We conducted the field work detailed in this report or between January 13 and February 26, 2014. Table 1 provides a summary of sample information and includes the sample number, date sampled, and types of laboratory testing for each matrix. We also included a table in Section 2 below that summarizes the scope of work.

1.3 Deviations from Proposal

The following is a list of deviations from the sampling and analysis work plan summarized in Table 1 of our proposal.

- Due to the abundance of subsurface utilities and shallow refusal of the Geoprobe® in Area 1, we collected one soil sample from each of seven different borings, instead of four borings with two samples from each boring.
- We added herbicides to Area 2 after the samples were submitted to the laboratory because inadvertently we had left it off the sampling and analysis plan. ESC provided the herbicide test results in a separate laboratory report.
- We added three sample locations based on field observations and membrane interface probe (MIP) data in Area 5, expanding the initial area. After laboratory test results were reviewed, we remobilized to the site on February 26, 2014 and collected two additional samples in Area 5 to confirm polynuclear aromatic hydrocarbon (PAH) contamination and help provide a better-defined area for soil remediation costs.
- We did not collect a sample near the drop inlet with red fluid next to the Steam Plant due to underground utility considerations (Area 6), and relied on groundwater results from 18-MW-3, which is located downgradient of this location, for evidence of a release.
- Once we discovered the structure used for transformer storage (Area 9) had only one downgradient outlet, we changed the six soil samples to three in native soil outside the structure, and collected two samples of the sediment that had accumulated on top of the concrete pad within the storage area (i.e., five instead of six locations)
- We added a soil boring in Area 12 when we found two hydraulic lifts were previously located in the area where an electric lift is now used.
- We did not collect samples in elevator shafts, as referenced in Section 1.1 (Area 14).
- Based on the MIP work and lack of field-screening evidence of releases of volatile organic compounds (VOCs), we constructed one shallow well in Area 16, instead of the estimated one shallow and one intermediate well.
- In Area 17, we constructed four shallow monitoring wells instead of three.
- We were not able to advance the Geoprobe/MIP in many locations in Area 17 due to shallow bedrock. Based on low MIP readings from Areas 18 and 19, we reduced the MIP work from five to three days. We obtained data from 12 MIP locations instead of the 18 estimated, and both MIP logs in Area 17 were shallow (8 and 11.5 feet deep).

- We rented a mercury vapor analyzer with lower detection limits (2 ng/m3) than originally anticipated in order to meet the IHSB residential screening concentrations for mercury vapor in indoor air (62.5 ng/m3).
- We added testing for hexavalent chromium for one or two of the soil samples collected for each area with the highest concentrations of total chromium, which was not in our original work scope. When total chromium is detected, generally it exceeds the residential PSRG for hexavalent chromium.
- We re-sampled Area 15-HA-D because it was a background location but the soil samples at both depths exhibited hexavalent chromium.
- We collected additional QA/QC samples - soil duplicate (DUP-5) and equipment blank (EB-5) - based on additional days of sample collection.
- We constructed and sampled only one temporary well point instead of three estimated in our proposal.

1.4 Previous Investigations

Duncklee & Dunham prepared a Phase I report for the site on behalf of the City of Raleigh. Prior to the Phase I, environmental work conducted at this site was either related to releases from underground storage tanks (USTs) and aboveground storage tanks (ASTs), or to the former Raleigh solid waste landfill area associated with the soccer fields adjacent to the north. No previous site-wide investigation was reported. Refer to Section 5.1/Appendix C of the Phase I report for a summary of the information and copies of documents from regulatory files.

2 Methodology

We conducted field work between January 13 and February 26, 2014. The following table summarizes the work we conducted, the equipment we used, and the samples we collected, but excludes field duplicate and equipment blank samples that we collected for quality assurance/quality control (QA/QC) purposes. The sample locations are shown on Figure 3. Because these areas overlap, we didn't provide a figure with the area identified. However, the reader can determine the areas by the sample locations depicted on Figure 3; the areas (1 - 21) comprise the first part of each sample location.

We also provide smaller figures that cover one or more areas where soil samples were collected, and in the corresponding groundwater monitoring points where applicable. These are provided as Figures 4a (Areas 1 and 12 soil locations), Figure 4b (Area 17 groundwater locations); Figure 4c (Area 17 potentiometric map), Figure 5 (Areas 2 and 3 soil locations), Figure 6a (Areas 4, 8, 10 and 11 soil locations), Figure 6b (Area 16 groundwater monitoring locations), Figure 7a (Areas 5, 6 and 9 soil samples), Figure 7b (Area 18 groundwater locations), Figure 8 (Areas 7 and 19 soil locations), Figure 9 (stream surface water and sediment sample locations) and Figure 10 (Areas 13 and 15 soil locations).

Dates Work Conducted (2014)	Task Description/Equipment	Soil Borings	Hand Augers Locations	Soil Samples	MIP Locations	Temporary Monitoring Wells	Permanent Monitoring Wells	Surface Water/ Sediment
January 13-15	Membrane interface probe locations (Columbia Technologies) advanced with Geologic Exploration 7822DT Geoprobe®				13*			
	Private Utility Location – Stewart Engineering	X			X	X	X	
January 13-17	Quantex 7822DT Geoprobe®	32		33		1	1	
January 13-17	Hand augering		30	36				
January 16	Stream Sampling							6
January 16-17	Geologic Exploration 7822DT Geoprobe®	4		5			3	
January 17	Quantex 540DT Geoprobe®	4		4				
January 20-23	Geologic Exploration DrillMax 2400 Combination Rig						5	
January 20-21	Geologic Exploration 6620 DT Geoprobe®	8		8			1	
January 27	Developed monitoring wells						10	
January 31, February 2	Sampled monitoring wells							
February 5	Re-sampled 16-HA-D Area		1	2				
February 26	Sampled two additional locations for SVOCs in Area 5		2	2				
Total Samples/Data Logs Collected		48	33	87	12	1	10	6

* Of the three locations in Area 17, only two MIP logs were obtained, with Geoprobe refusals at 8 and 12 feet. Quantex also conducted two half-days of air knifing on January 15-16 to clear subsurface utilities for soil boring in Area 1 and for monitoring wells in Area 17. Quantex cleared four locations to five feet, and another five did not clear due to subsurface obstructions.

Duncklee & Dunham described the lithologies of the soil borings and hand auger locations. The lithologic descriptions of the borings are provided in Appendix A.

2.1 Membrane Interface Probe Survey

On January 13-15, 2014 Geologic Exploration, Inc. (Geologic) and Columbia Technologies (Columbia), under contract to Duncklee & Dunham, used a track-mounted 7728DT Geoprobe® to advance Columbia's membrane interface probe (MIP) at 12 locations in the three main areas of concern. The MIP locations are represented by the cyan-colored circles on Figure 3 and are as follows:

- **Area 16:** Former outdoor storage areas along a former railroad spur line that led south off the main rail line and over the present-day hazardous waste storage shed. The MIP was able to penetrate depths from 33 to 39 feet below ground surface (bgs) at locations 17-MIP-01 through 17-MIP-05.

- **Area 17:** Near the former locations of the MGP (present-day location of the kitchen) and power plant (present-day location of the Garage). After attempts were made at three locations to advance the MIP at 17-MIP-01 (no penetration), we obtained MIP information at two locations, but met refusal at 8 and 11.5 feet for 17-MIP-02 and 17-MIP-03, respectively.

- **Area 18:** Near the current steam plant. The MIP was able to reach depths from 25 to 45 feet bgs at locations 18-MIP-01 through 18-MIP-05.

The MIP down-hole probe is fitted with three detectors. These probes detect certain volatile compounds of petroleum hydrocarbon and chlorinated solvents. A photoionization detector (PID) detects aromatics such as benzene, toluene and xylenes plus chlorinated compounds with double-bonded carbons such as trichloroethene (TCE) and tetrachloroethene (also called perchloroethene or PCE), and a flame ionization detector (FID) is used to detect petroleum hydrocarbons and an electron capture detector (ECD) that is very sensitive for common contaminants of concern (COCs) such as TCE or PCE.

Other parameters measured by the MIP include electrical conductivity (EC) and temperature. Lower conductivities are typically indicative of coarser-grained particles such as sands and silty sands, and higher conductivities are indicative of finer- grained particles such as clays and silty clays. Temperature data are used to ensure the probe is kept within a range sufficient to volatilize the VOCs with which the system contacts.

2.2 Soil Sampling

Duncklee & Dunham used Quantex, Inc. (Quantex) for most of the soil borings advanced during the first week of field work, using both a 7822DT Geoprobe® track-mounted drill rig (Photo 1 in Appendix B), and a 540DT for areas that were too small for the larger rig (Photo 2). Quantex advanced the soil borings at five-foot intervals. Stephen Keener (License No. A3468) was the driller that operated the 7822DT rig, and J.D. Barker (License No. 2106) operated the 540DT rig. Kenny Sargent (License 4226-A) of Geologic operated the 7822DT Geoprobe® and Donny Summers (License 2579-A) of Geologic operated the 6620DT Geoprobe ®. Quantex and Geologic used new acetate sleeves for each 5-foot soil boring collected.

Duncklee & Dunham uses stainless steel spoons to collect soil samples directly from the new acetate liners changed each time in the core barrel (Photo 3). We tested for different parameters in different areas, so we have listed what was tested in each area in the notes at the bottom of the table for each area. Duncklee & Dunham generally screened soil samples from each boring with an organic vapor analyzer

(OVA) with a PID and/or FID detector before the final we determined the sample interval for the sample to test in the laboratory. Our field staff also utilized visual and olfactory observations. When we found no evidence of a release, we determined the depth of the sample based on where the release likely occurred – surface or subsurface.

Duncklee & Dunham personnel collected a number of shallow soil samples using a hand auger at pre-determined depths. We decontaminated the hand auger in between each sample collected.

2.3 Stream Sampling

The stream we sampled is an unnamed tributary of Walnut Creek, which is a Class C stream located offsite to the south. This tributary is fed by surficial runoff, and at the subject site concrete pipes discharge stormwater on the eastern side of the active rail line. It would be ideal to sample the stream further upstream, but in this case the stream doesn't extend further northward.

The three stream-sampling locations, depicted in Figure 9, were located: 1) just south of the northernmost discharge pipe on the eastern side of the railroad tracks (Area 21 C, Photo 4), 2) on the western side of the railroad tracks after the stream discharges from the pipe that is submerged beneath railroad tracks, just west of the northern end of the wood chip canopy (Area 21B, Photo 5), and 3) to the south, after the engineered stream discharges again from a concrete pipe into a natural drainage feature just east of buildings located at the northeastern side of the farmer's market (Area 21A). We collected the samples from downstream (near the farmer's market) to upstream (near the stormwater discharge pipe).

We collected the VOC samples first, filling the sample vials by submerging them below the air-surface water interface. We subsequently collected the bottles required for testing for semivolatile organic compounds (SVOCs) and Priority Pollutant metals (PPMs).

After we collected a surface-water sample, we used a pre-cleaned stainless steel scoop to collect sediment beneath the surface water-sediment interface. We collected the VOC samples first using a Terra Core sampler to take approximately 5 grams of sample that we placed in pre-weighed vials that contained a preservative of either sodium bisulfate or methanol. We filled the remaining jars for the additional tests -- SVOCs, PPM, organochlorine pesticides, and PCBs -- using the sediment collected in the scoop, draining out as much water as possible out of the side of the scoop and then the sample jars prior to sealing them. We noted the sediment was comprised of medium- to coarse sand, with very little silt and clay.

2.4 Monitoring Well Construction and Groundwater Sampling

Four different drill rigs were used to construct the monitoring wells. The Geoprobes utilized augers with outside diameters between 7.25 and 8.25 inches. We provided the driller/rig information in the boring logs provided in Appendix A. Once we established the depth to the water table, the driller attached two pre-packed screens, each five feet long, to the Schedule 40 PVC casing, lowered the casing and screens into the interior of the augers, and filled the void space around the pre-packed screens with #2 silica sand. Duncklee & Dunham uses pre-packed screens when metals are target analytes to reduce turbidity and provide samples more representative of the aquifer. Once the augers were removed, the drillers used additional sand to fill in the void space left by the auger. The drillers placed at least two feet of bentonite pellets above the top of the screen, used a slurry grout to fill the borehole until about a foot bgs, and then constructed a flush-mounted well vault to complete the well construction. Photos 6-8 provide photos of

the two Geologic Geoprobe® drill rigs used for monitoring well construction. The drillers provided the well construction records, which are included in Appendix C.

Nicholas Hayes (A-4121) was Geologic's driller for the Drill Max 2400 combination truck-mounted drill rig that we used to construct the monitoring wells where the borings encountered shallow bedrock. We used this rig with a six-inch air hammer to construct all four wells in Area 17 and 18-MW-4. Several of the monitoring wells constructed with air hammer drilling are depicted in Photos 9-14.

Quantex encountered landfill debris in the boring advanced for the construction of 19-MW-1, to the northwest of the cemetery. The landfill map we used depicts a strip of native soil material between the landfill and the cemetery, and the driller moved to several locations without success in attempts to avoid landfill material (Photos 15-17). During the construction of this well, we detected the release of methane from the borehole, and we stopped drilling operations until the next day. Duncklee & Dunham brought a Q-RAE multi-gas explosimeter to monitoring readings around the borehole/breathing space the next day. The drillers were able to complete the well without incidence; the landfill layer extending between 4 and 24 feet bgs.

Duncklee & Dunham developed the monitoring wells on January 27, 2014 by surging and pumping until the purge water was clear and turbidity readings were low. We discharged the development and purge water to 55-gallon drums. On January 31, 2014, Duncklee & Dunham removed the well caps to allow the water table to equilibrate before we measured depths to the water table to the nearest 0.01 foot. We used low-flow sampling techniques to collect groundwater samples on January 31 and February 3, 2014. We used a submersible pump with a low-flow controller and new polyethylene tubing at each well.

We discharged groundwater directly from the tubing into the laboratory-provided bottles for testing, and collected the samples to be tested for VOCs first, followed by the samples to be tested for SVOCs and metals. We logged the samples on a chain-of-custody form, placed the containers on ice in a cooler, and delivered the cooler under chain of custody to the courier from our contracted laboratory, Environmental Science Corporation (ESC), a laboratory certified by DENR (certification no. 375).

During the field work, the equipment and trucks created numerous ruts in the soft soil, with an example provided in Photo 18. Duncklee & Dunham contracted with Ayers Landscaping to repair the areas.

2.5 Mercury Vapor Survey

Duncklee & Dunham conducted a vapor survey for mercury in selected areas of the Hargrove and McBryde East buildings on January 15, 2014. We utilized a Lumex Model 915 mercury vapor analyzer to measure mercury vapor concentrations, averaged every 10 seconds. This analyzer uses proven interference-free Zeeman-Atomic Absorption technology with a detection limit of 2 ng/m^3.

2.6 Quality Assurance/Quality Control

Duncklee & Dunham collected the following samples for QA/QC purposes:

- four soil, one surface water and one groundwater field duplicate;
- five soil, one sediment and two groundwater equipment blanks; and

- nine trip blanks that travelled from and back to the lab with samples being tested for VOCs. Trip blank results did not require tabulation and are reviewed in Section 3.6 below.

ESC prepared trip blanks that were shipped from and to their lab with the sample containers. Duncklee & Dunham specified trip blanks to be tested when the corresponding samples were also tested for VOCs. We collected equipment blanks by pouring laboratory-supplied deionized water over field-decontaminated sampling equipment, in this case stainless steel spoon, the hand auger, sediment scoops and the submersible pump. ESC tested equipment blanks for the same COCs collected in samples from that area. Field duplicates are collected at the same time as the sample in separate containers.

The laboratory reports are included in Appendix D. The results of testing the soil, groundwater and QA/QC samples are reviewed in Section 3.

2.7 Analytical Services

ESC provided the analytical services for this project. For non-petroleum sampling and testing methodologies, Duncklee & Dunham followed *Sampling and Analytical Procedures for the Remedial Investigation* in Appendix A of the *Inactive Hazardous Sites Program Guidelines for Assessment and Cleanup* (January 2014). For sampling associated with USTs/ASTs (Area 13) and hydraulic lifts (Area 12), we used soil testing methodologies that followed Table 3 of the UST Section *Guidelines for Assessment and Corrective Action for UST Releases* (December 2013) and *Guidelines for Initial Response and Abatement, Assessment, and Corrective Action for Non-UST Releases of Petroleum* (July 2012). Laboratory test methods used are referenced in Table 1.

3 Results

3.1 MIP Results

Columbia Technologies prepared a report entitled *Subsurface Characterization MIP and Soil Electrical Conductivity (EC) Technologies*, Former Dorothea Dix Hospital, Raleigh, North Carolina, dated February 14, 2014, which is included as Appendix E. Responses from the PID, FID and ECD curves were generally low, although in a few cases small peaks were observed at the same depth, which generally points towards the presence of a volatile contaminant (e.g. 7 feet in 17-MIP-02, and 21 feet in 18-MIP-04).

The MIP data showed no evidence of large-magnitude contaminant plumes in shallow groundwater, which allowed for the elimination of several monitoring wells from the work plan. The data did show a trace of a likely petroleum-hydrocarbon VOC contaminant in soil gas downgradient of the current fuel storage area.

3.2 Soil Results

3.2.1 Background Determination for Metals

To determine the background concentrations of metals in soil, we collected samples from five locations using the procedures in Section A.5.1.3 of the IHSB *Guidelines for Assessment and Cleanup.* Duncklee & Dunham chose on-site areas that had not been used for agricultural purposes or were not near areas of potential contaminants based on historical information gathered during our Phase I ESA. We collected soil samples with a hand auger at depths between 6-12 inches bgs for the surficial interval. We collected samples from the same locations at an interval of 24-30 inches to represent background concentrations below the surficial interval. Using the test results, we calculated the mean concentration of PPM for the 6- to 12-inch and 24- to 30-inch intervals in accordance with EPA guidelines. When the metal concentration was below the method detection limit (MDL), we assumed its value to be one-half the detection limit. Table 15 presents the background test results and calculations of the means for each metal at the two depth intervals.

The mean concentration of each metal is also provided in the soil results table for each study area (Tables 2 through 15) when a detection of that metal was reported by the laboratory. We also provided the results of other analytical tests (VOCs or SVOCs, for example) and the PSRG levels established by the IHSB for industrial, residential, and soil to groundwater scenarios in these tables.

Values in the background table are shaded when the detected level exceeds one or more of the PSRG values. If a metal concentration in a sample is below the mean concentration for that metal in the site background samples, we did not identify it as an exceedance of the PSRG concentrations. After we compared the individual background sample results to the mean concentrations, a number of samples exceed one or more PSRGs - arsenic (five samples), hexavalent chromium (four samples), and thallium (one sample).

3.2.2 Discussion of Soil Data

The soil results are summarized by each investigated area in Tables 2 through 14. Each table lists the organic and inorganic compounds detected in each study area. Figures supplement the tables to illustrate the results that exceed PSRG(s) in the study areas. Each table provides the concentrations of contaminants detected by the laboratory that exceed PSRGs, which are also shown on Figures 4a (Areas 1 and 12), Figure 5 (Areas 2 and 3), Figure 6a (Areas 4, 8, 10 and 11), Figure 7a (Areas 5, 6 and 9), Figure 8 (Areas 7 and 19) and Figure 10 (Areas 13 and 15).

Test results showed six samples (one each in Areas 1, 8, and 13 and three in Area 5) exhibited semivolatile PAHs at concentrations that exceed one or more PSRGs or maximum soil contaminant concentrations (MSCCs) published by DENR's UST Section. The highest levels of PAHs were found in shallow soil in the former land application area to the northeast of the steam plant. Otherwise, PAHs were found in soil next to the current fuel storage area at the garage, along the former rail spur line northeast of the waste storage shed, and at the backup generator UST at the Williams building, which contained petroleum hydrocarbons that also exceeded the action level for total petroleumhydrocarbons-diesel range organics (TPH-DRO) and one MSCC.

Otherwise, the COCs that were detected at concentrations that consistently exceeded PSRGs in soil were metals - arsenic, antimony, chromium, hexavalent chromium, and thallium. Of these, arsenic was the most prevalent and was detected consistently at concentrations that exceed the background mean we calculated and the residential and industrial/commercial PSRGs in shallow and deeper soil samples. ESC detected the highest concentrations of arsenic in soil samples collected in the central portion of the site, along the rail spur formerly northeast of the hazardous waste storage shed, and in the former agricultural areas. Generally, lower concentrations of arsenic were found to the eastern and western ends of the site.

We did not detect antimony in soil at concentrations that exceeded the industrial PSRG. We discovered locations where antimony concentrations in soil samples that exceeded protection of groundwater (PGW) and residential PSRGs are similar to those for arsenic -- in the central portion of the site, along the rail spur formerly northeast of the hazardous waste storage shed, and in the former agricultural areas. ESC did not detect antimony at concentrations that exceeded the PGW or residential PSRG towards the southern end of the site.

The samples that exhibited thallium at concentrations that exceeded the industrial PSRG were located in the central and northern portion of the site. We noted thallium concentrations that exceed the industrial PSRGs in each sample around the perimeter of the paint shop. Samples that exhibited thallium at concentrations that exceeded the residential PSRG were clustered around the steam plant, in a stream sample which receives runoff from the steam plant area, and in a former agricultural area just west of the railroad tracks in the same area.

As we received the results of testing for total chromium from ESC, we requested they test for hexavalent chromium one or two of the samples from each area with the highest total chromium results. Total chromium is naturally occurring whereas hexavalent chromium is generally related to anthropogenic activity. The chromium results for the entire site are provided in Table 16 and are summarized as follows:

- All the hexavalent chromium results, when detected in soil samples, exceeded the residential PSRG.
- In most areas, we did not see a clear correlation in site data between elevated concentrations of total chromium and hexavalent chromium. However, we noted a pattern of elevated concentrations of hexavalent chromium in the soil samples collected around the steam plant. The two soil samples from Area 6 (Historic Coal Pile) that exhibited total chromium concentrations of 47 and 50 mg/kg both exhibited detectable concentrations of hexavalent chromium.
- Only one groundwater sample, from monitoring well 16-MW-1, exhibited total chromium at a concentration that exceeded the North Carolina groundwater quality standard in 15A NCAC 2L .0202. However, soil samples collected from the area around this monitoring well did not exhibit a pattern of elevated concentrations of hexavalent chromium.

3.3 Stream Results

Stream results are presented in Table 17 and Figure 9. Duncklee & Dunham collected samples from the downstream location (A) to the upstream location (C). The sediment sample collected from Area 21C, the headwater of the stream, exhibited three metals -- arsenic, lead and thallium -- at concentrations that exceed the respective PSRGs. The upstream sediment sample exhibited arsenic, copper, total chromium,

and lead at concentrations that exceeded the EPA Region 4 sediment screening concentrations that take into account toxicity effects on aquatic biota.

The cadmium concentration in the surface water collected at 21-SW-B exceeded both the surface water quality standard established in 15A NCAC 2B (the 2B standards) and the groundwater quality standards established in 15A NCAC 2L (the 2L standards), but the duplicate sample collected from the same location, DUP-SW, did not. ESC detected lead in low concentrations in all the surface water samples collected and also detected zinc in 21-SW-C, but the concentrations detected did not exceed the 2B standards or EPA Criteria screening concentrations. The surface water/sediment samples we collected furthest downstream (21-A) location did not exhibit concentrations that exceed the 2B standards or any PSRGs.

3.4 Groundwater Results

The groundwater test results are summarized in Table 20 and on Figures 6b, 7b and 8. In general, we found groundwater contamination in the areas tested was minimal. However, ESC detected antimony at concentrations that exceeded the 2L standard in a sample from one well in Area 16, samples from four wells in Area 17, and a sample from one well in Area 18. Groundwater from one well in Area 16 exhibited chromium at a concentration that exceeded the 2L standard and groundwater from one well in Area 17 exhibited cadmium at a concentration that exceeded the 2L standard. ESC detected a low concentration of the gasoline oxygenate methyl tert-butyl ether (MTBE) in a groundwater from a well downgradient of the garage and vehicle fueling area, but the concentration detected did not exceed the 2L standard.

3.4.1 Metals in Groundwater

ESC detected antimony at a concentration that exceeded the interim maximum allowable concentration (IMAC) in groundwater samples collected from the five wells in Areas 16 and 17 and from the sample collected from 18-MW-4. The Director of the Division of Water Resources may establish IMACs for substances for which a standard has not been promulgated. An IMAC is enforceable as a groundwater quality standard. IMACs are reviewed on a triennial basis to determine if they will be made 2L standards, with or without modification. ESC also detected antimony at concentrations between the method detection limit and reported detection limit, and was reported by ESC as a J value to show it is an estimated concentration. The concentrations detected in the samples from these six wells exceed the IMAC. The antimony concentrations detected in the remaining four samples are estimates and did not exceed the IMAC. Only two of the seven soil samples collected in Area 1, which correlates to groundwater Area 17, exhibited antimony at concentrations that exceeded the PSRGs. The soil samples collected in Areas 8, 10 and 11, which correspond to groundwater samples collected in Area 16, exhibited elevated concentrations of antimony in soil. The 2L standard/IMAC for antimony is the lowest, at 1 µg/L, of the Priority Pollutant metals.

ESC detected chromium at a concentration that exceeded the 2L standard in the groundwater sample collected from 16-MW-1. Chromium concentrations did not exceed twice the mean background concentration in the nine soil samples collected from Areas 8 and 10, but were greater than twice the mean background concentration in two soil samples and a duplicate in Area 11 (paint shop), located upgradient of 16-MW-1. ESC detected chromium at J-value concentrations in samples from one well in Area 17 and two wells in Area 18.

ESC detected cadmium at J value concentrations in groundwater samples collected from Areas 16, 17 and 19. The concentration detected in the sample from 17-MW-2 exceeded the 2L standard but was a J value.

3.4.2 VOCs in Groundwater

ESC detected MTBE in the sample from one well in Area 17 at a concentration that did not exceed the 2L standard. MTBE is more soluble and mobile than the other constituents of gasoline. In this general area, the MIP detected soil gas and a soil sample that exhibited PAHs, which suggests a release of petroleum hydrocarbons to soil and groundwater has occurred.

ESC detected several VOCs in the groundwater sample collected from 19-MW-1, near the cemetery, but the concentrations were mainly petroleum-related and did not exceed the 2L standards.

ESC detected chloroform, a disinfection byproduct associated with chlorination of public-water supplies, in the samples from all four Area 17 wells and from the sample from one well in Area 18, but the concentrations did not exceed the 2L standard. The presence of chloroform likely points towards a leaking public-water supply line. Acetone was present in groundwater samples collected in all three areas, but below RDLs. Acetone is a common laboratory contaminant and was also detected in several of the trip blanks at similar concentration.

3.4.3 SVOCs in Groundwater

ESC detected phthalates and acetone at J-value concentrations in the groundwater samples collected from all four areas. Duncklee & Dunham considers the phthalates, which are common in plasticizers, as laboratory artifacts, based on the observation that these COCs were also detected at similar concentrations in equipment blanks collected from different types of equipment, even though phthalates were not detected in the soil samples where the equipment blanks were collected.

3.4.4. Groundwater Flow

Duncklee & Dunham prepared localized potentiometric maps for Areas 17 and 18 (Figures 4c and 7c) and a potentiometric map for the entire site (Figure 11) based on the depths to the water table collected on January 31, 2013, prior to collecting groundwater samples. The localized direction of groundwater flow of the surficial water table on the site is generally towards the railroad tracks and drainage feature, and mimics surficial topography. Groundwater gradients are steeper on the eastern side of the railroad tracks than the western side.

3.5 Sample Locations

Taylor Wiseman Taylor, a surveying firm licensed in North Carolina (# F-0362), surveyed the elevations and locations of the monitoring wells on January 31, 2014 relative to mean sea level (Appendix E). Table 19 shows the elevations of the top-of-casing measuring points and surface elevations of the wells, and the groundwater field parameters. On January 31, 2014, Duncklee & Dunham personnel collected locations of staked soil and MIP locations using a Trimball Geoexplorer 2008 Series hand-held global positioning system (GPS) unit. The accuracy of the GPS unit was diminished in some locations due to the presence of buildings or a tree canopy. In these cases, we plotted the locations based on the locations/notes on our field maps.

3.6 Mercury Vapor Survey Results

Table 18 provides the mercury vapor readings collected and the room numbers/room areas. We documented several exceedances of both the residential and non-residential indoor air screening levels (IASLs) published by the IHSB.

3.7 QA/QC Results

The laboratory quality control was generally within limits, with qualifiers, but such that the data were deemed acceptable by ESC. In addition to the standard "J" qualifier for an estimated concentration that falls between the method and reported detection limits (RDL), many of the remaining qualifiers are associated with matrix interferences and serial dilutions. Laboratory QA reports are included in each data package (Appendix D) and are individually bookmarked in the .pdf deliverable. Qualifiers are also provided on the data summary tables.

Duncklee & Dunham reviewed internally the Level 2 analytical data packages against EPA methods and found the data acceptable for use in this report. All samples were tested within the respective holding times, without deviations in the sample-handling procedures or the sampling methods.

Blanks are used to document good field technique and whether COCs were introduced from field conditions or handling procedures. Equipment blanks are used to document field decontamination procedures are adequate. The equipment blank results are provided in Table 21. All COCs detected in the equipment blanks were estimated J-values, and some of the COCs detected were not present in the samples associated with that area. This is true of the two phthalates detected in the equipment blank that were not in the associated soil samples. Although phthalates were detected at low concentrations in the groundwater equipment blanks, the results are within the same range of concentrations for many of the groundwater duplicates.

Equipment blanks are measured in µg/L while soil results are in mg/kg, three orders of magnitude higher, so we converted the mg/kg data to µg/kg in this table. ESC detected a number of metals in the equipment blanks, but many orders of magnitude lower than the concentrations in the soil. The soil test results are not affected by these J-value carryover concentrations.

The J-values for metals detected in the groundwater equipment blanks are much closer in concentration to the groundwater results. We collected the equipment blank for the groundwater samples by pouring laboratory-provided water over the decontaminated submersible pump, which is much more difficult to clean. Two of the three COCs in the groundwater have low standards: antimony (1 µg/L) and cadmium (2 µg/L). The 2L standard for chromium, the only other COC with an exceedance, is 10 µg/L. Chromium was not detected in either groundwater equipment blank, but antimony was detected in both groundwater equipment blanks and cadmium in one. The concentrations of antimony and cadmium were all relatively low in groundwater, within a factor of four above the 2L standard/IMAC. With the dilution factor of the water used to decontaminate the pump, it is not likely a factor in the groundwater exceedances, although it is possible that some component of carryover may have contributed to the exceedances associated with antimony and cadmium.

Field duplicates are used to establish data precision. Relative percentage difference (RPD) is a way to measure precision in a set of data. RPDs cannot be calculated when a COC is either a "J" value (not

quantifiable) or below detection limits. Additionally, the concentrations detected must be greater than or equal to five times the RDL to calculate RPDs.

When working in the controlled environment of a laboratory setting, the RPD for a matrix spike/matrix spike duplicate (MS/MSD), is established at 20%. For samples collected in the field, the RPD cutoff is generally 30% for water and 50% for soil matrices. The duplicate data are presented in Table 22. No RPD values exceeded the 20% guidelines for the two water duplicates, although RPDs could not be calculated in the surface water because all the values were too close to or below the RDLs. In the four soil samples with duplicates, the 50% RPD was exceeded for only two metals, one in each of two soil samples with an RPD of 75.2% for lead and 71.8% for mercury. Soil samples have heterogeneous matrices. Thus, with two RPDs out of the 30 RPDs calculated for soil samples exceeding the cutoff document good data precision for these data sets.

3.8 Tentatively Identified Compounds

At Duncklee & Dunham's request, ESC provided tentatively identified compound (TIC) reports for samples tested for volatile and semivolatile compounds. Peaks in the chromatogram that do not represent target compounds for the method (for which a series of standards at different concentrations are run), or internal or surrogate standards are considered TICs. The mass spectrographs of the unknown peak is searched against a library of over 250,000 compounds, and the percentage of the match between the unknown and the compound in the mass spectrometry library is provided. Even if the match percentage is high, the peak may not actually be the compound identified by the library search.

In order to estimate the concentration of the TIC, the height of the peak is compared to the closest internal standard and the concentration estimated. However, the unknown compound also has an unknown response factor. If one looks at a chromatogram for the full set of reportable constituents in a method, all at a single concentration, the height of the different peaks is quite variable, as are the height of the internal standard peaks. Highly-soluble constituents have much lower response factors than relatively less soluble constituents. By comparing only peak height, the estimated concentration of a TIC is far less reliable than the J-value estimated concentrations provided by an analytical method for which a standard was run for that particular compound.

Despite these limitations, TICs can be a useful tool, especially in areas that have not previously been tested. The TIC reports are included at the end of each laboratory report for the samples tested for VOCs/SVOCs (Appendix D). We have provided a summary table in Appendix G of the volatile and semivolatile TICs identified by ESC, along with the estimated concentrations, match percentage and retention time in the chromatogram when the unknown compound elutes.

Based on Duncklee & Dunham's review of the TICs, two of the 47 samples exhibited volatile TICs. One TIC, hexamethyl-cyclotrisiloxane, was identified in the soil collected at 2-HA-A. This TIC was identified twice, once as a semivolatile compound in 11-SB-B. The second sample with volatile TICs was the single soil sample from Area 13 that revealed evidence of a release from a UST above MSCCs. Seven petroleum–related TICs were identified in this sample but no semivolatile TICs were identified, even though the semivolatile TPH-DRO was the action level that was exceeded.

Of the 47 samples, 35 samples exhibited semivolatile TICs that ESC identified. Of these TICs, two were most prevalent, with multiple occurrences: 2-methoxy-2-methyl-butane (CAS # 94-05-8), also known as

tert-amyl methyl ether (TAME), and 4-hydroxy-4-methyl-2-pentanone (CAS #123-42-2), also known as diacetone alcohol. Each of these TICs was listed 35 times although not necessarily in the same samples.

The most common use of TAME is as a fuel oxygenate additive and octane enhancer. MTBE is a more commonly used oxygenate additive. EPA's UST website states there limited or no data are available for fuel oxygenates other than MTBE. The match percentage range with the library spectrograph is between 64 and 83%.
Diacetone alcohol is used in lacquers, wood stains, permanent markers, hydraulic brake fluids, metal cleaning compounds, and the manufacture of photographic film. The match percentage range with the library spectrograph is between 59-74%.

None of the other TICs is listed more than a few times, and many of the other SVOC TICs are related to PAHs. We have color-coded the TICs in the table that ESC detected more than once.

In our review, we also noted that sometimes the same TIC was identified at different retention times in the same sample, indicating that there may be two similar TICs present, but the library search could not differentiate.

3.9 Investigation-Derived Waste

Soil remaining in the acetate liners after sample collection was used to partially backfill the borings, all of which terminated above the water table, although some soil was placed in one of the two covered roll-off boxes. The drillers used bentonite chips to fill the remaining volumes in the boreholes. The cuttings from the borings for the monitoring wells were placed in the roll-off boxes. Water from decontaminating the augers, and well-development and purge water were stored in 55-gallon steel drums. Due to the low concentrations of contaminants in the soil and groundwater samples, our waste contractor, GARCO Inc. (GARCO) was able to use the assessment data for a waste determination, which showed the waste to be non-hazardous.

Duncklee & Dunham returned to the site on February 26, 2014 to meet GARCO, which removed the two roll-off boxes and five drums of water for offsite disposal. The final non-hazardous waste manifests are included in Appendix H.

The drillers collected the spent acetate liners and polyethylene sheeting from the decontamination areas for offsite disposal. Other investigative-derived waste consisted of disposable nitrile gloves, aluminum foil and polyethylene tubing, all of which we bagged and placed in dumpsters for disposal as regular solid waste.

4 Conclusions and Recommendations

4.1 Soil Exceedances

The following table lists the contaminants with number of samples and type(s) of PRSGs/standards/action levels exceeded in parentheses for the entire site.

Soil Samples				
Contaminant	**# Samples that Exceed PGW PSRG**	**# Samples that Exceed Only Residential PSRG**	**# Samples that Exceed Both Residential and Industrial PSRG**	**# Samples that Exceed Action Level/MSCC**
Antimony	14	5	0	N/A
Arsenic	45	0	53	N/A
Cadmium	2	0	0	N/A
Chromium, total *	0	4	0	N/A
Chromium, hexavalent	0	12	0	N/A
Mercury	2	0	0	N/A
PAHs**	11	7	10	N/A
Selenium	7	0	0	N/A
Silver	1	0	0	N/A
Thallium	14	9	5	N/A
TPH-GRO/ Petroleum Fraction	N/A	N/A	N/A	1

Some samples exceed multiple PSRGs. Test results that exceed the industrial PSRG also exceed the residential PSRG.

Duplicate samples are included.

* Total chromium exceedances are based on the results from soil samples that exceeded twice the site-specific background concentration where no hexavalent chromium sample was tested. Based on our hexavalent chromium data, we assumed these samples will exceed residential PSRGs. See Section 3.2.2 for further explanation.

** PAHs include different compounds; the number provided in each category for PAHs is the number of times a particular PAH is greater than a PSRG, whereas all the other contaminants are for the number of samples greater than a PSRG.

PGW – protection-of-groundwater

The following section breaks out the soil samples that exceed PSRGs by area, with the total number of soil samples from each area provided. The number within the parentheses specifies the number of samples and which PSRGs are exceeded for each COC. Totals from the areas listed below were combined to create the table above.

<u>Area 1 – Former MGP and Power Plant/Garage Area - 7 soil samples:</u>

PAHs: Benzo(a)pyrene (1, residential)

Metals: Antimony (2, PGW), arsenic (5, PGW and industrial), cadmium (2, PGW), hexavalent chromium (2, residential), silver (1, PGW) and thallium (1, PGW and industrial).

Area 2 - Possible Agricultural Mixing Area - 2 soil samples:

Metals: Arsenic (2, PGW and industrial)

Area 3 - Former Agricultural Fields - 12 soil samples:
Metals: Antimony (3, PGW), arsenic (12 industrial with 9 also PGW), mercury (1, PGW) and thallium (1, PGW and residential)

Area 4 - Former Drain in Grounds Shop - 1 soil sample:

Metals: Antimony (1, PGW and Residential), arsenic (1, PGW and industrial), thallium (1, PGW and residential)

Area 5 - Historic Land Farming Area Northeast of Steam Plant - 7 locations, 8 soil samples:

PAHs: Benzo(a) anthracene (3, PGW and industrial), benzo(a) pyrene (3, PGW and industrial), benzo(b)fluoranthene (3, PGW and residential; 2, residential; 1, industrial), dibenz(a,h)anthracene (1, PGW and industrial), indeno(1,2,3-cd)pyrene (3, residential; 2, residential)

Metals: Antimony (2, PGW); arsenic (7, PGW and industrial), chromium (1, residential), hexavalent chromium (2, residential)

Area 6 - Historic Coal Pile Area West of Steam Plant - 5 locations, 6 samples including duplicate:

***Metals*:** Antimony (1, PGW), arsenic (5, industrial, 3 also with PGW), chromium (2, residential), hexavalent chromium (2, residential), selenium (1, PGW), thallium (4, PGW and residential)

Area 7 - Landfill West of Cemetery - 4 locations, 5 soil samples including duplicate:

***Metals*:** Arsenic (1, industrial), selenium (1, PGW), thallium (1, PGW and residential)

Area 8 - Historic Outside Storage Area North of Current Hazardous Waste Storage Area - 5 soil samples:

PAHs: Benzo(a)anthracene (1, residential), benzo(b)fluoranthene (1, PGW and residential), and benzo(a)pyrene (1, residential)

Metals: Antimony (4, PGW, 3 also residential), arsenic (5, PGW and industrial), mercury (1, PGW), selenium (1, PGW).

Area 9 - Transformer Storage Area - 5 locations, 6 soil samples including duplicate:

Metals: Arsenic (5, PGW and industrial), hexavalent chromium (1, residential); selenium (2, PGW)

Area 10 – Former Hazardous Waste Storage Area - 4 soil samples:

Metals: Antimony (1, PGW and residential), arsenic (3, PGW and industrial), thallium (1, PGW and residential).

Area 11 – Paint Shop Area - 3 locations, 4 samples including duplicate:

Metals: Arsenic: (2, PGW and industrial), chromium (1, residential), hexavalent chromium (1, residential), selenium (2, PGW), thallium (4, PGW and industrial)

Area 12 – Garage – Former Hydraulic Lifts - 2 soil samples:

No exceedances; tested for TPH-GRO.

Area 13 – ASTs/USTs near Back-up Generators - 16 soil samples:

TPH-DRO (1, action level and Total C09-C22 Aromatic MSCC)

Area 15 – Background Samples for Metals - - 6 locations, 12 soil samples (two for Chromium/Hexavalent Chromium only):

Metals: Arsenic (5, industrial, of which 4 also exceeds PGW), hexavalent chromium (4, residential), thallium (1, PGW and residential)

4.2 Stream Exceedances

The following table lists the contaminants with number of samples, type(s) of PRSGs/standards/action levels exceeded in parentheses for the surface water and sediment samples collected from three locations.

Stream Samples					
Contaminant	Sediment				Surface Water
	# Sediment Samples that Exceed Sediment Screening Value	# Sediment Samples that Exceed PGW PSRG	# Sediment Samples that Exceed Only Residential PSRG	# Sediment Samples that Exceed Residential and Industrial PSRG	# Surface Water Samples that Exceed 2Bs or EPA Criteria
Arsenic	1	1	0	2	0
Cadmium	0	0	0	0	1
Chromium	1	0	0	0	0
Copper	1	0	0	0	0
Lead	1	1	0	0	0
A sample that exceeds an industrial PSRG will also exceed the residential PSRG. Duplicate SW sample did not exhibit cadmium at a concentration that exceeds the 2B standard					

Area 21 – 3 locations, 3 sediment samples, 4 surface water including 1 duplicate:

Metals: Arsenic (2, industrial, 1 also exceeds PGW and sediment screening level), cadmium (1, 2L and 2B), copper (1, sediment screening level), chromium (1, sediment screening level), lead (1, PGW and sediment screening level), thallium (1 sediment, residential)

4.3 Groundwater Exceedances

The following table lists the contaminants with number of samples, type(s) of PRSGs/standards/action levels exceeded in groundwater samples collected from the ten wells sampled across the site.

Groundwater Samples	
Contaminant	# Samples that Exceed IMACs or 2Ls
Antimony	7
Cadmium	1
Chromium	2
Duplicate Samples Included	

The following section breaks out the groundwater samples that exceed 2Ls by area, with the total number of groundwater samples from each area provided. The number within the parentheses specifies the number of samples and which 2L Standard/IMAC are exceeded for each COC. Totals from the areas listed below were combined to create the table above.

Area 16 – Hazardous Waste and Outside Storage Area - 1 monitoring well, 2 groundwater samples including duplicate:

Metals: antimony (2, IMAC), chromium (2, 2L)

Area 17 – Former MGP and Former Power Plant Garage Area - 4 monitoring wells, 4 groundwater samples:

Metals: antimony (4, IMAC), cadmium (1, 2L),

Area 18 – Steam Plant Area - 4 monitoring wells, 4 groundwater samples:

Metals: antimony (1, IMAC)

4.4 Mercury Vapor Exceedances

We found exceedances of the DENR's Division of Waste Management IASLs in two general areas. The spike reading and the average reading for mercury vapor around the sink drain in McBryde East, Room 445 exceeded the non-residential IASL. The Lumex vapor analyzer also detected readings that exceed the residential IASL in several rooms and areas on the first floor of the McBryde East Building. Table 18 provides all the mercury vapor readings and locations. These data were provided to the City of Raleigh prior to the issuance of this report with our recommendation for a Certified Industrial Hygienist to confirm the measurements and to advise the City on remedial costs that may be necessary for the current or future building use.

4.5 General Discussion of Exceedances

ESC detected several inorganic compounds in soil at concentrations that exceeded the calculated site background values, residential PSRGs, and industrial/commercial PSRGs. Levels of metals, including one or more of arsenic, antimony, chromium, hexavalent chromium, or thallium, show an elevated concentration pattern near the steam plant, the garage and former MGP area, the rail spur area north of the waste shed, the paint shop, and the former agricultural field west of the railroad tracks.

The groundwater test results for metals documented minor impacts in the areas tested. However, antimony exceeded groundwater standards in three study areas, while chromium and cadmium exceeded standards in one well each. No VOCs or SVOCs exceeded groundwater standards.

Other than those metal exceedances, the test results documented several detections of COCs in soil or groundwater at concentrations that either exceed the PSRGs, or are indicative of release in an area nearby. These detections include:

- MTBE in groundwater (17-MW-2) downgradient of the fueling/garage area
- DDE/DDT in shallow soil (7-HA-A) next to the landfill
- Diesel release from UST at Williams Building (13-SB-J)
- PAHs in Areas 1, 5 and 8

Based on our professional experience with hydraulic lifts, and the length of time of their operation, Duncklee & Dunham expects there will be releases from some of five hydraulic elevators that were installed before 1972 (Area 14). Testing the soil beneath the hydraulic cylinders for evidence of releases can be conducted in the future as part of demolition or renovation activities.

With regard to metals that exceed PSRGs in multiple areas across the site, the literature documents numerous trace metals that are associated with CCRs. The metals and concentrations depend on the composition of the coal that was burned, but typically include arsenic, beryllium, cadmium, chromium, hexavalent chromium, lead, mercury, selenium and thallium among others. These COCs can also be naturally occurring, from the decomposition of minerals in the bedrock, saprolite and soil layers, although hexavalent chromium is generally not naturally occurring. Before the regulation of air emissions, smokestacks associated with the burning of coal used few if any engineering controls and CCR particulates were spread in areas around the smokestacks. Arsenic is historically associated with agricultural operations and is also a naturally occurring element.

PAHS can also be present in CCRs as well as MGP wastes, diesel fuel, and exhausts from vehicles with diesel engines. Coal was stored historically on the ground in large piles, as documented by aerial photographs in our Phase I ESA report, and leaching of metals from the coal in these piles and downgradient drainages likely occurred.

The activities described in this report represent the results of initial assessment activities and are not comprehensive enough to answer all the questions related to origin of the COCs, especially the metals, which are likely a mixture of both naturally-occurring and anthropogenic origins. We recommend additional evaluation of naturally-occurring background concentrations of metals along with a request to

review our site data by DENR's toxicologist to determine what concentrations are acceptable for different land uses. This determination by DENR's toxicologist will be very important in determining which areas require remediation or capping, whether the property is utilized for commercial/industrial, recreational or residential use.

5 References

Characterization of Coal Combustion Residues from Electric Utilities – Leaching and Characterization Data, U.S. Environmental Protection Agency, EPA-600/R-09/151 (December 2009)

Guidelines for Assessment and Corrective Action for UST Releases, DENR UST Section (December 2013); link from http://portal.ncdenr.org/web/wm/ust/guidance

Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (January 2014) http://portal.ncdenr.org/c/document_library/get_file?uuid=5539ecfb-739f-4345-9459-b514508135f1&groupId=38361

Inactive Hazardous Sites Program Guidelines for Assessment and Cleanup (January 2014) http://portal.ncdenr.org/c/document_library/get_file?uuid=90256864-3efd-46c8-ae8d-63b1c67b231c&groupId=38361

Managing Coal Combustion Waste: Issues with Disposals and Use, Congressional Research Service, Linda Luther, January 12, 2010. (R40544)

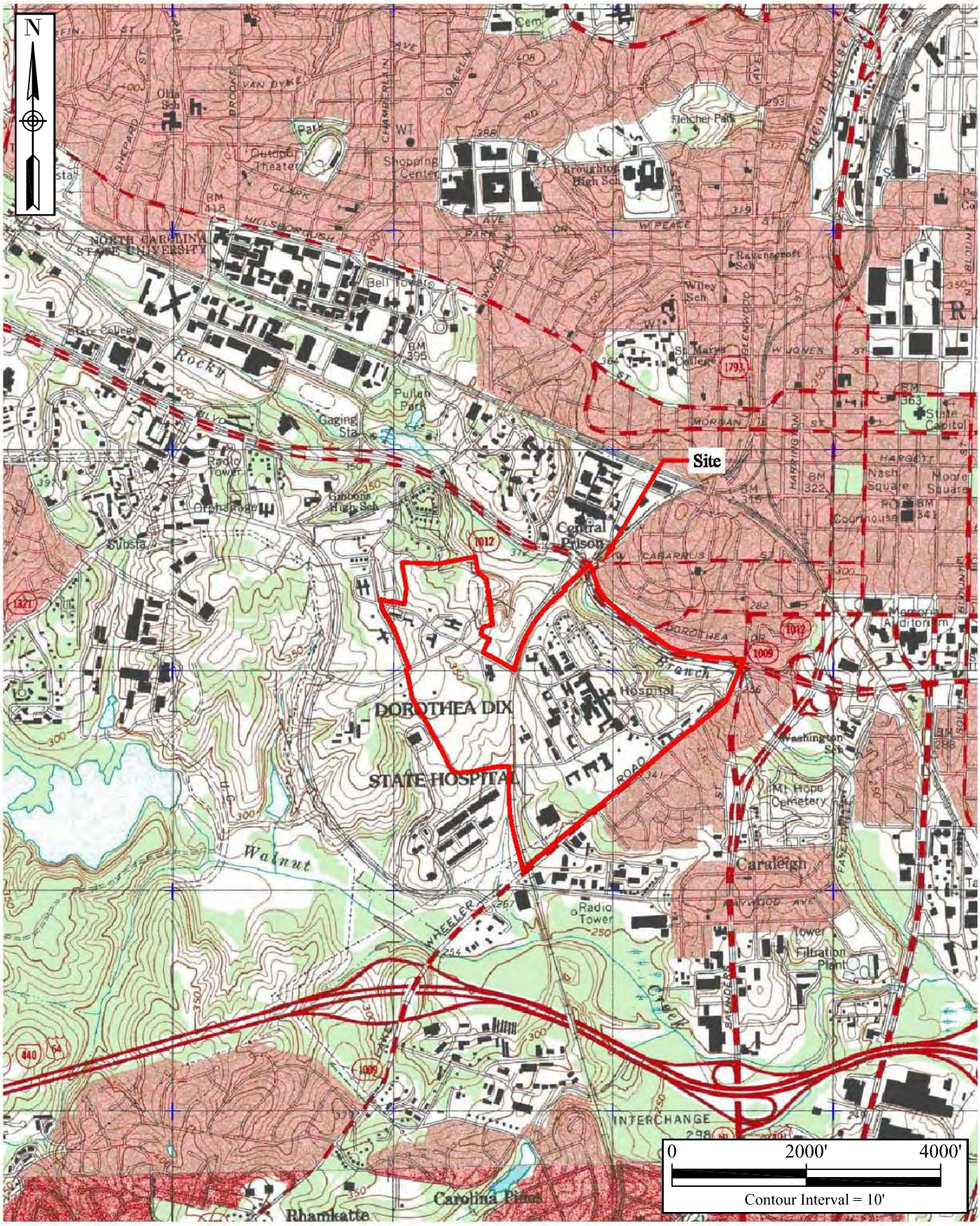
Maximum Soil Contaminant Concentration (MSCC) Table, UST Section (April 2012) http://portal.ncdenr.org/c/document_library/get_file?uuid=ad84a424-64a3-423c-a34c-8faeb9ffc27b&groupId=38361

NC DENR Division of Water Quality Groundwater Classification and Standards, 15A NCAC Subchapter 2L (April 2013): http://portal.ncdenr.org/c/document_library/get_file?uuid=1aa3fa13-2c0f-45b7-ae96-5427fb1d25b4&groupId=38364

and associated *NC And EPA Criteria Table* (May 15, 2013): http://portal.ncdenr.org/c/document_library/get_file?uuid=dfc89f23-a372-4782-b3b0-60e6884b1696&groupId=38364

Report of Phase I Environmental Site Assessment, Dorothea Dix Campus, Raleigh, North Carolina, Duncklee & Dunham (November 15, 2013)

Figures



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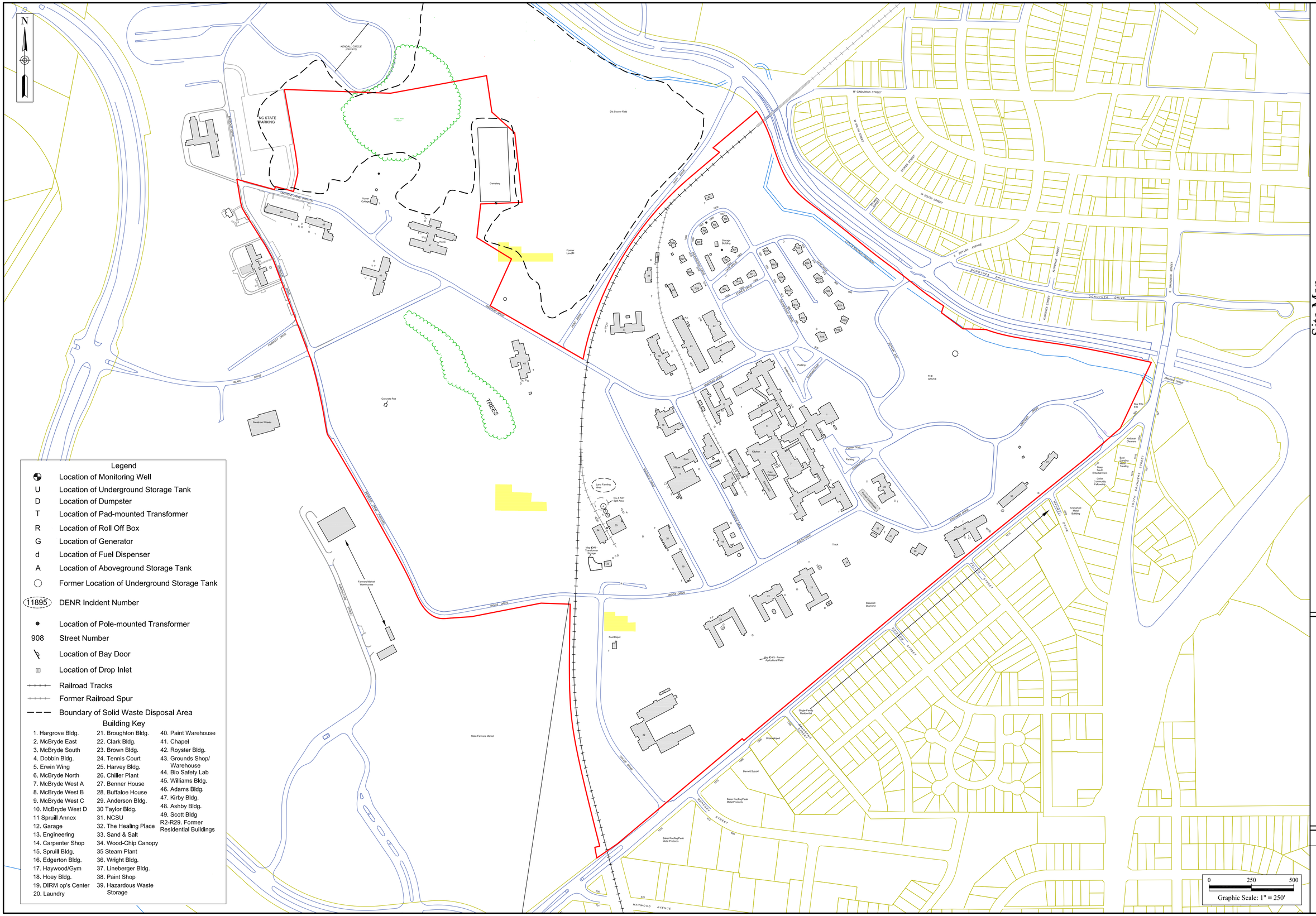
Site Topographic Map

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
JS		201336	February 2014	Raleigh West, 2002
Scale:	Size:	Layers:	Filename:	
1" = 2000'	8.5" x 11"	0,1,4	P:\Raleigh, City of\Dorothea Dix - 201335\Phase I ESA - 201335\CAD\Figure 1	

Figure

1



Site Map

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:	Scale:	Size:	Layers:
baj/js	DWG	201336	February 2014	Wake Co. GIS, NCDOT Aerial Photograph Mission 758 No. 304, Site Boundary Map Provided by City of Raleigh, 1950 Sanborn Map, Martin Marietta Materials Waste Disposal Map, Field Notes	1" = 250'	22" x 34"	0, 1, 5, 11

P:\Raleigh, City of\Dorothea Dix - 201335\Phase I ESA - 201335\CAD\Figure 2&3 - Site Map

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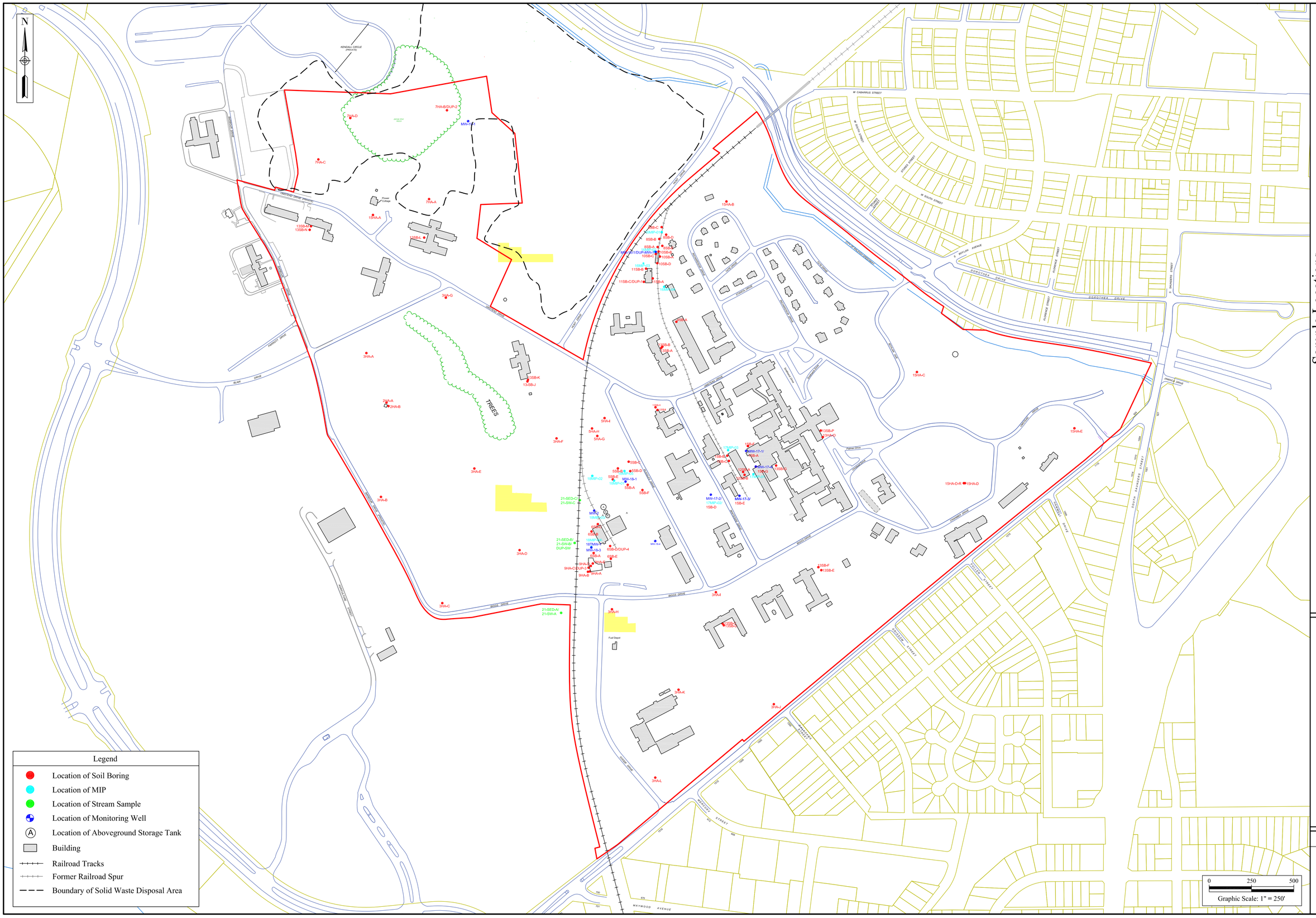
Figure

2



Sample Locations

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:
baj/js		201336	February 2014

References: Wake Co. GIS, NCDOT Aerial Photograph Mission 758 No. 304, Site Boundary Map Provided by City of Raleigh, 1950 Sanborn Map, Maintenance Facilities Waste Disposal Map, Field Notes

Scale: 1" = 250'

Size: 22" x 34"

Layers: 0, 1, 3, 34, 35

P:\Raleigh, City of\Dorothea Dix - 201335\Phase I ESA - 201335\CAD\Figure 2&3 - Site Map

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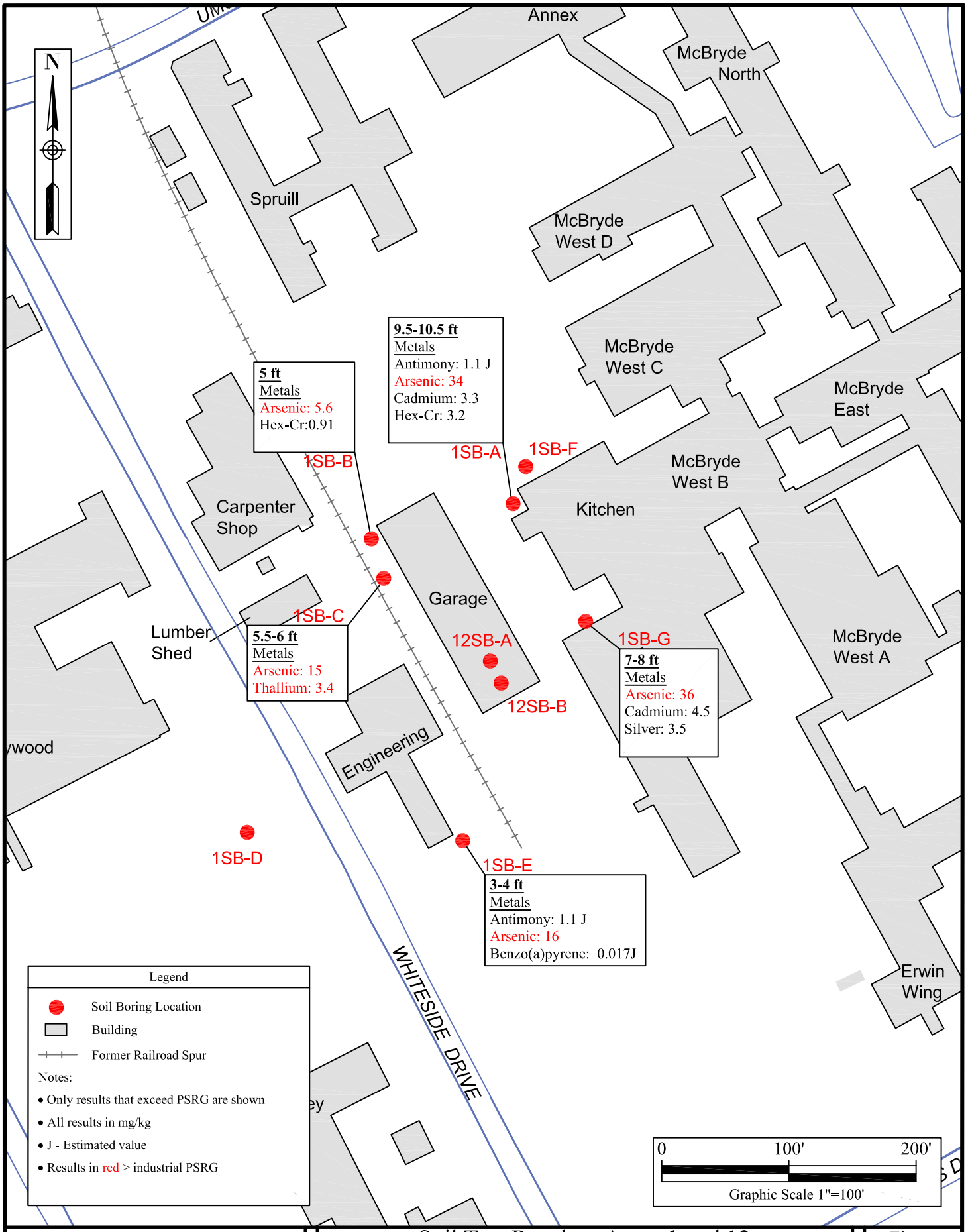
Figure

3



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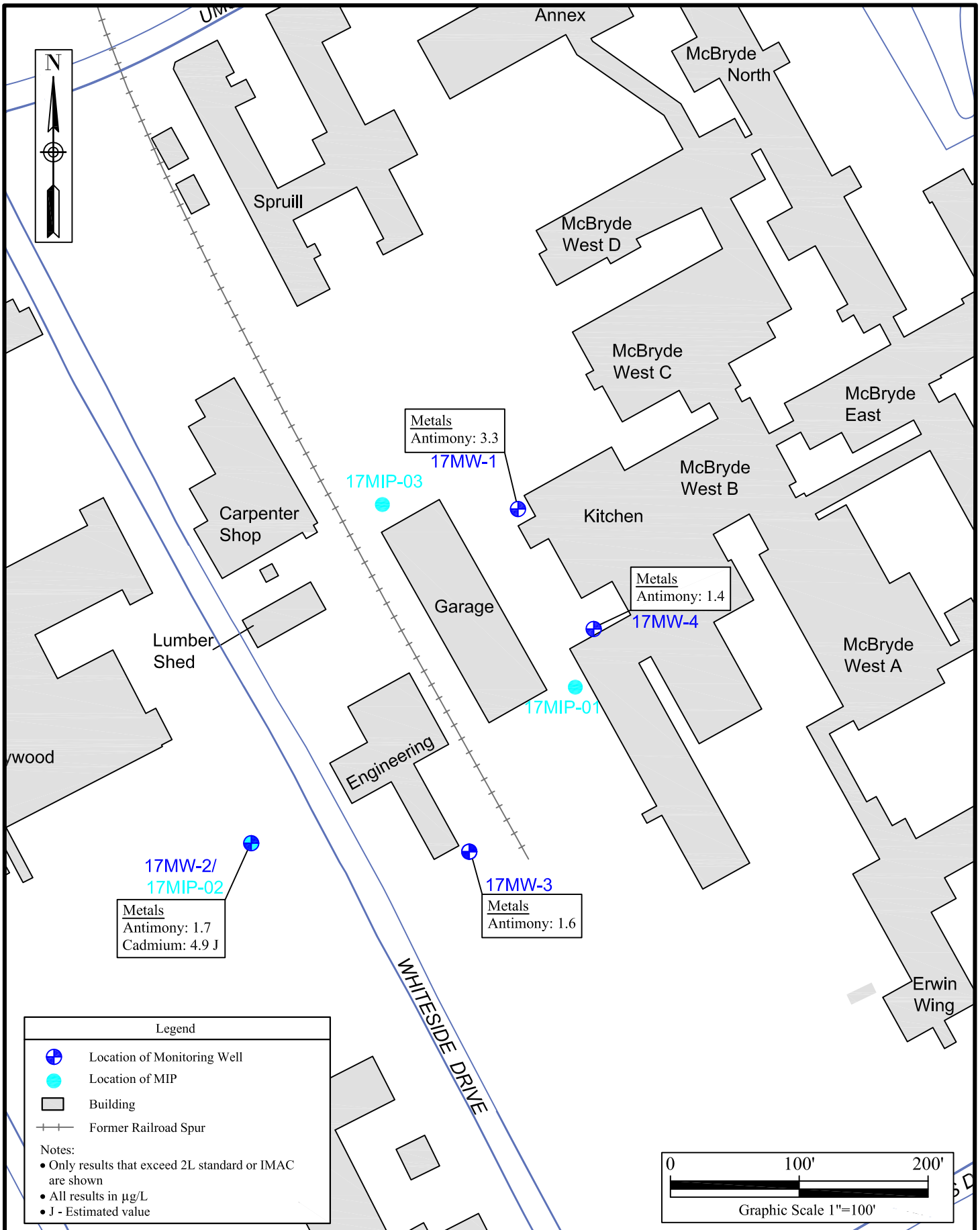
Soil Test Results - Areas 1 and 12

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
js		201336	February 2014	Wake Co. GIS; Field Notes; Laboratory Report
Scale: 1" = 100'	Size: 8.5" x 11"	Layers: 0,1,35,36	Filename: P:\Raleigh, City of\Dorothea Dix\201335 - Phase I ESA\CAD\Figure2&3 - Fig 4abc	

Figure

4a



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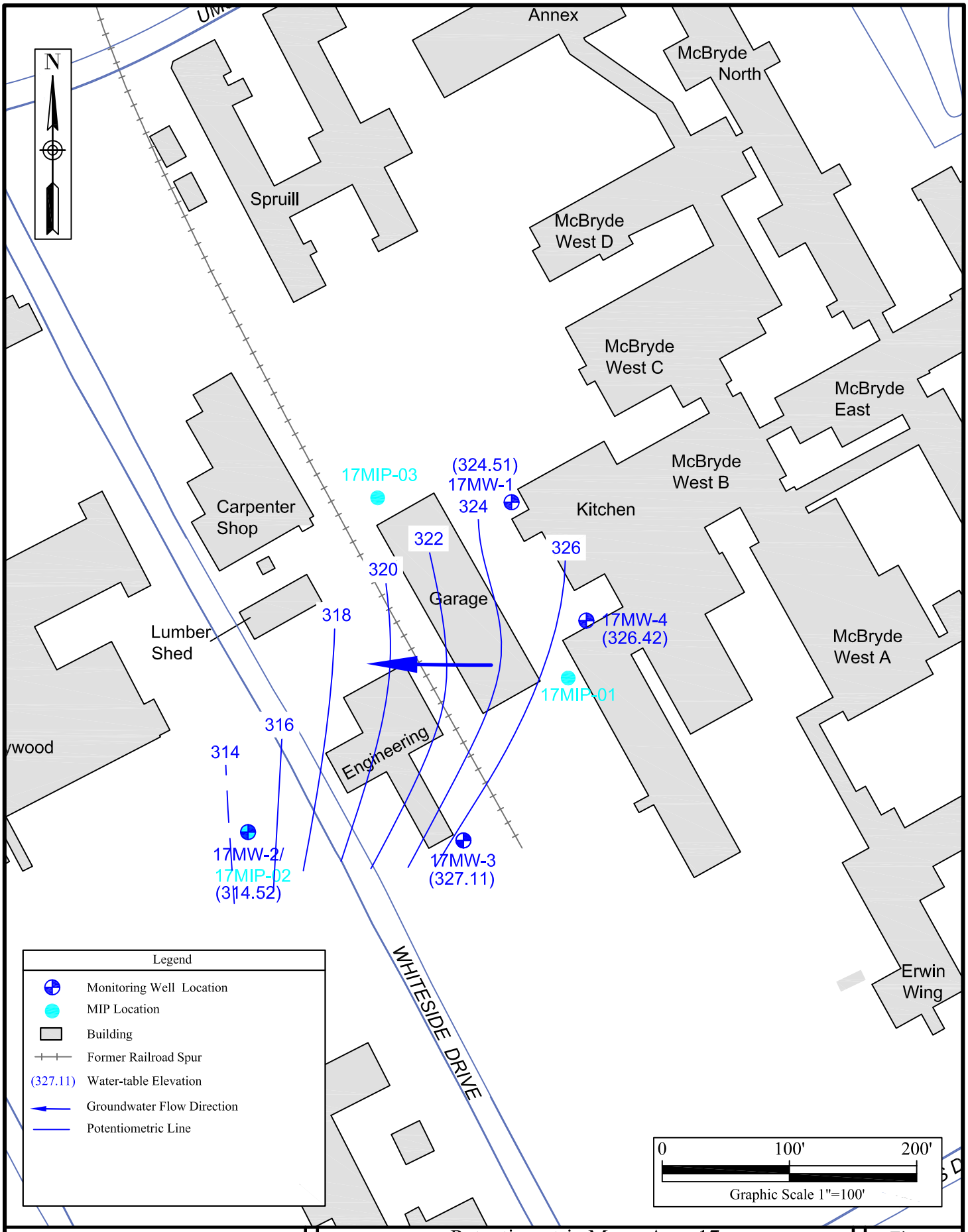
Groundwater Test Results and MIP Locations - Area 17

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
js		201336	February 2014	Wake Co. GIS; Taylor Wiseman & Taylor Survey; Field Notes; Laboratory Report
Scale: 1" = 100'	Size: 8.5" x 11"	Layers: 0,1,35,37	Filename: P:\Raleigh, City of\Dorothea Dix\201335 - Phase I ESA\CAD\Figure2&3 - Fig 4abc	

Figure

4b



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Potentiometric Map - Area 17

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
js		201336	February 2014	Wake Co. GIS; Taylor Wiseman & Taylor Survey; Field Notes; Laboratory Report
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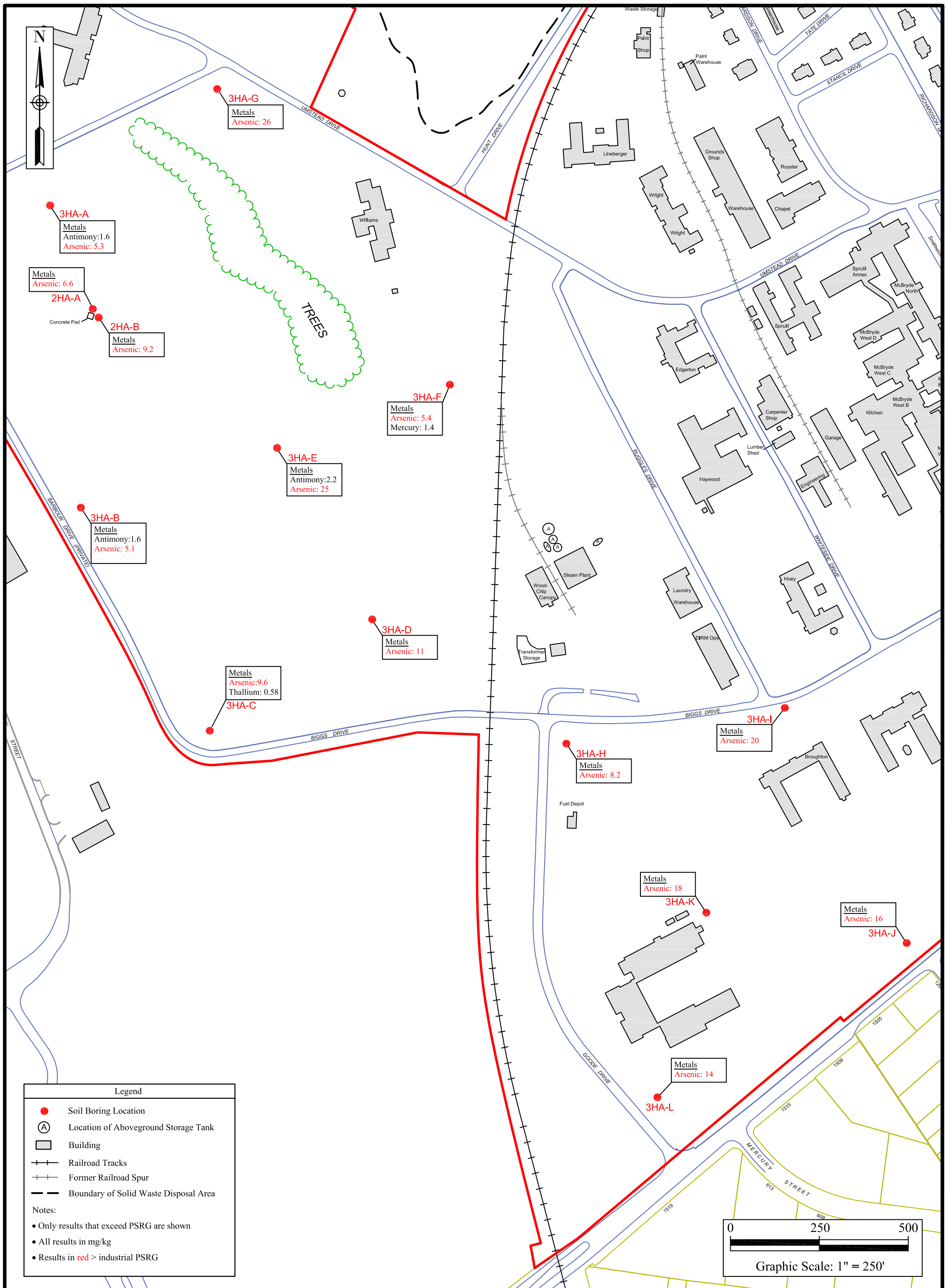
Figure

4c



5

Figure

Soil Test Results - Areas 2 and 3

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
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Scale: 1" = 250'	Size: 11" x 17"	Layers: 0,1,35,38	Filename: P:\Raleigh, City of\Dorothea Dix\201335 - Phase I ESA\CAD\Figure2&3 - Fig 5	

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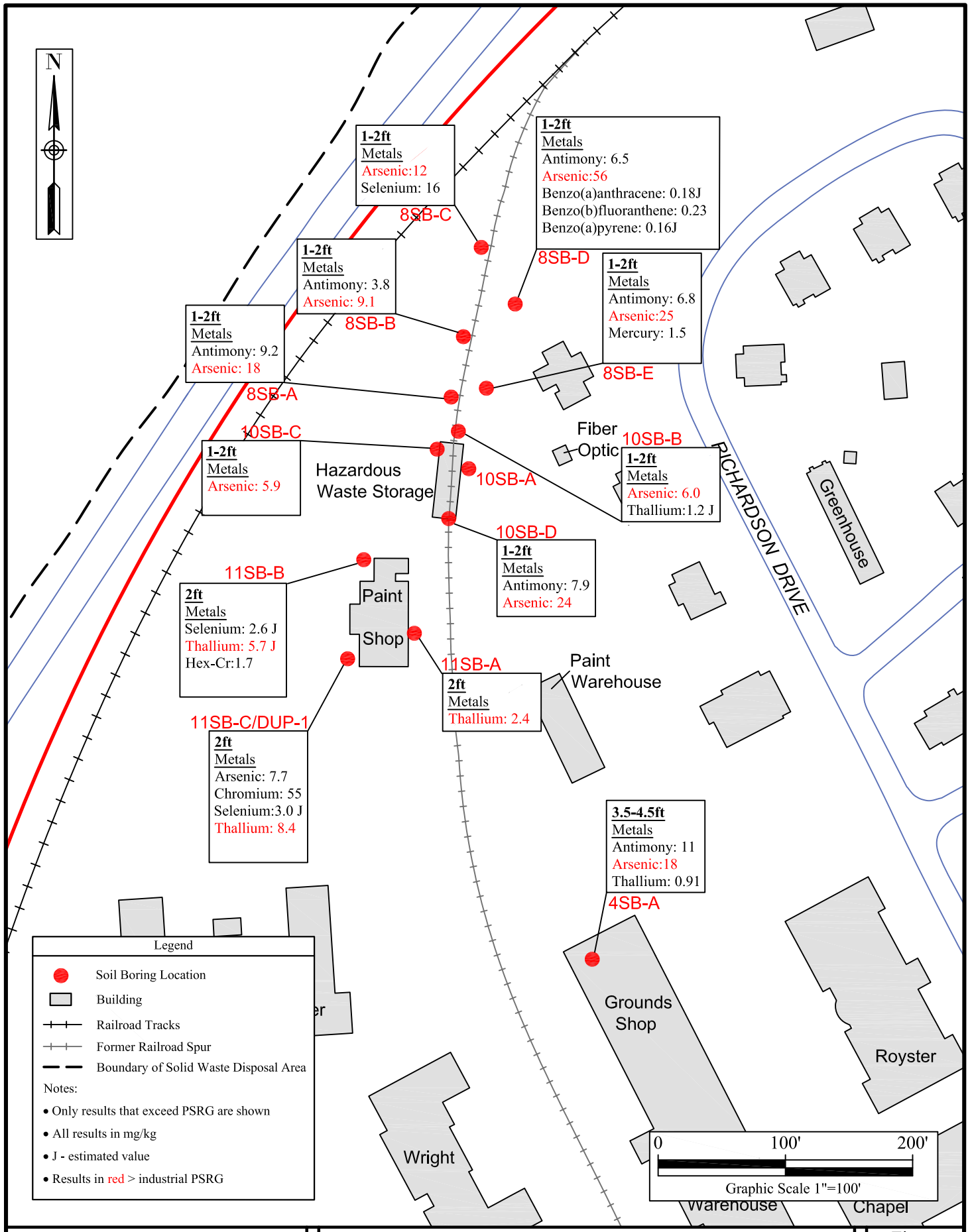

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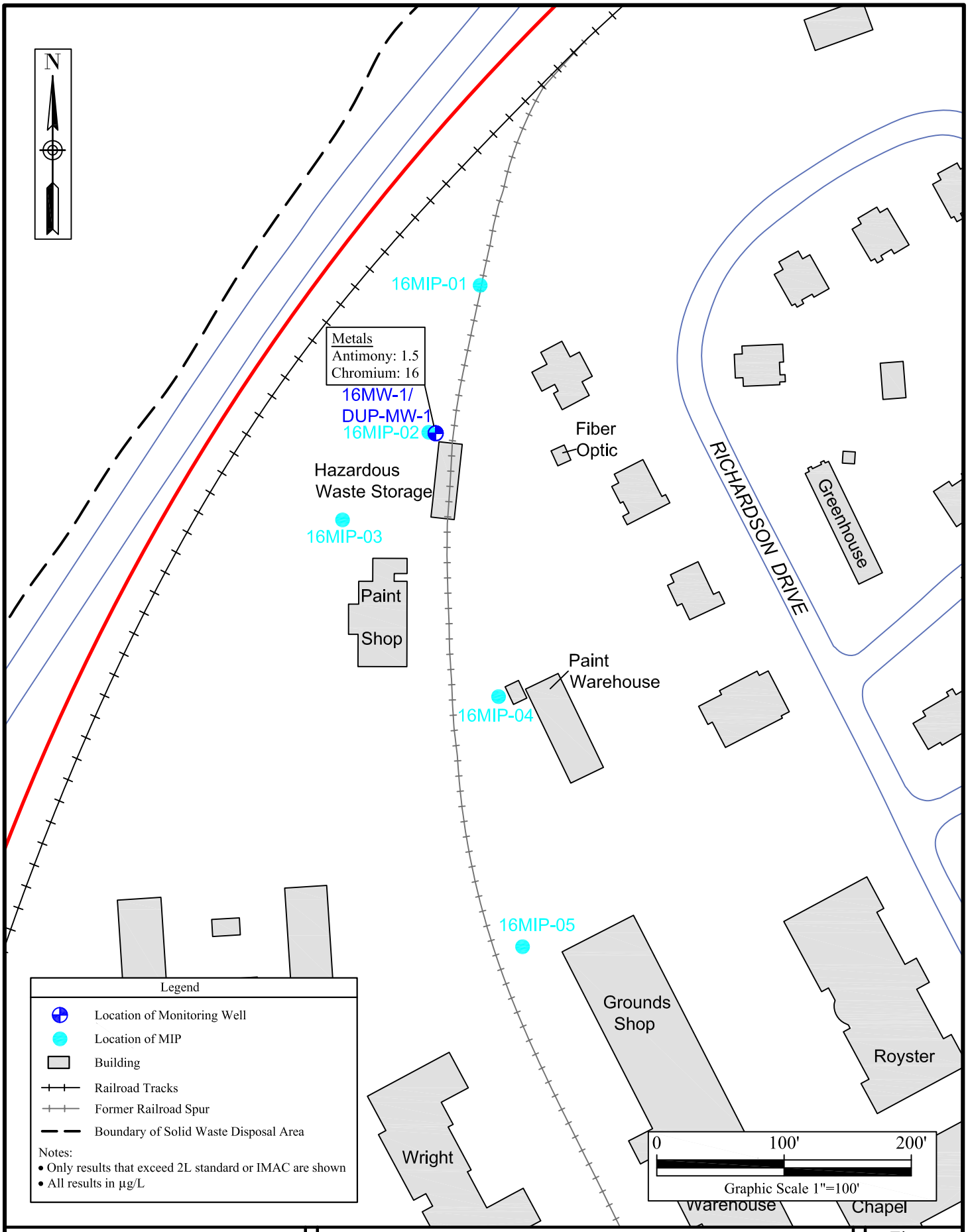
Soil Test Results - Areas 4, 8, 10 and 11
Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
js		201336	February 2014	Wake Co. GIS; Taylor Wiseman & Taylor Survey; Field Notes; Laboratory Report
Scale: 1" = 100'	Size: 8.5" x 11"	Layers: 0,1,35,39	Filename: P:\Raleigh, City of\Dorothea Dix\201335 - Phase I ESA\CAD\Figure2&3 - Fig 6ab	

Figure
6a



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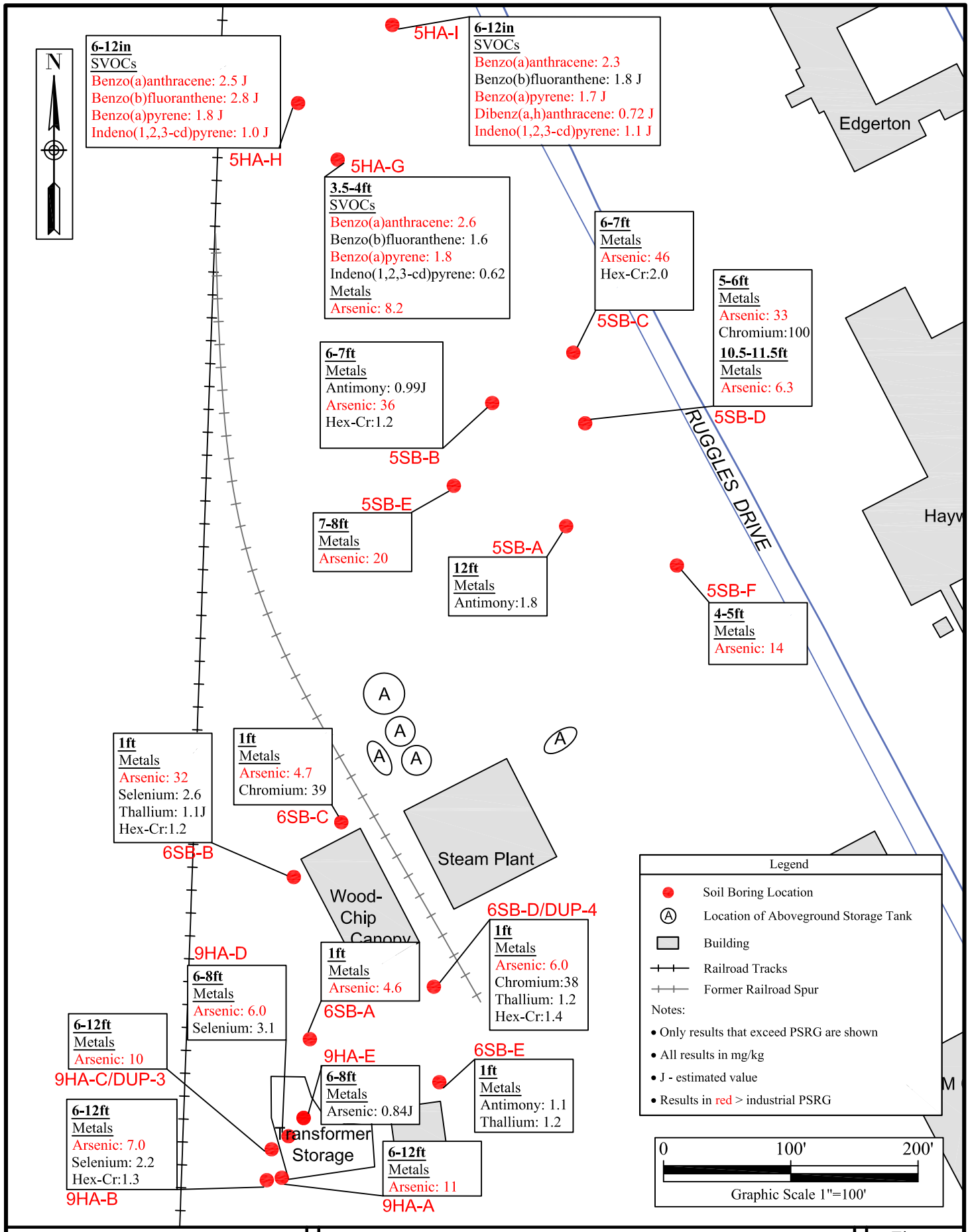
Groundwater Test Results and MIP Locations - Area 16

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
js	DWG	201336	February 2014	Wake Co. GIS; Taylor Wiseman & Taylor Survey; Field Notes; Laboratory Report
Scale: 1" = 100'	Size: 8.5" x 11"	Layers: 0,1,35,40	Filename: P:\Raleigh, City of\Dorothea Dix\201335 - Phase I ESA\CAD\Figure2&3 - Fig 6ab	

Figure

6b



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Soil Test Results - Areas 5, 6 and 9

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
js		201336	February 2014	Wake Co. GIS; Taylor Wiseman & Taylor Survey; Field Notes; Laboratory Report
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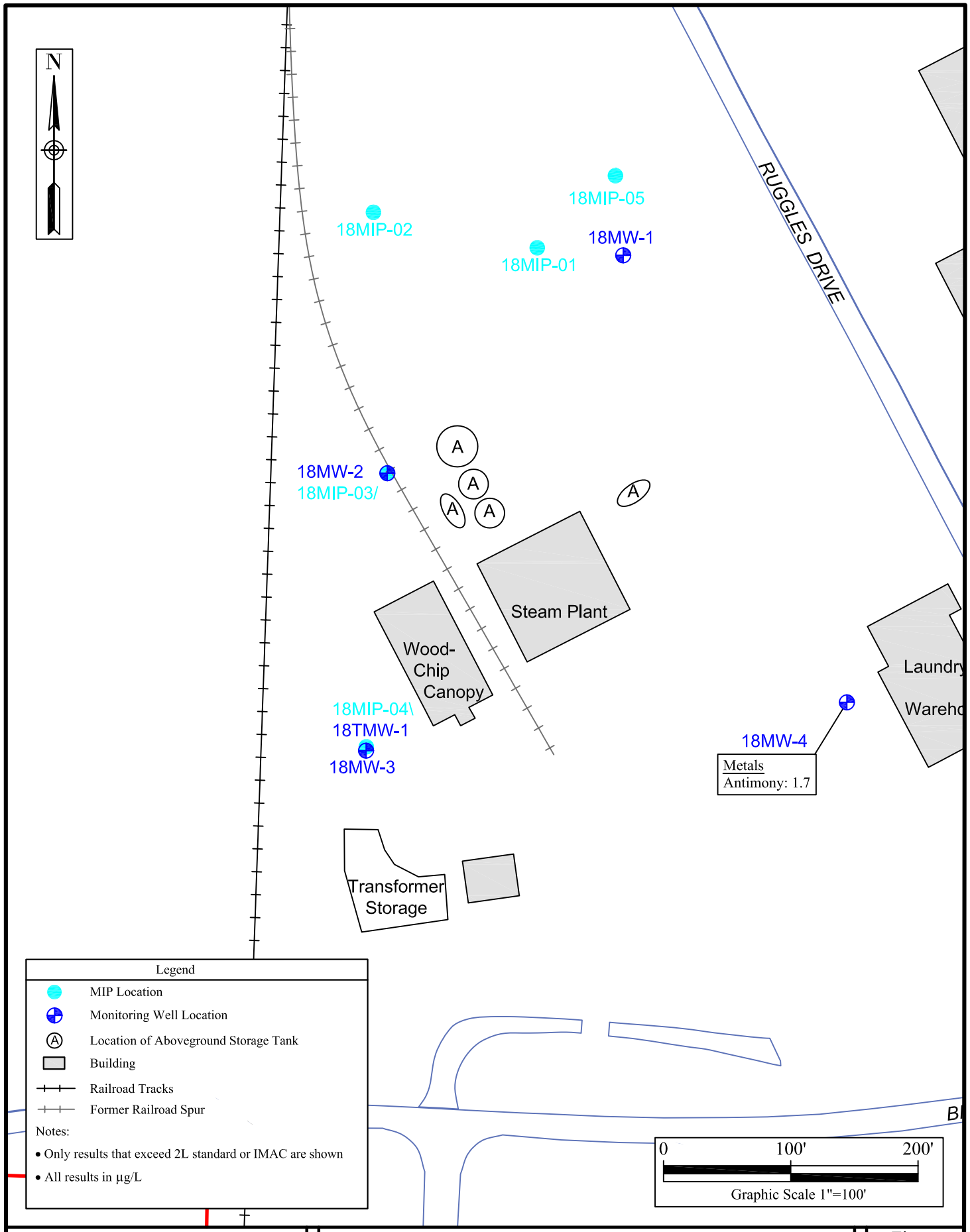
Figure

7a



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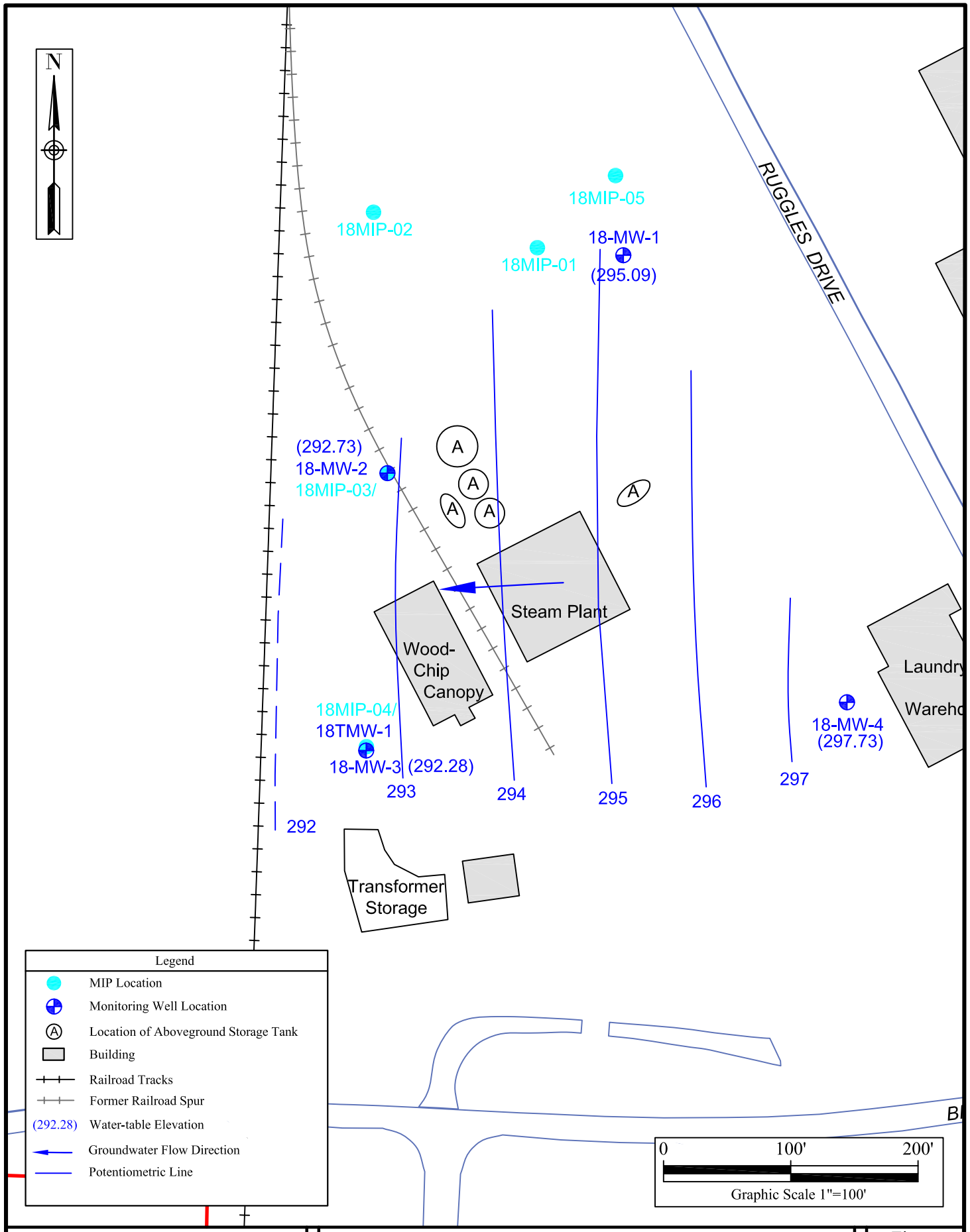
Groundwater Test Results and MIP Locations - Area 18

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
js		201336	February 2014	Wake Co. GIS; Taylor Wiseman & Taylor Survey; Field Notes; Laboratory Report
Scale: 1" = 100'	Size: 8.5" x 11"	Layers: 0,1,35,42	Filename: P:\Raleigh, City of\Dorothea Dix\201335 - Phase I ESA\CAD\Figure2&3	

Figure

7b



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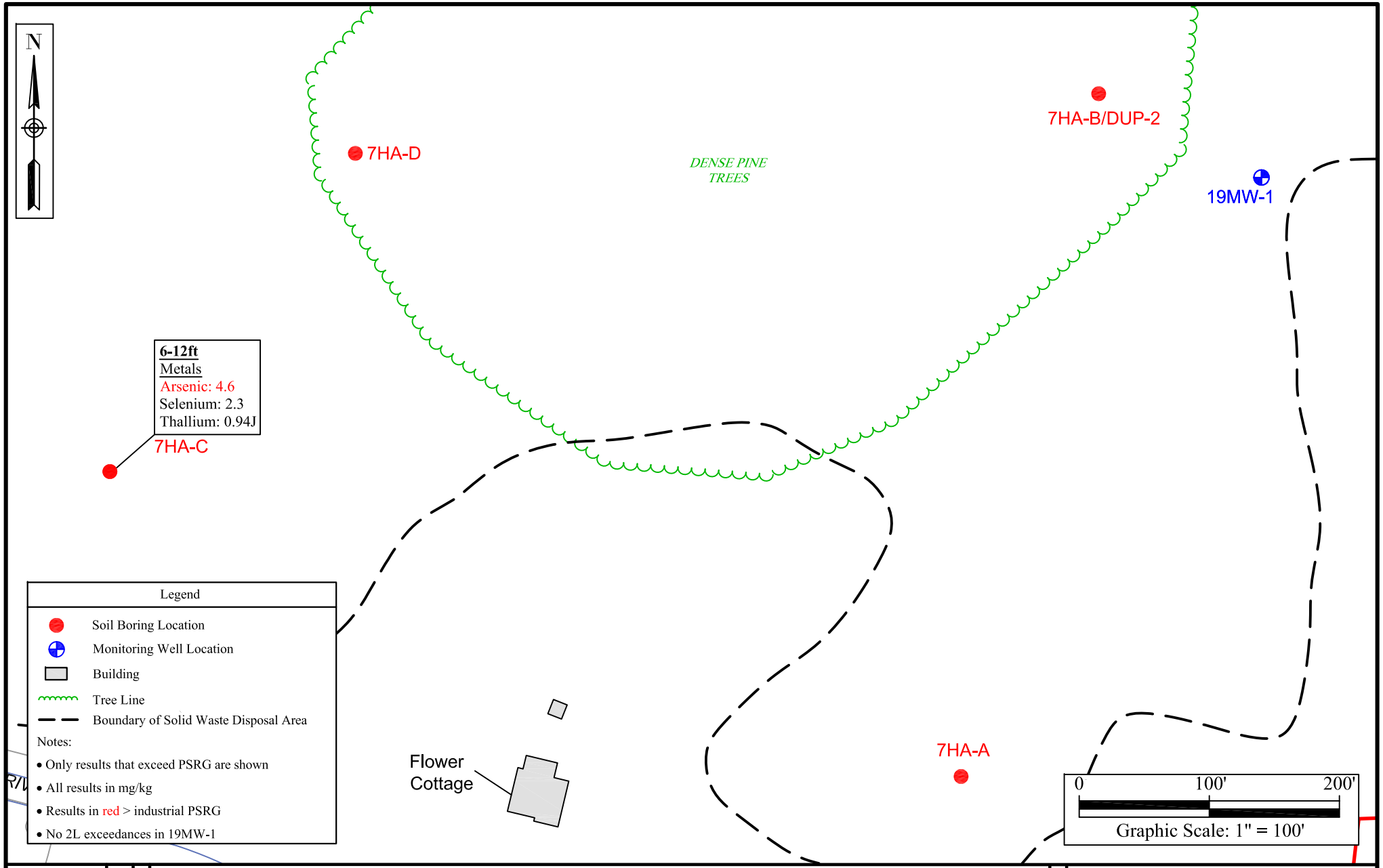
Potentiometric Map - Area 18

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
js		201336	February 2014	Wake Co. GIS; Taylor Wiseman & Taylor Survey; Field Notes; Laboratory Report
Scale: 1" = 100'	Size: 8.5" x 11"	Layers: 0,1,35,47	Filename: P:\Raleigh, City of\Dorothea Dix\201335 - Phase I ESA\CAD\Figure2&3	

Figure

7c



8

Figure

Soil and Groundwater Test Results - Areas 7 and 19

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	Reference:
js		201336	Feb 2014	Wake Co. GIS; Taylor Wiseman & Taylor Survey; Field Notes; Laboratory Report
Scale:	Size:	Layers:	Filename:	
1" = 100'	8.5" x 11"	0,1,35,43	P:\Raleigh, City of\Dorothea Dix\201335 - Phase I ESA\CAD\Figure2&3 - Fig 8	

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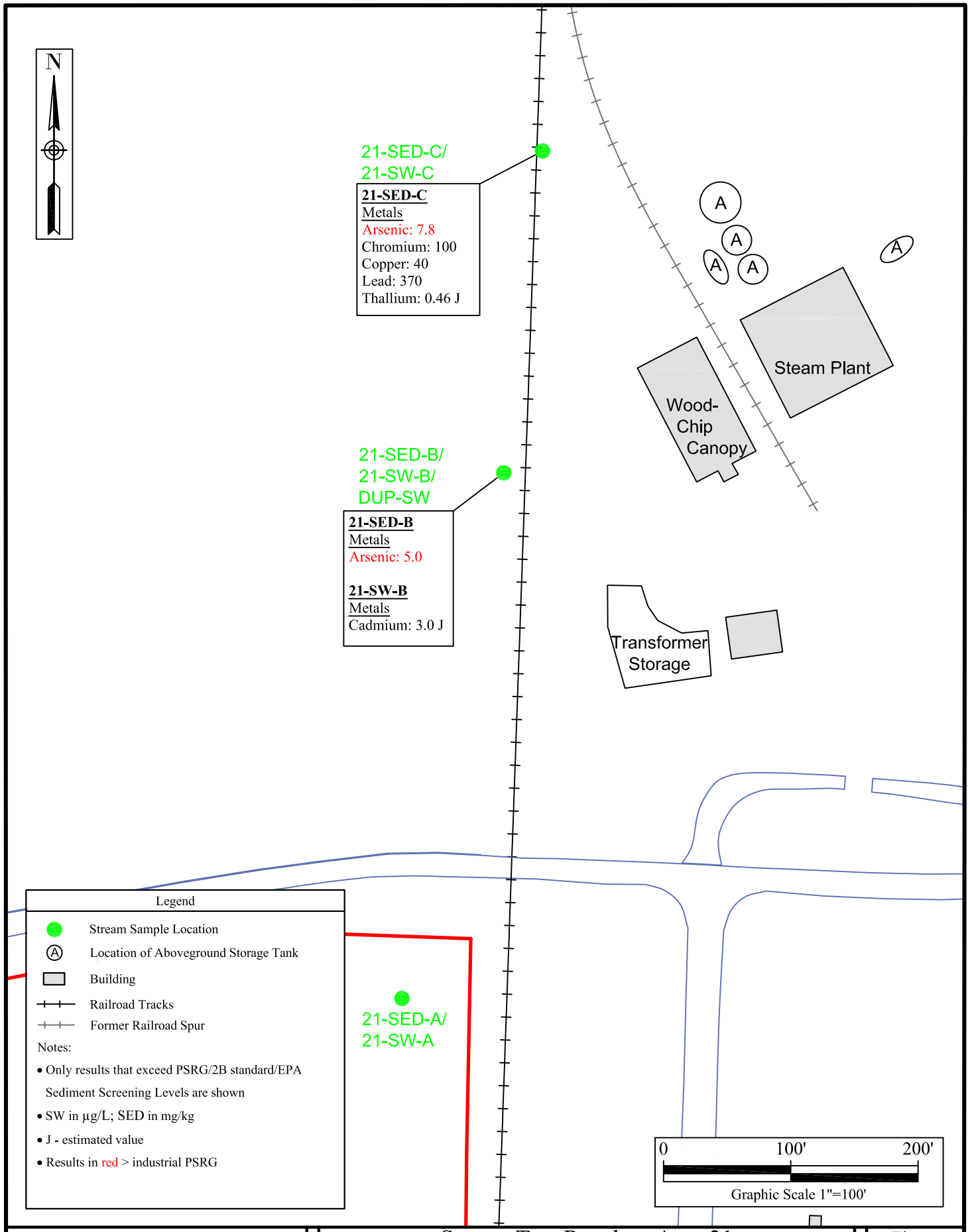

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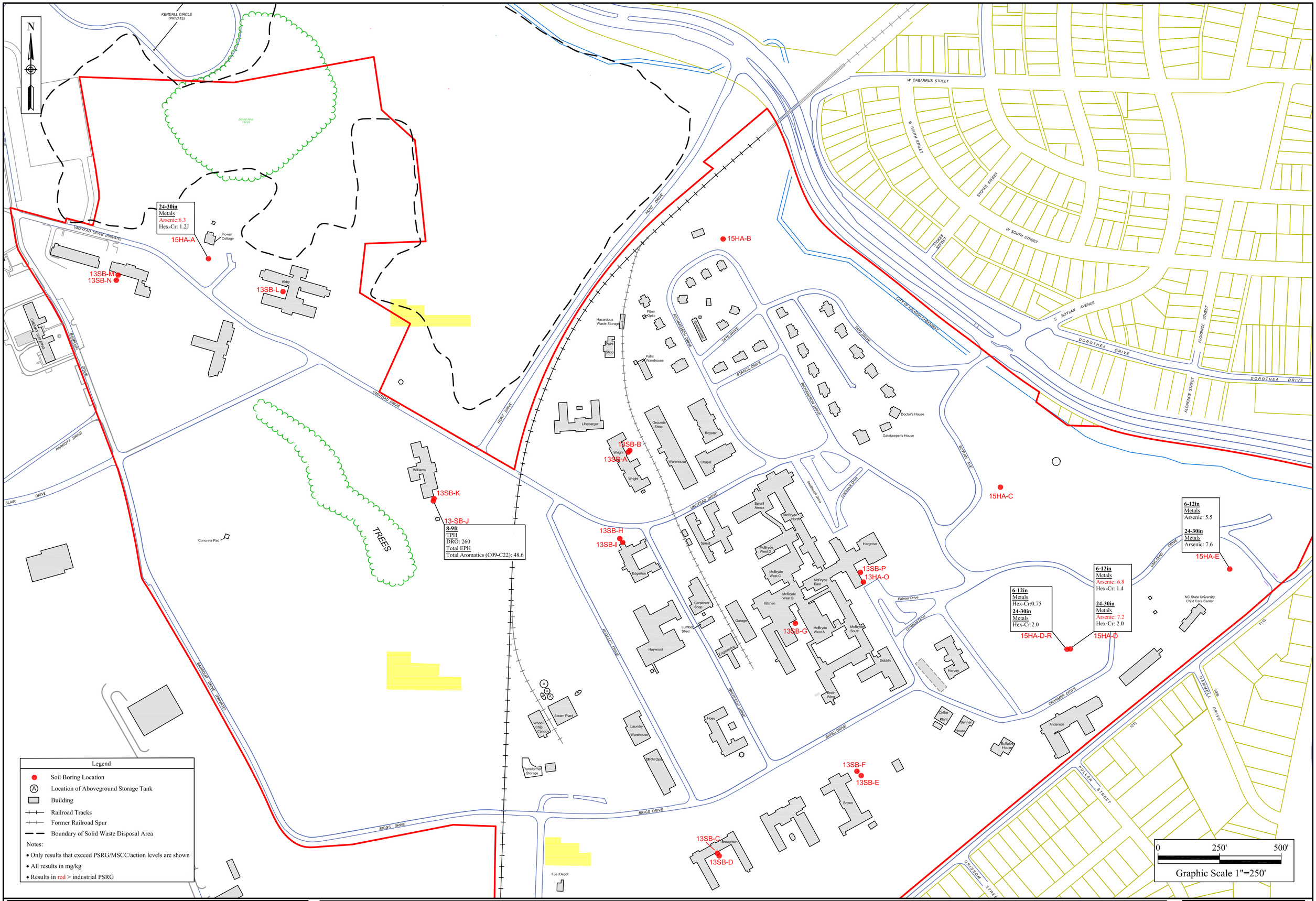
Stream Test Results - Area 21

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:
js		201336	February 2014	Wake Co. GIS; Field Notes; Laboratory Report
Scale: 1" = 100'	Size: 8.5" x 11"	Layers: 0,1,44	Filename: P:\Raleigh, City of\Dorothea Dix\201335 - Phase I ESA\CAD\Figure2&3 - Fig 9	

Figure

9



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Soil Test Results - Areas 13 and 15

Dorothea Dix Campus
Raleigh, North Carolina

Drawn By:	Checked By:	Project Number:	Date:	References:	Scale:	Paper Size:	Layers:
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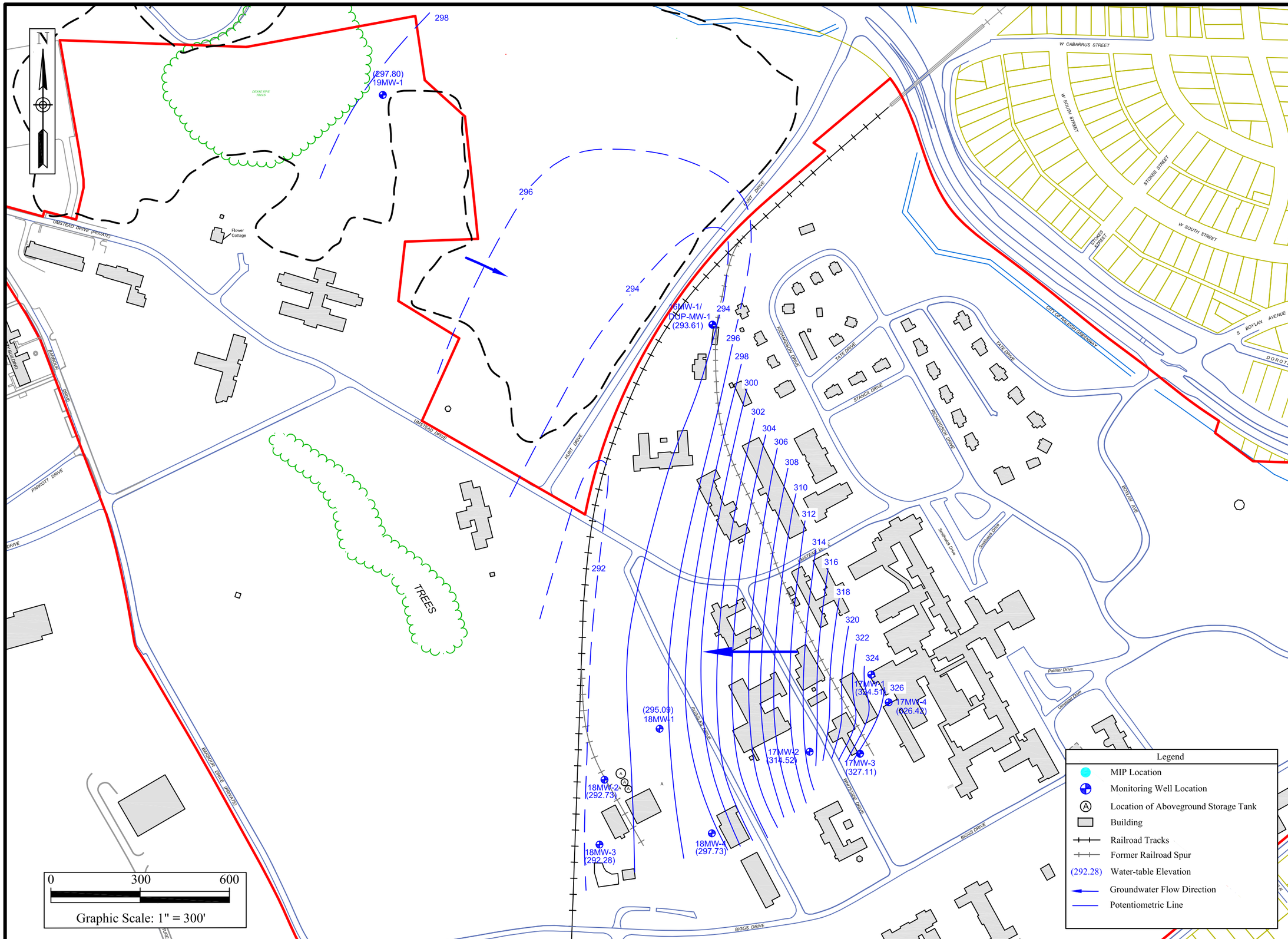
Figure

10



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Potentiometric Map - Full Site

Dorothea Dix Campus
Raleigh, North Carolina

References:
Wake Co. GIS; Taylor Wiseman & Taylor Survey; Field Notes; Laboratory Report

Drawn By: baj/js	Checked By: DWG	Project Number: 201336	Date: February 2014
Scale: 1" = 300'	Size: 11" x 17"	Layers: 0,1,35,46	Filename: P:/Raleigh, City of/Dorothea Dix/201335 - Phase I ESA/CAD/Figure 2&3

Figure

11

Tables

Table 1
Summary of Sample Locations and Analytical Suite
Dorothea Dix Campus
Raleigh, North Carolina

Location	Building # /Name (left blank if N/A)	Sample Number	Date Sampled	Matrix Sampled	VOCs (Method 8260)	SVOCs (Method 8270)	Priority Pollutant Metals (Methods 6010/6020/ 7470)	Hexavalent Chromium (Method 7199)	Organo-chlorine Pesticides (Method 8081)	Organo-Phosphate Pesticides (Method 8141)	Herbicides (Method 8151)	PCBs (Method 8082)	TPH-GRO (Method 8015)	VPH (MADEP Method)	TPH-DRO (Method 8015)	EPH (MADEP Method)
Area 1: Former Manufactured Gas Plant /Garage Area		1-SB-A (9.5-10.5')	1/20/2014	Soil	X	X	X	X								
		1-SB-B (4-5')			X	X	X	X								
		1-SB-C (5.5-6')			X	X	X									
		1-SB-D (4-5')			X	X	X									
		1-SB-E (3-4'			X	X	X									
		1-SB-F (11-12')			X	X	X									
		1-SB-G (7-8')	1/21/2014		X	X	X									
QA/QC		EB-5	1/20/2014	Water	X	X	X									
		Trip Blank	N/A		X											
Area 2: Possible Agricultural Mixing Area		2-HA-A (6-12")	1/16/2014	Soil	X	X	X	X	X	X	X					
		2-HAB (6-12")			X	X	X		X	X	X					
		Trip Blank	N/A	Water	X											
Area 3: Former Agricultural Fields		3-HA-A (6-12")	1/16/2014	Soil			X		X		X					
		3-HA-B (6-12")					X		X		X					
		3-HA-C (6-12")					X		X		X					
		3-HA-D (6-12")					X		X		X					
		3-HA-E (6-12")					X		X		X					
		3-HA-F (6-12")					X		X		X					
		3-HA-G (6-12")					X	X	X		X					
		3-HA-H (6-12")					X		X		X					
		3-HA-I (6-12")					X	X	X		X					
		3-HA-J (6-12")					X		X		X					
		3-HA-K (6-12")					X		X		X					
		3-HA-L (6-12")					X		X		X					
Area 4: Near Drain in Grounds Shop	43/Grounds Shop	4-SB-A (3.5 - 4.5')	1/17/2014	Soil	X	X		X	X	X	X		X		X	
QA/QC		Trip Blank	N/A	Water	X											
Area 5: Historic Land Farming Area North of Steam Plant		5-SB-A (12')	1/15/2014	Soil	X	X	X					X				
		5-SB-A (17')			X	X	X					X				
		5-SB-B (6-7')	1/16/2014		X	X	X	X				X				
		5-SB-C (6-7')			X	X	X	X				X				
		5-SB-D (5-6')			X	X	X					X				
		5-SB-D (10.5-11.5')				X	X					X				
		5-SB-E (7-8')			X	X	X					X				
		5-SB-F (4-5')	1/20/2014		X	X	X					X				
		5-HA-G (3.5-4.5')			X	X	X					X				
		5-HA-H	2/26/2014			X										
		15-HA-I (6-12")				X										
QA/QC		Trip Blank	N/A	Water	X	X	X					X				
Area 6: Historic Coal Pile Area West of Steam Plant		6-SB-A (1')	1/15/2014	Soil			X									
		6-SB-B (1')					X	X								
		6-SB-C (1')					X									
		6-SB-D (1')					X									
		DUP-4 (1')					X	X								
		6-SB-E (1')					X									
QA/QC		EB-4		Water			X									
Area 7: Landfill Area West of Cemetery		7-HA-A (6-12")	1/15/2014	Soil			X		X		X					
		7-HA-B (6-12")					X	X	X		X					
		DUP- 2 (6-12")					X		X		X					
		7-HA-C (6-12")					X	X	X		X					
		7-HA-D (6-12")					X		X		X					
QA/QC		EB-2		Water			X		X		X					
Area 8: Historic Outside Storage Area North of Current Hazardous Waste Storage Area (Trip Blank same as one listed in Area 10 below)		8-SB-A (1-2')	1/17/2014	Soil	X	X	X	X								
		8-SB-B (1-2')			X	X	X									
		8-SB-C (1-2')			X	X	X	X								
		8-SB-D (1-2')			X	X	X									
		8-SB-E (1-2')			X	X	X									
Area 9: Transformer Area Storage		9-HA-A (6-12")	1/17/2014	Soil			X					X				
		9-HA-B (6-12")					X	X				X				
		9-HA-C (6-12")					X					X				
		DUP-3 (6-12")					X					X				
		9-HA-D (6-12")					X					X				
		9-HA-E (6-12")					X					X				
QA/QC		EB-3		Water			X					X				
Area 10: Hazardous Waste Storage Area		10-SB-A (4-5')	1/17/2014	Soil	X	X	X									
		10-SB-B (1-2')			X	X	X	X								
		10-SB-C (1-2')			X	X	X									
		10-SB-D (2-3')			X	X	X	X								
QA/QC (in same cooler as Area 8 above)		Trip Blank	N/A	Water	X											
Area 11: Paint Shop		11-SB-A (2')	1/14/2014	Soil	X	X	X									
		11-SB-B (2')			X	X	X	X								
		11-SB-C (2')			X	X	X	X								
		DUP-1			X	X	X									
QA/QC (Trip blank in same cooler as Area 13 1/14/2014 samples)		EB-1		Water	X	X	X									
		Trip Blank	N/A		X											
Area 12: Garage - former hydraulic lifts	12/Garage	12-SB-A (3.5'-4.5')	1/17/2014	Soil											X	
		12-SB-B (6-6.5')													X	
Area 13: USTs (6 active, one temporarily abandoned) and 2 ASTs without double containment lines near emergency generators. Trip blank on 1/14/2014 same as Area 11 above.)	38/Wright	13-SB-A (5-6')	1/14/2014	Soil									X		X	
		13-SB-B (5-6')											X		X	
	21/Broughton	13-SB-C (5-6')											X		X	
		13-SB-D (5-6')											X		X	
	23/Brown	13-SB-E (5-6')											X		X	
		13-SB-F (5-6')											X		X	
	8/McBryde West B-AST	13-SB-G (1-2')											X		X	
	16/Edgerton	13-SB-H (7-8')											X		X	
		13-SB-I (7-8')											X		X	

Table 1
Summary of Sample Locations and Analytical Suite
Dorothea Dix Campus
Raleigh, North Carolina

Location	Building # /Name (left blank if N/A)	Sample Number	Date Sampled	Matrix Sampled	VOCs (Method 8260)	SVOCs (Method 8270)	Priority Pollutant Metals (Methods 6010/6020/ 7470)	Hexavalent Chromium (Method 7199)	Organo-chlorine Pesticides (Method 8081)	Organo-Phosphate Pesticides (Method 8141)	Herbicides (Method 8151)	PCBs (Method 8082)	TPH-GRO (Method 8015)	VPH (MADEP Method)	TPH-DRO (Method 8015)	EPH (MADEP Method)
Area 13 (cont'd): Trip blank on 1/15/2014 same as Area 11 above. Trip blank on 1/17/14 same as Area 4 above.	45/Williams	13-SB-J (8-9')	1/15/2014	Soil		X							X		X	X
		13-SB-K (8-9')											X		X	
	47/Kirby	13-SB-L (7-8')											X		X	
	48/Ashby	13-SB-M (1-2')											X		X	
		13-SB-N (7-8')											X		X	
	2/McBryde East - AST	13-HA-O (2')	1/17/2014										X		X	
		13-SB-P (2.5')											X		X	
Area 15: Background Soil Samples	Near Flower Cottage	15-HA-A (6-12")	1/17/2014	Soil			X	X								
		15-HA-A (2.5-3')					X	X								
	Near 44/Bio Safety Lab	15-HA-B (6-12")					X									
		15-HA-B (2.5-3')					X									
	Off Boylan Drive Entrance	15-HA-C (6-12")					X									
		15-HA-C (2.5-3')					X									
	North of Bldgs 29/30 (Anderson/ Taylor)	15-HA-D (6-12")	1/17/2014				X	X								
		15-HA-D(2.5-3')					X	X								
		15-HA-D-R (6-12")	2/5/2014				Cr Only	X								
		15-HA-D-R (2.5-3')					Cr Only	X								
	East of 31/NCSU Childcare	15-HA-E (6-12")	1/17/2014				X	X								
		15-HA-E (2.5-3')					X	X								
Area 16: Waste Storage Area		16-MW-1	2/3/2014	Groundwater	X	X	X									
		DUP-MW-1			X	X	X									
MIP Logs		16-MIP-1 to -5	1/13/2014	Membrane Interface Probe Logs												
QA/QC		GW-EB-2	2/3/2014	Water	X	X	X									
		Trip Blank	2/3/2014	Water	X	X	X									
Area 17: Garage/Former MGP Area		17-MW-1	1/31/2014	Groundwater	X	X	X									
		17-MW-2	2/3/2014		X	X	X									
		17-MW-3			X	X	X									
		MW-DUP-1			X	X	X									
		17-MW-4	1/31/2014		X	X	X									
MIP Logs		17-MIP-1A, B, C met refusal, no logs; 17-MIP-2, -3	1/15/2014	Membrane Interface Probe Logs												
QA/QC		GW-EB-1	1/31/2014	Water	X											
Area 18: Steam Plant Area		18-TMW-1	1/15/2014	Groundwater	X	X	X									
		18-MW-1	2/3/2014		X	X	X									
		18-MW-2			X	X	X									
		18-MW-3			X	X	X									
		18-MW-4			X	X	X									
MIP Logs		18-MIP-1 to -5	1/14/2014	Membrane Interface Probe Logs												
QA/QC		Trip Blank	2/3/2014	Water	X											
Area 19: Landfill Area West of Cemetery		19-MW-1	1/31/2014	Groundwater	X	X	X									
Area 21: Stream West of Steam Plant Area		21-SW-A	1/16/2014	Surface Water	X	X	X		X			X				
		21-SW-B			X	X	X		X			X				
		DUP-SW			X	X	X		X			X				
		21-SW-C			X	X	X		X			X				
		21-SED-A		Sediment	X	X	X		X			X				
		21-SED-B			X	X	X		X			X				
		21-SED-C			X	X	X	X	X			X				
QA/QC		SED EB		Water												
		Trip Blank	N/A	Water												

Notes:

(6-7') - feet below ground surface
TPH - Total Petroleum Hydrocarbons
DRO - Diesel Range Organics
GRO - Gasoline Range Organics
MADEP - Massachusetts Department of Environmental Protection
VPH - Volatile Petroleum Hydrocarbons
EPH - Extractable Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
Priority Pollutant Metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium and zinc)
NT - TPH/GRO or TPH/DRO < 10 mg/kg screening level, so no additional testing required.

Area 14 (Hydraulic Elevators) not sampled
Area 20 - Monitoring wells near ASTs/USTs in Area 13. Only one sample above screening levels. No monitoring wells installed

* Area 15 Sampled over three days. Trip blank on 1/15/2014 with sample locations 13 J-N; separate TB on 1/16/14; TB on 1/20/14 with Area 1 - sent in on 1/21/14

QA/QC - Quality Assurance/Quality Control Samples
TB - Trip Blank
EB - Equipment Blank
DUP - Field Duplicate Sample
MIP - Membrane Interface Probe

Table 2
Soil Laboratory Test Results: Area 1
Former Manufactured Gas Plant and former Power Plant/Garage Area
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification							Mean of Site Bkgd Samples 24-30" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	1-SB-A	1-SB-B	1-SB-C	1-SB-D	1-SB-E	1-SB-F	1-SB-G				
	Sample Depth (feet bgs)										
	9.5 - 10.5	4 - 5	5.5 - 6	4 - 5	3 - 4	11 - 12	7 - 8				
Volatile Organic Compounds - EPA 8260 (mg/kg)											
Acetone	0.017 J	0.049 J	0.039 J	<0.010	0.029 J	<0.010	0.027 J	N/A	24	12,000	100,000
2-Butanone (MEK)	<0.00024	0.007 J	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	N/A	16	5,600	28,000
Semivolatile Organic Compounds - EPA 8270 (mg/kg)											
Benzo(a anthracene	<0.0043	<0.0043	<0.0043	<0.0043	0.035 J	<0.0043	<0.0043	N/A	0.18	0.15	2.1
Benzo(b)fluoranthene	<0.0070	<0.0070	<0.0070	<0.0070	0.024 J	<0.0070	<0.0070	N/A	0.6	0.15	2.1
Benzo(k)fluoranthene	<0.0058	<0.0058	<0.0058	<0.0058	0.011 J	<0.0058	<0.0058	N/A	5.9	1.5	21
Benzo(g,h,i)perylene	<0.0072	<0.0072	<0.0072	<0.0072	0.010 J	<0.0072	<0.0072	N/A	7,800	NE	NE
Benzo(a)pyrene	<0.0055	<0.0055	<0.0055	<0.0055	0.017 J	<0.0055	<0.0055	N/A	0.059	0.015	0.21
Chrysene	<0.0056	<0.0056	<0.0056	<0.0056	**0.052**	<0.0056	<0.0056	N/A	18	15	210
Fluoranthene	<0.0050	<0.0050	<0.0050	<0.0050	**0.056**	<0.0050	<0.0050	N/A	330	460	4,400
Indeno(1,2,3-cd)pyrene	<0.0077	<0.0077	<0.0077	<0.0077	0.010 J	<0.0077	<0.0077	N/A	2.0	0.15	2.1
Phenanthrene	<0.0053	<0.0053	<0.0053	<0.0053	**0.15**	<0.0053	<0.0053	N/A	68	NE	NE
Priority Pollutant Metals (mg/kg)											
Antimony	1.1 J O1 P1 J6	<0.38	<0.38	0.74	1.1 J	0.75 J	<0.38	0.42	0.9	6.2	82
Arsenic	**34** O1 J6	**5.6**	**15**	**4.5**	**16**	**2.5**	**36**	5.3	5.8	0.61	2.4
Beryllium	**1.6**	**0.49**	**0.74**	**0.42**	**0.92**	**0.11**	**1.9**	1.2	63	32	400
Cadmium	**3.3**	**0.35**	0.78 J	<0.18	<0.18 O	<0.18 O	**4.5**	0.30	3.0	14	160
Chromium, total	**220** J6	**35**	**30**	**3.1**	**19**	**0.94**	**27**	25	360,000	24,000	100,000
Chromium, hexavalent	**3.2**	**0.91**	NT	NT	NT	NT	NT	NA	3.8	0.29	5.6
Copper	**190**	**5.3**	**23**	**41**	**25**	**31**	**66**	31	700	620	8,200
Lead	**80** J3 J5	**12**	**18**	**7.1**	**30**	**44**	**28**	17	270	400	800
Mercury	**0.049**	0.012 J	**0.063**	0.0087	**0.055**	0.0037 J	**0.047**	0.039	1.0	4.6	62
Nickel	**43** O1	**5.0**	**14**	**2.8**	**8.7**	**3.7**	**24**	8.7	130	300	4,000
Silver	2.6 J O1	<0.14	**0.65**	<0.14	0.29 J	<0.14	**3.5**	0.41	3.4	78	1,000
Thallium	<1.6 O	1.0 J	**3.4**	<0.32	<0.32	<0.32	<1.6 O	0.58	0.28	0.16	2.0
Zinc	**17** O1 J5	**8.4**	**34**	**18**	**150**	**24**	**47**	30	1,200	4,600	62,000

Notes:

Results as shown: mg/kg, equivalent to parts per million

All samples in this area were tested for volatile organic compounds, semivolatile organic compounds and Priority Pollutant metals. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

Two samples from Area 1 tested for total chromium were re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.

NE - Not established NT - Not tested

N/A - Not applicable

bold font Result exceeds reported detection limit

Result exceeds protection-of-groundwater (PGW) PSRG

Result exceeds residential PSRG

Result exceeds industrial PSRG

Result exceeds PGW and residential PSRG

Result exceeds PGW and industrial PSRG

bgs - below ground surface

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Laboratory Qualifiers

J - estimated concentration for test results above method detection limit but below reported detection limit.

J3 - The associated batch QC was outside the established quality control range for precision.

J5 - The sample matrix interfered with the ability to make an accurate determination; spike value is high.

J6 - The sample matrix interfered with the ability to make an accurate determination; spike value is low.

O - Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limited is elevated in order to reflect the necessary dilution.

O1 - The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

P1 - RPD value not applicable for sample concentrations less than five times reporting limit.

Table 3
Soil Laboratory Test Results: Area 2
Possible Agricultural Chemical Mixing Area
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification		Mean Site Bkgd Samples 6-12" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	2-HA-A	2-HA-B				
	Sample Depth (feet bgs)					
	0.5 - 1	0.5 - 1				
Volatile Organic Compounds - EPA 8260 (mg/kg)						
Acetone	0.022 J	0.023 J	N/A	24	12,000	100,000
Priority Pollutant Metals (mg/kg)						
Arsenic	**6.6**	**9.2**	4.3	5.8	0.61	2.4
Beryllium	**0.43**	**0.52**	1.0	63	32	400
Cadmium	0.27 J	**0.39**	0.25	3.0	14	160
Chromium, total	**11**	**15**	17	360,000	24,000	100,000
Chromium, hexavalent	NT	<0.26	N/A	3.8	0.29	5.6
Copper	**20**	**22**	23	700	620	8,200
Lead	**140**	**62**	16	270	400	800
Mercury	**0.078**	**0.092**	0.031	1.0	4.6	62
Nickel	**3.9**	**4.7**	6.0	130	300	4,000
Selenium	0.68 J	1.1 J	0.77	2.1	78	1,000
Silver	0.21 J	0.20 J	0.41	3.4	78	1,000
Zinc	**70**	**81**	33	1,200	4,600	62,000

Notes:

All results in mg/kg, equivalent to parts per million

All samples in this area were tested for volatile organic compounds, semivolatile organic compounds, Priority Pollutant metals, organochlorine and organophosphate pesticides and herbicides. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

One sample from Area 2 tested for total chromium was re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.

N/A - Not applicable NT - Not tested

bold font Result exceeds reporting detection limit

Result exceeds protection-of-groundwater and industrial PSRGs

bgs - below ground surface

J - estimated concentration for test results above method detection limit but below reported detection limit.

Table 4
Soil Laboratory Test Results: Area 3
Former Agricultural Fields
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification												Mean of Site Bkgd Samples 6 - 12" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	3-HA-A	3-HA-B	3-HA-C	3-HA-D	3-HA-E	3-HA-F	3-HA-G	3-HA-H	3-HA-I	3-HA-J	3-HA-K	3-HA-L				
	Sample Depth (inches bgs)															
	6 - 12	6 - 12	6 - 12	6 - 12	6 - 12	6 - 12	6 - 12	6 - 12	6 - 12	6 - 12	6 - 12	6 - 12				
Priority Pollutant Metals (mg/kg)																
Antimony	**1.6**	**1.5**	<0.38	<0.38	**2.2**	<0.38	0.54 J	<0.38	<0.38	<0.38	<0.38	<0.38	0.23	0.9	6.2	82
Arsenic	**5.3**	**5.1**	**9.6**	**11**	**25**	**5.4**	**26**	**8.2**	**20**	**16**	**18**	**14**	4.3	5.8	0.61	2.4
Beryllium	**0.31**	**0.27**	**0.66**	**0.55**	**0.93**	**0.46**	**1.4**	**0.41**	**0.66**	**0.73**	**0.82**	**0.73**	1.0	63	32	400
Cadmium	0.29 J	0.17 J	0.13 J	<0.035	<0.035	**0.33**	<0.035	**0.16**	**0.68**	**0.46**	0.25 J	0.28 J	0.25	3.0	14	160
Chromium, total	**16**	**30**	**14**	**28**	**12**	**12**	**59**	**19**	**34**	**34**	**30**	**28**	17	360,000	24,000	100,000
Chromium, hexavalent	NT	NT	NT	NT	NT	NT	<0.26	NT	<0.26	NT	NT	NT	N/A	3.8	0.29	5.6
Copper	**9.4**	**12**	**17**	**19**	**51**	**22**	**46**	**24**	**34**	**37**	**29**	**42**	23	700	620	8,200
Lead	**12**	**11**	**9.1**	**10**	**11**	**12**	**24**	**10**	**19**	**24**	**18**	**17**	16	270	400	800
Mercury	**0.070**	**0.032**	**0.043**	**0.034**	**0.041**	**1.4**	**0.077**	**0.034**	**0.083**	**0.27**	**0.046**	**0.042**	0.031	1.0	4.6	62
Nickel	**4.6**	**3.6**	**6**	**5.7**	**7.2**	**8.3**	**15**	**7.1**	**13**	**9.5**	**9.9**	**12**	6.0	130	300	4,000
Selenium	0.68 J	0.86 J	<0.37	0.92 J	<1.8	<0.37	<1.8	**0.52**	<1.8	0.66 J	1.4	1.0 J	0.77	2.1	78	1,000
Silver	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	0.35 J	**0.25**	**0.25**	<0.14	0.36 J	0.38 J	0.41	3.4	78	1,000
Thallium	<0.32	<0.32	**0.58**	<0.32	<1.6	<0.32	<1.6	<0.32	<0.32	<0.32	<0.32	<0.32	0.32	0.28	0.16	2.0
Zinc	**22**	**17**	**21**	**27**	**60**	**40**	**55**	**18**	**40**	**37**	**29**	**24**	33	1,200	4,600	62,000

Notes:

All results in mg/kg, equivalent to parts per million

All samples in this area were tested for Priority Pollutant metals, organochlorine pesticides and herbicides. Only the constituents detected in at least one sample are listed in this table. See lab reports for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

Two samples from Area 3 tested for total chromium were re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.

N/A - Not applicable

NT - Not tested

bold font Result exceeds reported detection limit

Result exceeds protection-of-groundwater PSRG

Result exceeds residential PSRG

Result exceeds industrial PSRG

Results exceeds protection-of-groundwater and residential PSRG

Result exceeds protection-of-groundwater and industrial PSRG

bgs - below ground surface

J - estimated concentration for test results above method detection limit but below reported detection limit

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 5
Soil Laboratory Test Results: Area 4
Former Drain in Grounds Shop
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample ID 4-SB-A (3.5 - 4.5 feet bgs)	Mean of Site Bkgd Samples 24-30" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
Volatile Organic Compounds (mg/kg)					
Acetone	0.018 J	N/A	24	12,000	100,000
Priority Pollutant Metals (mg/kg)					
Antimony	**11**	0.42	0.9	6.2	82
Aresenic	**18**	5.3	5.8	0.61	2.4
Beryllium	**0.80**	1.2	63	32	400
Cadmium	**0.89**	0.30	3.0	14	160
Chromium, total	**27**	25	360,000	24,000	100,000
Chromium, hexavalent	<0.26	N/A	3.8	0.29	5.6
Copper	**39**	31	700	620	8,200
Lead	**16**	17	270	400	800
Mercury	**0.1**	0.039	1.0	4.6	62
Nickel	**7.5**	8.7	130	300	4,000
Silver	**0.87**	0.41	3.4	78	1,000
Thallium	**0.91**	0.58	0.28	0.16	2
Zinc	**33**	30	1200	4,600	62,000

Notes:

All results in mg/kg, equivalent to parts per million

This sample was tested for volatile organic compounds, semivolatile organic compounds, Proirity Pollutant metals, organochlorine pesticides and herbicides and total petroleum hydrocarbons, both diesel and gasoline fractions. Only the constituents detected are listed in this table. See lab report for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

bgs - below ground surface

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

This sample tested for total chromium was re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.

N/A - Not applicable

bold font Result exceeds reported detection limit

Result exceeds protection-of-groundwater and residential PSRG

Result exceeds protection-of-groundwater and industrial PSRG

J - estimated concentration for test results above method detection limit but below reported detection limit

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 6
Soil Laboratory Test Results: Area 5
Historic Land Farming Area Northeast of Steam Plant
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification										Mean of Site Bkgd Samples 24-30" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	5-SB-A	5-SB-B	5-SB-C	5-SB-D	5-SB-D	5-SB-E	5-SB-F	5-HA-G	5- HA-H	5-HA-I				
	Sample Depth (feet bgs)								Sample Depth (inches bgs)					
	12	6 - 7	6 - 7	5 - 6	10.5 - 11.5 *	7 - 8	4 - 5	3.5 - 4	6 - 12	6 - 12				
Volatile Organic Compounds - EPA 8260 (mg/kg)														
Acetone	<0.010	0.023 J	0.026 J	0.025 J	NT	<0.010	0.019 J	0.060 J	NT	NT	N/A	24	12,000	100,000
Semivolatile Organic Compounds - EPA 8270 (mg/kg)														
Acenaphthylene	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	**0.19**	1.6 J	0.58 J	N/A	21	NE	NE
Anthracene	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	**0.83**	2.1 J	1.2 J	N/A	660	3,400	34,000
Benzo(a) anthracene	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	**2.6**	2.5 J	**2.3**	N/A	0.18	0.15	2.1
Benzo(b) fluoranthene	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	**1.6**	2.8 J	1.8 J	N/A	0.6	0.15	2.1
Benzo(k) fluoranthene	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	**0.57**	1.0 J	0.65 J	N/A	5.9	1.5	21
Benzo(g,h,i) perylene	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	**0.62**	0.91 J	1.0 J	N/A	7,800	NE	NE
Benzo(a) pyrene	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	**1.8**	1.8 J	1.7 J	N/A	0.059	0.015	0.21
Chrysene	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	**3.1**	3.4 J	**3.1**	N/A	18	15	210
Dibenz(a,h)anthracene	<0.0082	<0.0082	<0.0082	<0.0082	<0.0082	<0.0082	<0.0082	<0.16	<0.82	0.72 J	N/A	0.19	0.015	0.21
Fluoranthene	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**1.9**	2.3 J	1.8 J	N/A	330	460	4,400
Indeno(1,2,3-cd) pyrene	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	**0.62**	1.0 J	1.1 J	N/A	2.0	0.15	2.1
Phenanthrene	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	**4.9**	**5.2**	**5.4**	N/A	68	NE	NE
Pyrene	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	**3.9**	**4.7**	**3.8**	N/A	220	340	3,400
Priority Pollutant Metals (mg/kg)														
Antimony	**1.8** O1 P1 J6	0.99 J	<0.38	<0.38	0.79 J	<0.38	<0.38	<0.38	NT	NT	0.42	0.9	6.2	82.0
Arsenic	<0.32	**36**	**46**	**33**	**6.3**	**20**	**14**	**8.2**	NT	NT	5.3	5.8	0.61	2.4
Beryllium	**0.55**	**1.9**	**3.1**	**1.0**	**0.33**	**1.3**	**0.63**	**0.79**	NT	NT	1.2	63	32	400
Cadmium	**0.26**	<0.035	<0.035	<0.035	<0.18	<0.035	**1.0**	**0.39**	NT	NT	0.30	3.0	14	160
Chromium, total	**3.2**	**29**	**71**	**100** **	**2.4**	**23**	**43**	**24**	NT	NT	25	360,000	24,000	100,000
Chromium, hexavalent	NT	**1.2**	**2.0**	NT	NT	NT	NT	NT	NT	NT	N/A	3.8	0.29	5.6
Copper	**49**	**160**	**140**	**130**	**48**	**99**	**80**	**29**	NT	NT	31	700	620	8,200
Lead	**4.6**	**5.6**	**7.5**	**4.2**	**2.7**	**4.9**	**7.6**	**25**	NT	NT	17	270	400	800
Mercury	0.0018 J	0.028 J	0.026 J	0.0077 J	0.0019 J	0.020 J	**0.098**	0.072	NT	NT	0.039	1.0	4.6	62
Nickel	**16**	**22**	**42**	**34**	**16**	**12**	**19**	**10**	NT	NT	8.7	130	300	4,000
Selenium	<0.37	<0.18	<0.18	<0.18	<0.37	**1.9**	<0.37	<0.37	NT	NT	0.33	2.1	78	1,000
Silver	<0.14	0.59 J	**0.97**	**0.86**	<0.14	**0.84**	**1.0**	0.35 J	NT	NT	0.41	3.4	78	1,000
Zinc	**62**	**91**	**73**	**32**	**48**	**22**	**28**	**40**	NT	NT	30	1,200	4,600	62,000

Notes:

All results in mg/kg, equivalent to parts per million.

All samples in this area were tested for volatile organic compounds, semivolatile organic compounds, PCBs and metals except 5-SB-D (10.5 - 11.5'), which was tested for the same parameters except volatiles. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of contaminants tested. PCBs were not detected in any of the samples. 5-SB-A-17' was only tested for PCBs, so does not show up in this table.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

** Total chromium greater than twice background concentration and hexavalent chromium not analyzed. Based on results of 29 soil samples tested for hexavalent chromium, it is likely that soil samples with total chromium greater than twice mean background will exceed the residential PSRG for hexavalent chromium.

Two samples from Area 5 tested for total chromium were re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.

N/A - Not applicable NE - Not established NT - Not tested

bold font Result exceeds reported detection limit

Result exceeds protection-of-groundwater (PGW) PSRG

Result exceeds residential PSRG

Result exceeds industrial PSRG

Result exceeds PGW and residential PSRG

Result exceeds PGW and industrial PSRG

bgs - feet below ground surface

Laboratory Qualifiers

J - estimated concentration for test results above method detection limit but below reported detection limit

J6 - The sample matrix interfered with the ability to make an accurate determination; spike value is low.

O1 - The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

P1 - RPD value not applicable for sample concentrations less than five times reporting limit.

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 7
Soil Laboratory Test Results: Area 6
Historic Coal Pile Area West of Steam Plant
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification						Mean of Site Bkgd Samples 6-12" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	6-SB-A	6-SB-B	6-SB-C	6-SB-D	DUP-4	6-SB-E				
	Sample Depth (feet bgs)									
	1	1	1	1	1	1				
Priority Pollutant Metals (mg/kg)										
Antimony	<0.38	<0.38	<0.38	<0.38	<0.38	**1.1**	0.23	0.9	6.2	82
Arsenic	**4.6**	**32**	**4.7**	**5.8**	**6.0**	**3.6**	4.3	5.8	0.61	2.4
Beryllium	**2.0**	**1.5**	**1.3**	**1.8**	**1.9**	**1.7**	1.0	63	32	400
Cadmium	**0.39**	0.25 J	**0.28**	**0.39**	**0.43**	**0.38**	0.25	3.0	14	160
Chromium, total	**22**	**47**	**39 ****	**38 ****	**50**	**23**	17	360,000	24,000	100,000
Chromium, hexavalent	NT	**1.2**	NT	NT	**1.4**	NT	N/A	3.8	0.29	5.6
Copper	**110**	**82**	**59**	**92**	**99**	**81**	23	700	620	8,200
Lead	**8.3**	**9.7**	**11**	**11**	**11**	**28**	16	270	400	800
Mercury	0.0062 J	**0.031**	**0.12**	**0.054**	**0.061**	0.020 J	0.031	1.0	4.6	62
Nickel	**14**	**17**	**22**	**23**	**20**	**28**	6.0	130	300	4,000
Selenium	0.72 J	**2.6**	**0.77**	0.72 J	0.92 J	**1.3**	0.77	2.1	78	1,000
Thallium	<1.6	1.1 J	<0.32	**1.2**	**1.0**	**1.2**	0.32	0.28	0.16	2.0
Zinc	**47**	**43**	**31**	**45**	**52**	**30**	33	1,200	4,600	62,000

Notes:

All results in mg/kg, equivalent to parts per million

All samples in this area were tested for priority pollutant metals. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

** Total chromium greater than twice background concentration and hexavalent chromium not analyzed. Based on results of 29 soil samples tested for hexavalent chromium, it is likely that soil samples with total chromium greater than twice mean background will exceed the residential PSRG for hexavalent chromium.

Two samples from Area 6 tested for total chromium were re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.

NT - Not tested N/A - Not applicable

bgs - below ground surface

bold font Result exceeds reported detection limit

Result exceeds protection-of-groundwater (PGW) PSRG

Result exceeds residential PSRG

Result exceeds industrial PSRG

Result exceeds PGW and residential PSRG

Result exceeds PGW and industrial PSRG

J - estimated concentration for test results above method detection limit but below reported detection limit

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 8
Soil Laboratory Test Results: Area 7
Landfill West of Cemetery
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification					Mean of Site Bkgd Samples 6-12" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	7-HA-A	7-HA-B	DUP-2	7-HA-C	7-HA-D				
	Sample Depth (inches bgs)								
	6 - 12	6 - 12	6 - 12	6 - 12	6 - 12				
Priority Pollutant Metals (mg/kg)									
Antimony	<0.38	0.63 J	0.60 J	<0.38	1.0 J	0.23	0.9	6.2	82
Arsenic	**3.3**	**3.4**	**1.9**	**4.6**	**3.1**	4.3	5.8	0.61	2.4
Beryllium	**1.1**	**2.0**	**1.8**	**0.72**	**1.7**	1	63	32	400
Cadmium	**0.39**	0.29 J	0.29 J	**0.34**	**0.32**	0.25	3.0	14	160
Chromium, total	**19**	**31**	**26**	**29**	**27**	17	360,000	24,000	100,000
Chromium, hexavalent	NT	<0.26	NT	<0.26	NT	N/A	3.8	0.29	5.6
Copper	**26**	**36**	**29**	**33**	**42**	23	700	620	8,200
Lead	**28**	**6.8**	**15**	**26**	**7.4**	16	270	400	800
Mercury	**0.26**	0.0018 J	0.0019 J	**0.095** O1	0.015 J	0.031	1.0	4.6	62
Nickel	**7.0**	**13**	**12**	**4.3**	**12**	6.0	130	300	4,000
Selenium	**1.4**	**1.3**	**1.6**	**2.3**	0.73 J	0.77	2.1	78	1,000
Thallium	<0.32	<1.6	<1.6	0.94 J	<1.6	0.32	0.28	0.16	2.0
Zinc	**57**	**62**	**55**	**33**	**59**	33	1,200	4,600	62,000
Organophosphate Pesticides (mg/kg)									
4,4-DDE	**0.028**	<0.0015	<0.0015	<0.0015	<0.0015	N/A	0.24	1.4	5.1
4,4-DDT	0.0028 J	<0.0020	<0.0020	<0.0020	<0.0020	N/A	0.34	1.7	7.0

Notes:

All results in mg/kg, equivalent to parts per million.

All samples in this area were tested for priority pollutant metals, organophosphate pesticides and herbicides. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

N/A - Not applicable NT - Not tested

bold font Result exceeds reported detection limit

Result exceeds protection-of-groundwater (PGW) PSRG

Result exceeds residential PSRG

Result exceeds industrial PSRG

bgs - below ground surface

Laboratory Qualifiers

J - estimated concentration for test results above method detection limit but below method reporting limit

O1 - The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 9
Soil Laboratory Test Results: Area 8
Historic Outside Storage Area North of Current Hazardous Waste Storage Area
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification					Mean of Site Bkgd Samples 24-30" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	8-SB-A	8-SB-B	8-SB-C	8-SB-D	8-SB-E				
	Sample Depth (feet bgs)								
	1 - 2	1 - 2	1 - 2	1 - 2	1 - 2				
Semivolatile Organic Compounds - EPA 8270 (mg/kg)									
Benzo(a) anthracene	<0.0043	<0.0043	<0.0043	0.18 J	0.015 J	N/A	0.18	0.15	2.1
Benzo(b) fluoranthene	<0.0070	<0.0070	<0.0070	**0.23**	0.015 J	N/A	0.6	0.15	2.1
Benzo(k) fluoranthene	<0.0058	<0.0058	<0.0058	0.065 J	<0.0058	N/A	5.9	1.5	21
Benzo(g,h,i) perylene	<0.0072	<0.0072	<0.0072	0.11 J	0.0085 J	N/A	7,800	NE	NE
Benzo(a) pyrene	<0.0055	<0.0055	<0.0055	0.16 J	0.013 J	N/A	0.059	0.015	0.21
Chrysene	<0.0056	<0.0056	<0.0056	0.18 J	0.015 J	N/A	18	15	210
Fluoranthene	<0.0050	<0.0050	<0.0050	**0.31**	0.020 J	N/A	330	460	4,400
Indeno(1,2,3-cd) pyrene	<0.0077	<0.0077	<0.0077	0.097 J	<0.0077	N/A	2.0	0.15	2.1
Phenanthrene	<0.0053	<0.0053	<0.0053	0.12 J	0.021 J	N/A	68	NE	NE
Pyrene	<0.012	<0.012	<0.012	**0.29**	0.021 J	N/A	220	340	3,400
Priority Pollutant Metals (mg/kg)									
Antimony	**9.2**	**3.8**	<1.9	**6.5**	**6.8**	0.23	0.9	6.2	82
Arsenic	**18**	**9.1**	**12**	**56**	**25**	4.3	5.8	0.61	2.4
Beryllium	**0.85**	**0.68**	**1.6**	**1.2**	**1.0**	1.0	63	32	400
Cadmium	**0.53**	**0.20 J**	<0.035	**0.48**	**0.47**	0.25	3.0	14	160
Chromium, total	**31**	**16**	**55**	**30**	**26**	17	360,000	24,000.00	100,000
Chromium, hexavalent	<0.26	NT	<0.26	NT	NT	N/A	3.8	0.29	5.6
Copper	**110**	**22**	**95**	**61**	**60**	23	700	620	8,200
Lead	**9.1**	**18**	**7.9**	**94**	**59**	16	270	400	800
Mercury	**0.034**	0.022 J	**0.034**	**0.26**	**1.5**	0.31	1.0	4.6	62
Nickel	**11**	**7.2**	**30**	**10**	**9.9**	6.0	130	300	4,000
Selenium	<1.8	<1.8	**16**	<1.8	<1.8	0.77	2.1	78	1,000
Silver	**1.2**	0.49 J	**1.4**	0.67 J	**0.78**	0.41	3.4	78	1,000
Zinc	**31**	**26**	**34**	**130**	**92**	33	1,200	4,600	62,000

Notes:

All results in mg/kg, equivalent to parts per million

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

All samples in this area were tested for volatile organic compounds, semivolatile organic compounds and Priority Pollutant metals. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

Two samples from Area 8 tested for total chromium were re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.

N/A - Not applicable NT - Not tested

NE - Not established

bgs - below ground surface

bold font Result exceeds reported detection limit

Result exceeds protection-of-groundwater (PGW) PSRG

Result exceed residential PSRG

Result exceeds industrial PSRG

Result exceeds PGW and residential PSRG

Result exceeds PGW and industrial PSRG

J - estimated concentration for test results above method detection limit but below method reporting limit

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 10
Soil Laboratory Test Results: Area 9
Transformer Storage Area
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification						Mean of Site Bkgd Samples 6-12" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	9-HA-A	9-HA-B	9-HA-C	DUP-3	9-HA-D	9-HA-E				
	Sample Depth (inches bgs)									
	6 - 12	6 -12	6 - 12	6 - 12	6 - 8	6 - 8				
Priority Pollutant Metals (mg/kg)										
Arsenic	**11**	**7.0**	**10**	**9.2**	**6.0**	0.84 J	4.3	5.8	0.61	2.4
Beryllium	**1.4**	**1.4**	**1.2**	**0.91**	**1.2**	**0.18**	1.0	63	32	400
Cadmium	**0.39**	**0.91**	**0.44**	0.27 J	**2.3**	**0.34**	0.25	3.0	14	160
Chromium, total	**23**	**28**	**22**	**19**	**12**	**2.1**	17	360,000	24,000	100,000
Chromium, hexavalent	NT	< 0.26/**1.3****	NT	NT	NT	NT	NA	3.8	0.29	5.60
Copper	**66**	**66**	**43**	**42**	**40**	**5.8**	23	700	620	8,200
Lead	**8.8**	**17**	**6.9**	**5.8**	**22**	**3.4**	16	270	400	800
Mercury	**0.064**	**0.062**	**0.038**	**0.027**	0.026 J	0.0050 J	0.031	1.0	4.6	62
Nickel	**15**	**20**	**15**	**10**	**28**	**7.7**	6.0	130	300	4,000
Selenium	0.47 J	**2.2**	**1.6**	**1.7**	**3.1**	0.76 J	0.77	2.1	78	1,000
Silver	<0.70	<0.70	<0.70	<0.14	0.43 J	<0.14	0.41	3.4	78	1,000
Zinc	**31**	**67**	**32**	**20**	**93**	**13**	33	1,200	4,600	62,000

Notes:

All results in mg/kg, equivalent to parts per million

All samples in this area were tested for priority pollutant metals and PCBs. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

** Sample 9-HA-B (6-12") was inadvertently submitted for a second hexavalent Cr analysis, so was used as a duplicate analysis in this table.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

Two samples from this area tested for total chromium were re-tested for hexavalent chromium; both were for 9HA-B. See Table 16 for all hexavalent chromium results.

NT - Not tested

NA - Not available

bold font Result exceeds reported detection limit

Result exceeds protection-of-groundwater (PGW) PSRG

Result exceeds residential PSRG

Result exceeds industrial PSRG

Result exceeds PGW and residential PSRG

Result exceeds PGW and industrial PSRG

bgs - feet below ground surface

J - estimated concentration for test results above method detection limit but below method reporting limit

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 11
Soil Laboratory Test Results: Area 10
Former Hazardous Waste Storage Area
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification				Mean of Site Bkgd Samples 24-30" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	10-SB-A	10-SB-B	10-SB-C	10-SB-D				
	Sample Depth (feet bgs)							
	4-5	1-2	1-2	2-3				
Priority Pollutant Metals (mg/kg)								
Antimony	<0.38	<0.38	<0.38	**7.9**	0.42	0.9	6.2	82
Arsenic	**4.0**	**6.0**	**5.9**	**24**	5.3	5.8	0.61	2.4
Beryllium	**1.1**	**1.6**	**1.3**	**1.2**	1.2	63	32	400
Cadmium	**0.36**	**0.44**	**0.35**	**0.91**	0.30	3.0	14	160
Chromium, total	**25**	**30**	**27**	**42**	25	360,000	24,000	100,000
Chromium, hexavalent	NT	<0.26	NT	<0.26	NA	3.8	0.29	5.6
Copper	**54**	**76**	**44**	**73**	31	700	620	8,200
Lead	**6.8**	**7.7**	**12**	**9.8**	17	270	400	800
Mercury	**0.039**	0.018 J O1	**0.051**	**0.028**	0.039	1.0	4.6	62
Nickel	**16**	**12**	**11**	**39**	8.7	130	300	4,000
Selenium	0.48 J	<0.37	**1.4**	<1.8	0.33	2.1	78	1,000
Silver	<0.70	<0.70	<0.70	**1.0**	0.41	3.4	78	1,000
Thallium	<0.32	1.2 J	<0.32	<1.6	0.58	0.28	0.16	2.0
Zinc	**30**	**30**	**35**	**38**	30	1,200	4,600	62,000

Notes:

All results in mg/kg, equivalent to parts per million

All samples in this area were tested for volatile organic compounds, semivolatile organic compounds and Priority Pollutant metals. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

Two samples from Area 11 tested for total chromium were re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.

NT - Sample not tested for this analyte
NE - Not established
N/A - Not applicable
NA - Not available

bold font Result exceeds reported detection limit
Result exceeds protection-of-groundwater (PGW) PSRG
Result exceeds residential PSRG
Result exceeds industrial PSRG
Result exceeds PGW and residential PSRG
Result exceeds PGW and industrial PSRG

bgs - below ground surface

Laboratory Qualifiers

J - estimated concentration for test results above method detection limit but below method reporting limit
J3 - The associated batch QC was outside the established quality control range for precision.
J6 - The sample matrix interfered with the ability to make an accurate determination; spike value is low.
O1 - The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 12
Soil Laboratory Test Results: Area 11
Paint Shop Area
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification				Mean of Site Bkgd Samples 24-30" *	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	11-SB-A	11-SB-B	11-SB-C	DUP-1				
	Sample Depth (feet bgs)							
	2	2	2	2				
Volatile Organic Compounds - EPA 8260 (mg/kg)								
Xylenes, Total	<0.00070	0.0028 J	<0.00070	<0.00070	N/A	5.8	130	260
Semivolatile Organic Compounds - EPA 8270 (mg/kg)								
Bis (2-ethylhexyl) phthalate	0.018 J	<0.012	<0.012	<0.012	N/A	7.2	35	120
Priority Pollutant Metals (mg/kg)								
Arsenic	**4.6**	3.2 J	6.4 J	**7.7**	5.3	5.8	0.61	2.4
Beryllium	**1.8**	**3.5**	**2.1**	**2.1**	1.2	63	32	400
Cadmium	**0.55**	**0.76**	**0.71**	**0.58**	0.30	3.0	14	160
Chromium, total	**39**	**190**	**64**	**55** **	25	360,000	24,000	100,000
Chromium, hexavalent	NT	**1.7**	<0.26	NT	NA	3.8	0.29	5.6
Copper	**90** B	**150** B	**100** B	**110** B	31	700	620	8,200
Lead	**11**	**7.9**	**10**	**9.8**	17	270	400	800
Mercury	0.058 J O1 P1 J6	**0.040**	**0.14**	**0.066**	0.039	1.0	4.6	62
Nickel	**21**	**33**	**25**	**28**	8.7	130	300	4,000
Selenium	**1.8**	2.6 J	<1.8	3.0 J	0.33	2.1	78	1,000
Thallium	**2.4**	5.7 J	4.6 J	**8.4**	0.58	0.28	0.16	2.0
Zinc	**74**	**57**	**47**	**48**	30	1,200	4,600	62,000

Notes:

All results in mg/kg

All samples in this area were tested for volatile organic compounds, semivolatile organic compounds and priority pollutant metals. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

** Total chromium greater than twice background concentration and hexavalent chromium not analyzed. Based on results of 29 soil samples tested for hexavalent chromium, it is likely that soil samples with total chromium greater than twice mean background will exceed both the residential PSRG for hexavalent chromium..

Two samples from this area tested for total chromium were re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.

NA - Not available NT - Not Tested

bold font Result exceeds reported detection limit

Result exceeds protection-of-groundwater (PGW) PSRG

Result exceeds residential PSRG

Result exceeds industrial PSRG

Result exceeds PGW and residential PSRG

Result exceeds PGW and industrial PSRG

bgs - below ground surface

Laboratory Qualifiers

B - The indicated compound was found in the associated method blank as well as the laboratory sample.

J - estimated concentration for test results above method detection limit but below reported detection limit.

J6 - The sample matrix interfered with the ability to make any accurate determination; spike value is low.

O1 - The analyte failed the method - required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

P1 - RPD value not applicable for sample concentrations less than five times reporting limit.

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 13
Soil Laboratory Test Results: Area 12
Garage - Former Hydraulic Lift
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Total Petroleum Hydrocarbons - Diesel Range Organics (TPH-DRO)
Action Level	**10**
12-SB-A (2 - 2.5 feet bgs)	<0.77
12-SB-B (6 - 6.5 feet bgs)	**1.6**

Notes:
All results in mg/kg, equivalent to parts per million
Tested for TPH-DRO; no additional tests necessary since neither sample exceeded the action level.
bgs - below ground surface
Result in **bold** exceeds the reported detection limit.
< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 14
Soil Laboratory Test Results: Area 13
ASTs/USTs Near Back-up Generators
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Wright Building		Broughton Building		Brown Building		McBryde West B (AST)	Edgerton Building		Williams Building		Kirby Building	Ashby Building		McBryde East (AST)		Soil-to-Groundwater MSCC	Residential MSCC	Industrial/ Commercial MSCC
	13-SB-A	13-SB-B	13-SB-C	13-SB-D	13-SB-E	13-SB-F	13-SB-G	13-SB-H	13-SB-I	13-SB-J	13-SB-K	13-SB-L	13-SB-M	13-SB-N	13-HA-O	13-SB-P			
	Sample Depth (feet bgs)																		
	5- 6	5 - 6	5 - 6	5 - 6	5 - 6	5 - 6	1 - 2	7 - 8	7 - 8	8 - 9	8 - 9	7 - 8	1 - 2	7 - 8	2	2.5			
Total Petroleum Hydrocarbons - Gasoline Range Organics (TPH-GRO) - EPA Method 8015 (mg/kg)																			***mg/kg***
TPH-GRO	<0.46	<0.47	<0.58	<0.49	<0.43	<0.47	<0.58	<0.72	<0.60	<0.54	<0.50	<0.47	<0.53	<0.45	<0.43	<0.42	10 (Action level, not MSCC)		
Total Petroleum Hydrocarbons - Diesel Range Organics (TPH-DRO) - EPA Method 8015 (mg/kg)																	***mg/kg***		
TPH - DRO	<0.77	1.7 J	<0.77	<0.77	<0.77	<0.77	2.0 J	<0.77	<0.77	**260**	<0.77	<0.77	<38 O	<0.77	<0.77	**5.8**	10 (Action level, not MSCC)		
MADEP - Volatile Petroleum Hydrocarbons (mg/kg)																	***mg/kg***		
Aliphatic (C05-C08)										**1.2**							68	939	24,528
Aliphatic (C09-C12)										**3.5**							See Total Aliphatics Below		
Aromatic (C09-C10)										**1.6**							See Total Aromatics Below		
MADEP - Extractable Petroleum Hydrocarbons (mg/kg)																	***(mg/kg)***		
Aliphatic (C09-C18)										**64**							See Total Aliphatics Below		
Aliphatic (C19-C36)										**18**							Considered	31,000	810,000
Aromatic (C11-C22)										**47**							See Total Aromatics Below		
Total VPH/EPH Fractions to Compare to MSCCs (mg/kg)																	***(mg/kg)***		
Total Aliphatics (C09-C18)										**67.5**							540	1,500	1,500
Total Aromatics (C09-C22)										**48.6**							31	469	469
Volatile Organic Compounds (mg/kg)																	***(mg/kg)***		
Acetone										0.016 J							24	14,000	360,000
sec-Butylbenzene										**0.0095**							3.3	626	16,350
tert-Butylbenzene										0.00048 J							3.4	626	16,350
Semivolatile Organic Compounds (mg/kg)																	***(mg/kg)***		
Anthracene										0.033 J							940	4,600	122,000
Isophorone										0.0085 J							NE	NE	NE
Phenanthrene										**0.039**							56	469	12,264
Pyrene										0.019 J							270	469	12,264

Notes:

All results in mg/kg, equivalent to parts per million

All samples in this area were first tested for total petroleum hydrocarbons, both diesel and gasoline range organics (TPH-DRO, TPH-GRO). If results below action level, no additional testing required. If results above the action level, additional testing required. Lab tested for volatiles in 13-SB-J even though Action level not exceeded. Total aromatics (C09-C22) were exceeded in just the extractable semivolatile (EPH) fraction.

MSCC - DENR UST Section Maximum Soil Contaminant Concentration (published April 2012)

NE - Not established

bold font Result exceeds reported detection limit

Result exceeds soil-to-groundwater MSCC

Blank Cell - Not tested. Only the sample that was above the action level required additional testing provided.

bgs - below ground surface

Laboratory Qualifiers

J - estimated concentration for test results above method detection limit but below reported detection limit

O - Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 15
Soil Laboratory Test Results: Area 15
Background Samples for Metals
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification												Mean 6-12" Interval *	Mean 24-30" Interval*	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	15-HA-A	15-HA-A	15-HA-B	15-HA-B	15-HA-C	15-HA-C	15-HA-D	15-HA-D	15-HA-D-R	15-HA-D-R	15-HA-E	15-HA-E					
	Sample Depth (inches bgs)																
	6 - 12"	24 - 30"	6 - 12"	24 - 30"	6 - 12"	24 - 30"	6 - 12"	24 - 30"	6 - 12"	24 - 30"	6 - 12"	24 - 30"					
Priority Pollutant Metals (mg/kg)																	
Antimony	<0.32 J6	<0.32	0.52 J	0.55 J	<0.32	1.1 J	<1.9 O	<1.9 O	NT	NT	<0.38	<0.38	0.23	0.42	0.9	6.2	82
Arsenic	**3.2** O1	**6.3**	**2.8**	**2.7**	**3.0**	**2.5**	**6.8**	**7.2**	NT	NT	**5.5**	**7.6**	4.3	5.3	5.8	0.61	2.4
Beryllium	**0.48** O1	**1.1**	**1.4**	**1.1**	**1.1**	**1.0**	0.23 J	**0.77**	NT	NT	**1.8**	**2.2**	1.0	1.2	63	32	400
Cadmium	0.26 J	**0.39**	0.2 J	0.21 J	0.26 J	**0.34**	<0.18 O	<0.18 O	NT	NT	**0.44**	**0.49**	0.25	0.30	3.0	14	160
Chromium, total	**13** J3	**52**	**6.2**	**5.7**	**13**	**9.6**	**15**	**21**	**7.4**	**8.5**	**40**	**37**	17	25	360,000	24,000	100,000
Chromium, hexavalent	<0.26	<0.26	NT	NT	NT	NT	**1.4**	**2.0**	**0.75**	**2.0**	<0.26	<0.26	N/A	N/A	3.8	0.29	5.6
Copper	**17** O1	**54**	**21**	**16**	**20**	**18**	**17**	**17**	NT	NT	**39**	**48**	23	31	700	620	8,200
Lead	**34**	**16**	**9.5**	**30**	**7.9**	**9.6**	**15**	**17**	NT	NT	**16**	**14**	16	17	270	400	800
Mercury	**0.031**	**0.075**	0.016 J	0.016 J	**0.032**	0.024 J	**0.029**	0.021 J	NT	NT	**0.045**	**0.061**	0.031	0.039	1.0	4.6	62
Nickel	**6.6**	**21**	**3.5**	**2.7**	**4.6**	**4.4**	5.3 J	**6.5**	NT	NT	**10**	**8.9**	6.0	8.7	130	300	4,000
Selenium	0.65 J O1	<0.37	<0.37	<0.37	1.0 J	<0.37	<1.8 O	<1.8 O	NT	NT	1.1 J	<0.37	0.77	0.33	2.1	78	1,000
Silver	<0.14	<0.70 O	<0.14	<0.14	<0.14	<0.14	1.5 J	1.2 J	NT	NT	<0.70 O	<0.70 O	0.41	0.41	3.4	78	1,000
Thallium	<0.32	1.2 J	<0.32	<1.6 O	<0.32	<0.32	<1.6 O	<1.6 O	NT	NT	<0.32	<1.6 O	0.29	0.62	0.28	0.16	2.0
Zinc	**36**	**26**	**37**	**34**	**28**	**33**	**23**	**15**	NT	NT	**39**	**40**	33	30	1,200	4,600	62,000

Notes:
All results in mg/kg, equivalent to parts per million
All samples were tested for priority pollutant metals.
PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)
Three samples and a duplicate location of 15-HA-D from this area tested for total chromium were re-tested for hexavalent chromium. See Table 16 for all hexavalent chromium results.
N/A - Not applicable NT - Not tested

bold font Result exceeds reported detection limit
Result exceeds protection-of-groundwater (PGW) PSRG
Result exceeds residential PSRG
Result exceeds industrial PSRG
Result exceeds PGW and residential PSRG
Result exceeds PGW and industrial PSRG

* Per EPA risk assessment guidelines, mean calculated using 'J' values and 1/2 method detection limit if constituent not detected in sample: http://www.epa.gov/reg3hscd/risk/human/info/guide3.htm
Mean is rounded to two significant figures, the same number of significant figures as the laboratory test results.
bgs - below ground surface

Laboratory Qualifiers
J - estimated concentration for test results above method detection limit but below reported detection limit.
J3 - The associated batch QC was outside the established quality control range for precision.
J6 - The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O - Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1 - The analyte failed the method-required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
< # - analyte not detected at a concentration that exceeds the method detection level shown

Table 16
Soil Laboratory Test Results for Chromium/Hexavalent Chromium
All Areas
Dorothea Dix Campus
Raleigh, North Carolina

Sample Identification																	
Area				**Area 1**		**Area 2**	**Area 3**		**Area 4**	**Area 5**		**Area 6**		**Area 7**		**Area 8**	
Analyte	**Protection of Groundwater PSRG**	**Residential PSRG**	**Industrial PSRG**	**1-SB-A**	**1-SB-B**	**2-HA-B**	**3-HA-G**	**3-HA-I**	**4-SB-A**	**5-SB-B**	**5-SB-C**	**6-SB-B**	**DUP-4**	**7-HA-B**	**7-HA-C**	**8-SB-A**	**8-SB-C**
				Sample Depth (bgs)													
				9.5-10.5'	4 - 5'	6 - 12"	6 - 12"	6 - 12"	3.5 - 4.5'	6 - 7'	6 - 7'	1'	1'	6 - 12"	6 - 12"	1-2'	1 - 2'
Unit	**(mg/kg)**																
Chromium (total) *	360,000	24,000	100,000	220 J6	**35**	**15**	**59**	**34**	**27**	**29**	**71**	**47**	**50**	**31**	**29**	**31**	**55**
Hexavalent chromium	3.8	0.29	5.6	**3.2**	**0.91**	<0.26	<0.26	<0.26	<0.26	**1.2**	**2.0**	**1.2**	**1.4**	<0.26	<0.26	<0.26	<0.26

Area				**Area 9 ***		**Area 10**		**Area 11**		**Area 15**								**Area 21**
Analyte	**Protection of Groundwater PSRG**	**Residential PSRG**	**Industrial PSRG**	**9-HA-B**	**9-HA-B DUP**	**10-SB-B**	**10-SB-D**	**11-SB-B**	**11-SB-C**	**15-HA-A**	**15-HA-A**	**15-HA-D**	**15-HA-D**	**15-HA-D-R**	**15-HA-D-R**	**15-HA-E**	**15-HA-E**	**21-SED-C**
				Sample Depth (bgs)														
				6 - 12"	6 - 12"	2-Jan	2 - 3'	2'	2'	6 - 12"	24 - 30"	6 - 12"	24 - 30"	6 - 12"	24 - 30"	6 - 12"	24 - 30"	N/A
Unit	**(mg/kg)**																	
Chromium (total) *	360,000	24,000	100,000	**28**	NT	**30**	**42**	**190**	**64**	13 J	**52**	**15**	**21**	**7.4**	**8.5**	**40**	**37**	**100**
Hexavalent chromium	3.8	0.29	5.6	<0.26	**1.3**	<0.26	<0.26	**1.7**	<0.26	<0.26	<0.26	**1.4**	**2.0**	**0.75**	**2.0**	<0.26	<0.26	<0.26

Notes:
All results in mg/kg, equivalent to parts per million
PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)
Cell shaded in gray indicates concentration exceeds the residential PSRG
J - estimated concentration for test results above method detection limit but below method reporting limit
< # - analyte not detected at a concentration that exceeds the method detection limit shown
* Trivalent chromium PSRGs are provided for total chromium for comparison, when hexavalent chromium has also been tested.
Sample 9-HA-B (6-12") was inadvertently submitted for a second hexavalent Cr analysis, so was used as a duplicate analysis in this table.
All samples collected between 1/14-20, 2014 except 15-HA-D-R collected on 2/5/2014

Table 17
Stream Sample Laboratory Test Results: Area 21
Stream Samples West of Power Plant
Dorothea Dix Campus
Raleigh, North Carolina

Analyte	Sample Identification				Surface Water 2B Std/ EPA Criteria	SW Std/ Criteria Code	2L Standard/ IMAC *	Sample Identification			Mean of Site Bkgd Samples 6-12" *	EPA Region 4 Sediment Screening Value	Protection of Groundwater PSRG	Residential PSRG	Industrial PSRG
	21-SW-A	21-SW-B	DUP-SW	21-SW-C				21-SED-A	21-SED-B	21-SED-C					
	Downstream → Upstream							Downstream → Upstream							
Volatile Organic Compounds(µg/l)								***Volatile Organic Compounds (mg/kg)***							
Acetone	<10	<10	<10	<10	2,000	C, FAL	6,000	<0.010	0.016 J	0.020 J	N/A	NE	24	12,000	100,000
Semivolatile Organic Compounds (µg/l)								***Semivolatile Organic Compounds (mg/kg)***							
Bis (2-ethylhexyl) phthalate	1.2 J	1.3 J	0.97 J	1.2 J	2.2	C, HH	3	<0.24	<0.060	<0.24	N/A	0.182	7.2	35	120
Di-n-butyl phthalate	<0.27	<0.27	<0.27	0.47 J	9.5	C, FAL	700	<0.22	<0.054	<0.22	N/A	NE	19	1,200	12,000
Priority Pollutant Metals (µg/l)								***Priority Pollutant Metals (mg/kg)***							
Antimony	0.40 J	0.40 J	0.36 J	0.57 J	640	C, HH	1 *	<0.38	<0.38	<0.38	0.23	12	0.9	6.2	82
Arsenic	**1.0**	0.82 J	0.62 J	0.73 J	10	2B, HH	10	**2.5**	**5.0**	**7.8**	4.3	7.24	5.8	0.61	2.4
Beryllium	<0.70	<0.70	<0.70	<0.70	6.5	2B,FAL	4 *	**0.16**	**0.58**	**0.26**	1.0	NE	63	32	400
Cadmium	1.2 J	3.0 J	1.8 J	1.0 J	2	2B,FAL	2	0.13 J	0.14 J	0.064 J	0.25	1	3.0	14	160
Chromium, total	<1.4	<1.4	<1.4	<1.4	50	2B,FAL	10	**6.0**	**30**	**100**	17	52.3	360,000	24,000	100,000
Chromium, hexavalent	NT	NT	NT	NT	NE	N/A	NE	NT	NT	<0.26	N/A	N/A	3.8	0.29	5.6
Copper	<5.3	<5.3	<5.3	5.7 J	7	2B,FAL	1,000	**16**	**12**	**40**	23	18.7	700	620	8,200
Lead	**1.9**	**1.3**	**2.0**	**1.4**	25	2B,FAL	15	**4.6**	**8.3**	**370**	16	30.2	270	400	800
Mercury	<0.049	<0.049	<0.049	<0.049	0.012	2B,FAL	1	0.0045 J	0.019 J	0.015 J	0.031	0.13	1.0	4.6	62
Nickel	<4.9	<4.9	<4.9	<4.9	88	2B,FAL	100	**3.2**	**4.2**	**7.6**	6.0	NE	130	300	4,000
Selenium	<7.4	<7.4	<7.4	12 J	5	2B,FAL	20	<0.37	<0.37	<0.37	0.77	2	2.1	78	1,000
Silver	<2.8	<2.8	<2.8	<2.8	0.06	2B,FAL	20	<0.14	<0.14	0.37 J	0.41	NE	3.4	78	1,000
Thallium	<0.19	<0.19	<0.19	<0.19	0.47	C, HH	0.2 *	<0.32	<0.32	0.46 J	0.32	NE	0.28	0.16	2.0
Zinc	18 J	13 J	6.2 J	**41**	50	2B,FAL	1,000	**18**	**18**	**42**	33	124	1,200	4,600	62,000

Notes:

All results in µg/l, equivalent to parts per billion for stream water samples; mg/kg, equivalent to parts per million for sediment samples

All samples tested for volatile organic compounds, semivolatile organic compounds, Priority Pollutant metals, organochlorine pesticides and PCBs. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

PSRG - Preliminary Soil Remediation Goal published by DENR's Inactive Hazardous Sites Branch (rev. January 2014)

* See Table 15 for test results of background metals in soil and mean background calculations.

For metals except chromium, if result is less than mean background concentration, cell shading/orange border removed.

For chromium, per IHSB guidance, if total chromium is less than twice background concentrations, hex chromium analyses are not required, so total chromium test results in these samples compared to trivalent chromium PSRGs.

15A NCAC 2B Standard or EPA National Criteria (rev. May 2013)
http://portal.ncdenr.org/c/document_library/get_file?uuid=dfc89f23-a372-4782-b3b0-60e6884b1696&groupId=38364

EPA Region 4 Sediment Screening Value
http://www.epa.gov/region4/superfund/programs/riskassess/ecolbul.html#tbl3

The lower of Human Health or Freshwater Aquatic Life standard/Criteria was used, using codes below.

C = EPA Surface Water Criteria HH = Human Health FAL = Freshwater Aquatic Life 2B - North Carolina Surface Water Standard NE - Not established NT - Not Tested

* - Interim Maximum Allowable Concentration per 15A NCAC 2L N/A - Not applicable

Total chromium results compared to hexavalent chromium standards. One sample from this area tested for total chromium were re-tested for hexavalent chromium; both were 9HA-B. See Table 16 for all hexavalent chromium results.

NT - Not tested NE - Not established NA - Not available N/A - Not applicable

bold font Result exceeds reporting detection limit

Result exceeds protection-of-groundwater (PGW) PSRG

Result exceeds residential PSRG

Result exceeds industrial PSRG

7.8 Result exceeds Region 4 Sediment Screening Value

Surface water result exceeds the lower of the 2B or 2L standards

Result exceeds PGW and residential PSRG

Result exceeds PGW and industrial PSRG

J - estimated concentration for test results above method detection limit but below method reporting limit

< # - analyte not detected at a concentration that exceeds the method detection level shown

Table 18
Lumex 915 Mercury Vapor Survey
Hargrove and McBryde East Buildings
Dorothea Dix Campus
Raleigh, North Carolina

Building	Room No.	Room Area	Mercury vapor reading (ng/m3)
Hargrove	19	Ambient	3
		Sink	1
		Backsplash	1, 2
		Drain trap	1
		Under cabinet	1
		Baseboards	1, 0, 2
		Bathroom sink	0
	21	Sink	0
		Backsplash	1
		Under cabinet	0
		Base of cabinet	0
		Baseboards	1, 0
	25	Under sink at trap	1
		Sink drain	2
		Base of cabinet	1
	17	Ambient	2
		Baseboards	2, 2
	12	Ambient	3
		Baseboards	1, 2
	12-B	Ambient	3
		Sink	2
		Sink Trap	2
	28	Drinking Fountain	3
	26	Ambient	2
		Bathroom sink	2
		Under drain	3
McBryde East Elevator		Ambient	5, 4
McBryde East 4th Floor	452	Ambient	4
		Sink drain	4
		Under sink	4
		Cabinet baseboard	4
		Cabinet labeled "thermometers"	5
		Next to cabinet labeled "thermometers"	8
		Bottom drawer below "thermometer drawer"	8

Table 18
Lumex 915 Mercury Vapor Survey
Hargrove and McBryde East Buildings
Dorothea Dix Campus
Raleigh, North Carolina

Building	Room No.	Room Area	Mercury vapor reading (ng/m3)
McBryde East 4th Floor	452	Cabinet top back edge with wall	8
	Hallway	Ambient	7, 7
	454	Ambient	8
		Baseboard	12
	453	Ambient	12, 16
		Baseboards	15, 16
	446	Ambient	15
		Tile floor - plugged hole	16
	449	Ambient	19
		Tub drain	15
	445	Ambient	16, 19
		Baseboards	19, 19
		Sink drain - spike	**1394**
		Sink drain - average	**939, 1180**
		Pipe entering wall behind sink	26
McBryde East 1st Floor	Hallway	Next to elevator	30-**100**
McBryde East 4th Floor		Hallway	23, 24, 20
Elevator to 3rd Floor		Elevator	28, 30, 27
McBryde East 3rd Floor		Hallway	17, 15, 11, 11, 17
McBryde East 2nd Floor		Hallway	18, 13, 13
Elevator to 1st Floor		Elevator	14, 18
McBryde East 1st Floor		Hallway	30-61 at elevator
			118-126
	126	Ambient	**122**
		Baseboard	**123, 124, 125**
		Washroom	**124**
	127	Ambient	**126**
	129/130	Ambient	**125**
	136	Restroom drain	**126, 129**

Table 18
Lumex 915 Mercury Vapor Survey
Hargrove and McBryde East Buildings
Dorothea Dix Campus
Raleigh, North Carolina

Building	Room No.	Room Area	Mercury vapor reading (ng/m3)
McBryde East Ground Floor		Ambient	30
		Morgue/Pharmacy	29, 26
		Sink drain	29, 30
		Morgue floor drain	32
		Mop sink	44, 48, 54
		Kitchen area sink	32, 32
	55	Sink drain	36, 37
		2nd sink drain	33, 33

Notes:

Vapor survey conducted on January 15, 2014.

Lumex 915 Mercury Vapor analyzer used to collect readings. This analyzer utilizes proven interference-free Zeeman-Atomic Absorption technology. Detection limit of 2 ng/m3.

http://www.lumex.biz/catalog/atomic-absorption-spectrometry/ra-915m.php

Mercury vapor readings are compared to the January 2014 Division Waste Management (DWM) Residential Vapor Intrusion Indoor Air Screening Level (IASL). The links for these two tables are provided below.

http://portal.ncdenr.org/c/document_library/get_file?uuid=f2bf20c6-571c-4318-9fa0-0d36c34f4b52&groupId=38361

http://portal.ncdenr.org/c/document_library/get_file?uuid=a036efdc-5552-4e57-935a-64e48cdcafb7&groupId=38361

Values in **bold** with cell shaded green when results above the non-residential IASL for mercury in indoor air **(263 ng/m3)**

Values in **bold** with cell shaded gray when results above the residential IASLfor mercury vapor in indoor air **(62.6 ng/m3)**

DWM's IASLs are based on Hazard Quotient (HQ) of 0.2, accounting for the presence of five non-carcinogenic contaminants known to affect the same target organ system. This is a very conservative assumption as there is no reason assume there are other volatile contaminants present that would affect the same target organs. However, the sink average in room 445 would still exceed the residential IASL at a HQ = 1.0, and the spike reading in the sink would exceed the non-residential IASL at HQ = 1.0.

Table 19
Monitoring Well Construction Information and Groundwater Field Parameters
Dorothea Dix Campus
Raleigh, North Carolina

Well ID	Date Constructed	Elevation Ground Surface	Elevation Measuring Point (Top of Casing)	Screened Interval (ft bgs)	Elevation Screened Interval (ft bgs)	Depth of Well (feet bgs)	Depth to Water Table from Top of Casing (feet)	Elevation Water Table	pH (SU)	Specific Conduc-tivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temper-ature (° Celsius)	Oxygen-reduction Potential (mV)
16-MW-1	1/17/2014	324.03	323.72	26.0 - 36.0	298.03 - 288.03	36	30.11	293.61	6.09	0.100	8.40	3.86	17.79	84.0
17-MW-1	1/20/2014	358.75	358.20	33.0 - 43.0	325.75 - 315.75	43	33.69	324.51	6.01	0.230	3.92	6.30	19.44	89.8
17-MW-2	1/21/2014	348.32	348.13	31.0 - 41.0	317.32 - 307.32	41	33.61	314.52	6.32	0.280	6.87	5.10	23.76	133.6
17-MW-3	1/23/2014	354.73	354.27	26.0 - 36.0	328.73 - 318.73	36	27.16	327.11	5.44	0.184	8.08	5.46	19.3	117.0
17-MW-4	1/23/2014	359.99	359.53	33.0 - 43.0	326.99 - 316.99	43	33.11	326.42	6.30	0.118	34.90	7.65	19.50	103.4
18-MW-1	1/16/2014	322.37	322.22	25.0 - 35.0	297.37 - 287.37	35	27.13	295.09	6.00	0.047	10.40	8.41	17.01	134.8
18-MW-2	1/21/2014	310.98	310.38	10.0 - 20.0	300.98 - 290.98	20	17.65	292.73	6.26	0.531	3.25	2.63	19.15	125.1
18-MW-3	1/16/2014	307.77	307.3	10.0 - 20.0	297.77 - 287.77	20	15.02	292.28	5.96	0.533	8.19	0.96	17.37	129.3
18-MW-4	1/23/2014	326.04	325.73	26.0 - 36.0	300.04 - 290.04	36	28.00	297.73	5.94	0.192	10.3	6.49	18.19	145.2
19-MW-1	1/17/2014	332.58	332.28	33.0 - 43.0	299.58 - 289.58	43	34.48	297.80	5.98	1.331	10.4	0.41	16.94	-21.6

Notes:

Groundwater parameters measured immediately prior to collection of sample for testing in laboratory.
bgs - below ground surface
Elevations are relative to mean sea level.
SU - standard units
mS/cm - milliSiemens per centimeter
NTU - nephelometric turbidity units
mg/L - milligrams per liter
mV - millivolts

Table 20
Groundwater Laboratory Test Results
Dorothea Dix Campus
Raleigh, North Carolina

Date Sampled		2/3/2014		1/31/2014	2/3/2014		1/31/2014	2/3/2014				1/31/2014
Description of Area Sampled		Former Haz. Waste Storage		Former MGP/Power Plant				Steam Plant Area				Landfill near Cemetery
Parameter	Groundwater Quality Standard	16-MW-1	DUP-MW-1	17-MW-1	17-MW-2	17-MW-3	17-MW-4	18-MW-1	18-MW-2	18-MW-3	18-MW-4	19-MW-1
Volatile Organic Compounds (µg/L)												
Acetone	6,000	10 J	10 J	<10	<10	<10	14 J	<10	<10	<10	<10	<10
Benzene	1	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.48 J
sec-Butylbenzene	70	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.46 J
Chlorobenzene	50	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	**13**
Chloroform	70	<0.32	<0.32	3.3 J	4.1 J	**13**	1.6 J	<0.32	<0.32	<0.32	2.0 J	<0.32
1,2-Dichlorobenzene	20	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	0.47 J
1,4-Dichlorobenzene	6	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	**3.7**
Di-isopropyl ether	70	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	0.36 J
Methyl tert-butyl ether	20	<0.37	<0.37	<0.37	**8.4**	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
Semivolatile Organic Compounds (µg/L)												
Bis(2-ethylhexyl)phthalate	3	0.91 J	1.8 J	1.3 J	1.0 J	0.97 J	0.95 J	<0.71	0.92 J	0.94 J	0.81 J	0.78 J
Di-n-butyl phthalate	700	0.38 J	0.83 J	0.51 J	<0.27	0.30 J	0.39 J	<0.27	0.30 J	<0.27	<0.27	<0.27
Diethyl phthalate	6,000	0.32 J	0.34 J	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
Isophorone	40	0.41 J	0.38 J	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27
Priority Pollutant Metals (µg/L)												
Antimony	1 *	**1.5**	**1.3**	**3.3**	**1.7**	**1.6**	**1.4**	0.34 J	0.78 J	0.58 J	**1.7**	0.64 J
Arsenic	10	<1.2	<1.2	0.85 J	**1.3**	**1.2**	**1.1**	0.76 J	**1.3**	**3.3**	**1.6**	**2.7**
Cadmium	2	1.2 J	1.6 J	1.3 J	4.9 J	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	1.3 J
Chromium	10	**13**	**16**	<1.4	2.7 J	<1.4	<1.4	<1.4	5.5 J	<1.4	2.7 J	<1.4
Copper	1,000	**32**	**39**	<5.3	6.0 J	5.8 J	10 J	<5.3	<5.3	<5.3	12 J	<5.3
Lead	15	**1.7**	**1.6**	0.6 J	**1.5**	0.55 J	0.86 J	0.93 J	0.40 J	0.40 J	0.58 J	<0.24
Nickel	100	11 J	14 J	<4.9	<4.9	5.6 J	<4.9	<4.9	<4.9	11 J O1	<4.9	13 J
Selenium	20	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	<7.4	13 J	<7.4
Silver	20	3.3 J	6.2 J	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8
Zinc	1,000	**34**	**37**	11 J	16 J	15 J	8.5 J	10 J	8.9 J	11 J P1	9.2 J	7.8 J

Notes:

All results in µg/L.

All samples tested for volatile organic compounds, semivolatile organic compounds and priority pollutant metals. Only the constituents detected in at least one sample are listed in this table. See lab report for full list of constituents tested.

Groundwater quality standard (2L standard) as defined in 15A NCAC 2L rev. 4/1/2013.

* Interim Maximum Allowable Concentration (IMAC) indicated with *

Result in **bold** exceeds the laboratory reported detection limit.

Result in **bold** and shaded cell exceeds the groundwater quality standard or IMAC.

Laboratory Qualifiers

J - estimated concentration for test results above reported detection limit but below reported detection limit.

O1 - The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

P1 - RPD value not applicable for sample concentrations less than five times reported detection limit.

Table 21
Laboratory Test Results for QA/QC: Equipment Blanks
Dorothea Dix Campus
Raleigh, North Carolina

Sample Identification/Areas Equipment Blanks Tested																
Analyte	**EB-1**	**Range Sample Conc. Area 11**	**EB-2**	**Range Sample Conc. Area 7**	**EB-3**	**Range Sample Conc. Area 9**	**EB-4**	**Range Sample Conc. Area 7**	**EB-5**	**Range Sample Conc. Area 1**	**SED-EB**	**Range Sample Conc. Area 21**	**EB-1 GW**	**Range Sample Conc. Day 1**	**EB-2 GW**	**Range Sample Conc. Day 2**
Units	**(µg/l)**	**(µg/kg)**	**(µg/l)**	**(µg/kg)**	**(µg/l)**	**(µg/kg)**	**(µg/l)**	**(µg/kg)**	**(µg/l)**	**(µg/kg)**	**(µg/l)**	**(µg/kg)**	**(µg/l)**	**(µg/l)**	**(µg/l)**	**(µg/l)**
Semivolatile Organic Compounds																
Bis (2-ethylhexyl) phthalate	**0.78 J**	<12 18	NT	N/A	NT	N/A	NT	N/A	**0.83 J**	**ND**	**1.1. J**	**ND**	**1.0 J**	0.78 J 1.3 J	**1.5 J**	<0.71 1.8
Di-n-butyl phthalate	<0.27	**ND**	NT	N/A	NT	N/A	NT	N/A	**0.29 J**	**ND**	**0.32 J**	**ND**	<0.27	<0.27 0.51 J	<0.27	<0.27 0.83
Priority Pollutant Metals																
Antimony	<0.21	<380	<0.21	<380 630	**0.40 J**	<380	**0.37 J**	<380	**0.44 J**	<380 1,100	**0.39 J**	<0.38	<0.21	0.64 J 3.3	**0.26 J**	0.34 1.7
Arsenic	**0.79 J**	3,200 7,700	<0.25	1,900 4,600	**0.45 J**	840 11,000	**0.33 J**	3,600 32,000	**0.96 J**	2,500 36,000	**0.38 J**	2,500 7,800	**0.62 J**	0.85 J 2.7	**0.77 J**	<1.2 3.3
Beryllium	<0.70	1,800 3,500	<0.70	720 2,000	<0.70	180 1,400	<0.70	1,300 2,000	<0.70	110 1,900	<0.70	160 580	<0.70	<0.70	<0.70	<0.70
Cadmium	**2.7 J**	550 760	<0.70	290 390	**1.3 J**	270 2,300	**1.3 J**	250 430	<0.70	<180 4,500	**0.76 J**	64 J 130 J	<0.70	<0.70 1.3 J	**2.7 J**	<0.70 4.9
Chromium	<1.4	39,000 190,000	**1.9 J**	19,000 31,000	<1.4	2,100 28,000	<1.4	22,000 50,000	<1.4	940 220,000	<1.4	6,000 100,000	<1.4	<1.4	<1.4	<1.4 16
Copper	<5.3	90,000 150,000	<5.3	26,000 42,000	<5.3	5,800 66,000	<5.3	59,000 110,000	<5.3	5,300 190,000	<5.3	12,000 40,000	<5.3	<5.3 10 J	<5.3	<5.3 39
Lead	<0.24	7,900 11,000	<0.24	6,800 28,000	**0.66 J**	3,400 22,000	**0.91 J**	8,300 28,000	<0.24	7,100 80,000	**0.81 J**	4,600 370,000	<0.24	<0.24 0.86 J	<0.24	<0.24 1.7
Mercury	<0.049	58 140	<0.049	15 260	<0.049	26 64	<0.049	6.2 120	<0.049	<12 63	<0.049	4.5 J 19 J	<0.049	<0.049	<0.049	<0.049
Nickel	<4.9	21,000 33,000	<4.9	4,300 13,000	<4.9	7,700 28,000	<4.9	14,000 28,000	<4.9	2,800 43,000	<4.9	3,200 7,600	<4.9	<4.9 13 J	<4.9	<4.9 14
Selenium	<7.4	<1800 3,000	<7.4	730 2,300	<7.4	470 3,100	**8.8 J**	720 2,600	<7.4	<370 <1800	**11 J**	<370	<7.4	<7.4	**9.4 J**	<7.4 13
Silver	<2.8	<140	<2.8	<140 <700	<2.8	<140 430	<2.8	<700	3.0 J	<140 2,600	<2.8	<140 370 J	<2.8	<2.8	<2.8	<2.5 6.2
Thallium	<0.19	2,400 8,400	<0.19	<160 940	<0.19	<320 <1,600	<0.19	<320 1,200	<0.19	<320 3,400	<0.19	<320 460 J	<0.19	<0.19	<0.19	<0.19
Zinc	<5.9	47,000 74,000	<5.9	33,000 62,000	<5.9	13,000 93,000	**6.8 J**	31,000 52,000	<5.9	8,400 150,000	<5.9	18,000 42,000	<5.9	7.8 J 11 J	<5.9	7.8 37

Notes:
Results as shown: µg/l for equipment blanks and water samples, and µg/kg for soil samples, equivalent to parts per billion
Result in **bold** are used on this table to emphasize the J-values, since no constituents were detected above the reported dection limit.
ND - not detected. Also in **bold** when the contaminant is not not present in the area where the field equipment was used.
NT - not tested N/A - Not applicable
J - estimated concentration for test results above method detection limit but below reported detection limit
< # - analyte not detected at a concentration that exceeds the method detection limit shown

Table 22
Laboratory Test Results for QA/QC: Field Duplicates
Dorothea Dix Campus
Raleigh, North Carolina

Sample Identification																		
Area	**Area 11**			**Area 7**			**Area 6**			**Area 9**			**Area 21 - Surface Water**			**Area 16 - Groundwater**		
Analyte	**11-SB-C**	**DUP-1**	**RPD**	**7-HA-B**	**DUP-2**	**RPD**	**6-SB-D**	**DUP-4**	**RPD**	**9-HA-C**	**DUP-3**	**RPD**	**21-SW-B**	**DUP-SW**	**RPD**	**16-MW-1**	**DUP-MW-1**	**RPD**
Units	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**µg/l**			**µg/l**		
Volatile Organic Compounds																		
Acetone	<0.010	<0.010	Code 1	NT	NT	N/A	NT	NT	N/A	NT	NT	N/A	<10	<10	Code 1	10 J	10 J	Code 2
Semivolatile Organic Compounds																		
Bis (2-ethylhexyl) phthalate	<0.012	<0.012	Code 1	NT	NT	N/A	NT	NT	N/A	NT	NT	N/A	1.3 J	0.97 J	Code 2	0.91 J	1.8 J	Code 2
Di-n-butyl phthalate	<0.011	<0.011	Code 1	NT	NT	N/A	NT	NT	N/A	NT	NT	N/A	<0.27	<0.27	Code 1	0.38 J	0.83 J	Code 2
Diethyl phthalate	<0.0069	<0.0069	Code 1	NT	NT	N/A	NT	NT	N/A	NT	NT	N/A	<0.28	<0.28	Code 1	0.32 J	0.34 J	Code 2
Isophorone	<0.0052	<0.026	Code 1	NT	NT	N/A	NT	NT	N/A	NT	NT	N/A	<0.27	<0.27	Code 1	0.41 J	0.38 J	Code 2
Priority Pollutant Metals																		
Antimony	<0.38	<0.38	Code 1	0.63 J	0.60 J	Code 2	<0.38	<0.38	Code 1	<0.38	<0.38	Code 1	0.40 J	0.36 J	Code 2	**1.5**	**1.3**	**14.3**
Arsenic	6.4 J	**7.7**	Code 2	**3.4**	**1.9**	Code 3	**5.8**	**6**	**3.4**	**10**	**9.2**	**8.3**	0.82 J	0.62 J	Code 2	<1.2	<1.2	Code 1
Beryllium	**2.1**	**2.1**	**0.0**	**2.0**	**1.8**	**10.5**	**1.8**	**1.9**	**5.4**	**1.2**	**0.91**	**27.5**	<0.70	<0.70	Code 1	<0.70	<0.70	Code 1
Cadmium	**0.71**	**0.58**	**20.2**	0.29 J	0.29 J	Code 2	**0.39**	**0.43**	**9.8**	**0.44**	0.27 J	Code 2	3.0 J	1.8 J	Code 2	1.2 J	1.6 J	Code 2
Chromium	**64**	**55**	**15.1**	**31**	**26**	**17.5**	**38**	**50**	**27.3**	**22**	**19**	**14.6**	<1.4	<1.4	Code 1	**13**	**16**	Code 3
Copper	**100**	**110**	**9.5**	**36**	**29**	**21.5**	**92**	**99**	**7.3**	**43**	**42**	**2.4**	<5.3	<5.3	Code 1	**32**	**39**	**19.7**
Lead	**10**	**9.8**	**2.0**	**6.8**	**15**	**75.2**	**11**	**11**	**0.0**	**6.9**	**5.8**	**17.3**	**1.3**	**2**	Code 3	**1.7**	**1.6**	Code 3
Mercury	**0.14**	**0.066**	**71.8**	0.0018 J	0.0019 J	Code 2	**0.054**	**0.061**	**12.2**	**0.038**	**0.027**	Code 2	<0.049	<0.049	Code 1	<0.049	<0.049	Code 1
Nickel	**25**	**28**	**11.3**	**13**	**12**	**8.0**	**23**	**20**	**14.0**	**15**	**10**	**40.0**	<4.9	<4.9	Code 1	11 J	14 J	Code 2
Selenium	<1.8	3.0 J	Code 1	**1.3**	**1.6**	Code 3	0.72 J	0.92 J	Code 2	**1.6**	**1.7**	Code 3	<7.4	<7.4	Code 1	<7.4	<7.4	Code 1
Silver	<0.70	<0.70	Code 1	<0.70	<0.70	Code 1	<0.70	<0.70	Code 1	<0.70	<0.14	Code 1	<2.8	<2.8	Code 1	3.3 J	6.2 J	Code 2
Thallium	4.6 J	**8.4**	Code 2	<1.6	<1.6	Code 1	**1.2**	**1.0**	Code 3	<1.6	<0.32	Code 1	<0.19	<0.19	Code 1	<0.19	<0.19	Code 1
Zinc	**47**	**48**	**2.1**	**62**	**55**	**12**	**45**	**52**	**14.4**	**32**	**20**	**46.2**	13 J	6.2 J	Code 2	**34**	**37**	**8.5**

Notes:

Results as shown: µg/l, equivalent to parts per billion for groundwater and stream water samples and mg/kg, equivalent to parts per million for soil sample concentrations

RPD - relative percent difference. RPD goal of 20% for water samples and 50% for soil samples

Bold font Result exceeds the method reporting limit

Greater than RPD goals

J - estimated concentration for test results above method detection limit but below reported detection limit

< # - analyte not detected at a concentration that exceeds the method detection limit shown

Codes for RPDs not calculated

Code 1 - Either value below reported detection limit

Code 2- Either value a "J" (estimated) value

Code 3 - Either of the values is less than five times the reported detection limit.

Appendix A

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Boring ID	**Area 1 Old MGP Area**	***Sheet :*** ***1 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 6620DT (Geologic)**
Sample Types	**Grab**	***Boring Diameter***	**2"**
Field Staff	**WMF**	***Total Depth (ft)***	**as shown below**
Start	**1/20/2014 - 1000**	***Finish***	**1/21/2014 - 0900**
Split Spoon/__Length	**5 ft**	***Well Installed? (type)***	

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
1-SB-A (9.5 - 10.5')	No PID/FID detections	0 - 5' backfill from air knifing
		5 - 7' orange/red silty clay, micaceous with mottling
		7 - 7.5' tan/light brown silty sand, tightly compacted, medium to coarse grained sand
		7.5 - 8.5' orange/red silty clay, micaceous, with mottling
		8.5 - 10.5' orange/tan/red sandy silty clay with medium to fine grained sand
		10.5 - 11 orange/tan/brown clayey silty sand with medium to coarse grained sand
1-SB-B (4 - 5')		0 - 8" asphalt/gravel/backfill material
		8" 1.5' orange/red micaceous clay
		1.5 - 2.0' tan/gray sandy silt with fine to medium-grained sand
		2 - 2.5' orange/red micaceous clay
		2.5 - 3' light brown/tan sandy silt with fine grained sand
		3-4' orange read micaceous clay
		4 - 5' dark tan/brown fine to medium grained sand
		5 - 9' orange/red silty clay
		9 - 9.5' orange/tan/white compacted silty sand, possibly partially weathered rock
1-SB-C (5.5 - 6.5')		0 - 5' backfill from air knifing
		5 - 6' dark tan/brown silty sand with fine to medium grained sand
		6 - 7.5' orange/red micaceous clay
		7.5 - 8' light tan/light orange medium to coarse grained sand.
1-SB-D (4 - 5')		0 - 3" topsoil
		3" - 5" tan/light brown clayey sandy silt with fine to medium grained sand
		5" - 1' reddish brown clayey sandy silt with fine to medium grained sand
		1 - 1.5' brown/dark brown sandy silt with fine to medium grained sand
		1.5 - 3' reddish/brown sandy silty clay with fine to medium grained sand
		3 - 7' orange/white/gray fine to medium grained sand
1-SB-E (3 - 4')		0 - 4" topsoil
		4" - 1.5' light brown sandy silt with fine to medium grained sand
		1.5 - 2' dark brown silty sand with fine to medium grained sand
		2 - 3' red/orange silty clay
		3 - 3.3' light gray medium grained sand
		3.3 - 4' orange/red silty sand with medium to coarse grained sand
1-SB-F (11 - 12')		0 - 5' backfill from air knifing
		5' - 11' orange/red silty clay
		11 - 13' orange/read/gray fine to medium grained sand.
1-SB-G (7 - 8')		0 - 5' backfill from air knifing
		5 - 6' orange/red sandy silty clay with fine to medium grained sand
		6 - 7' orange red sandy silty clay
		7 - 14' orange red to tan sandy silty clay with fine to medium grained sand. Mottling between 10 - 14'. All clays/silts are micaceous.

Comments:

Associated Monitor Well: Area 17 Wells

Due to the many underground utilities in this area, including steam lines, a number of the borings were cleared to 5 ft with an air knife prior to advancing the soil boring.

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Boring ID	**Area 2 - Possible Ag Chemicals Mixing Area**	***Sheet :*** ***2 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Hand Auger**
Sample Types	**Grab**	***Boring Diameter***	**4"**
Field Staff	**PMJ**	***Total Depth (ft)***	**1 foot**
Start	**1/16/2014 - 0755**	***Finish***	**1/16/2014 - 0821**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**No**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
2-HA-A (6-12")	Not screened; pre-determined depth, no volatile testing	brown sandy clay, moist, rocky, no odor.
2-HA-B (6-12")		brown sandy clay, moist, rocky, no odor.

Comments:
Associated Monitor Well: None
N/A - not applicable

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Boring ID	**Area 3 - Former Agricultural Fields**	***Sheet :*** ***3 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Hand Auger**
Sample Types	**Grab**	***Boring Diameter***	**4"**
Field Staff	**PMJ**	***Total Depth (ft)***	**1 foot**
Start	**1/16/2014 - 0911**	***Finish***	**1/16/2014 - 1630**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**No**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
3-HA-A (6-12")	Not screened; pre-determined depth, no volatile testing	reddish brown to brown, sandy clay, no odor
3-HA-B (6-12")		brown, sandy clay, moist, no odor
3-HA-C (6-12")		clay, reddish brown, moist, no odor
3-HA-D (6-12")		light brown, sandy clay, moist, no odor
3-HA-E (6-12")		light brown, clay, no odor
3-HA-F (6-12")		light brown-tan, sandy clay, no odor
3-HA-G (6-12")		light to medium brown, clay, no odor
3-HA-H (6-12")		medium brown, clay, no odor
3-HA-I (6-12")		red clay, no odor
3-HA-J (6-12")		red sandy clay, no odor
3-HA-K (6-12")		red sandy clay, no odor
3-HA-L (6-12")		red sandy clay, no odor

Comments:
Associated Monitor Well: None
N/A - Not applicable

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Boring Area	**Area 4 - Grounds Shop Drain Area**	***Sheet :*** ***4 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 540DT (Quantex)**
Sample Types	**Grab**	***Boring Diameter***	**6"**
Field Staff	**DMJ**	***Total Depth (ft)***	**1 foot**
Start	**1/15/2014 - 1350**	***Finish***	**1/15/2014 - 1600**
Split Spoon/__Length	**5 ft**	***Well Installed? (type)***	**No**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
4-SB-A (3.5 - 4.5')	0.1 (1')	0 - 0.5' dark to reddish brown gravel
	0.2 (2')	0.5 - 1' dark to reddish brown silty clay
	0.2 (3')	1 - 5' reddish brown to reddish tan silty clay. Very compacted but without much plasticity.
	0.3 (4')	

Comments:
Associated Monitor Well: None
Sample was collected approximately 1 foot east of concrete patch area where drain was located during Phase I ESA. Could not drill through center of drain as Geoprobe met refusal.

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Boring ID	**Area 5 - Historic Land Farming Area**	***Sheet :*** ***5 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 7822 DT (Geologic) ***
Sample Types	**Grab**	***Boring Diameter***	**2"**
Field Staff	**DMJ**	***Total Depth (ft)***	**See borings below**
Start	**1/15/2014 - 1605**	***Finish***	**2/26/2014 - 1425**
Split Spoon/__Length	**5 ft**	***Well Installed? (type)***	**N/A**

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
5-SB-A (6 - 7') 5-SB-A (12')	No PID detections	0 - 0.3' topsoil
		0.3 - 3' orange/red clayey silt with minor fine grained sand
		3 - 6' orange/red/tan sandy clayey silt with fine grained sand
		6 - 16' light tan silty sand with fine grained sand
		16 - 20' orange/red clayey silt (~90% silt)
5-SB-B (6 - 7')		0 - 0.3' brown medium-fine grained clayey silt (topsoil)
		manganese staining. Very low plasticity. Becoming moist at 24-25'. Only 1.5' recovery in 0-5' sleeve.
5-SB-C (6-7')		0 - 0.5 - brown topsoil as in location 'B' sample description above
		0.5 - 8.5' Apparent fill. Reddish tan fine grained sandy clayey silt with mica and minor manganese stains around 4-6'
		8.5 - 19' Not obvious fill. Orange tan slightly fine grained sand, slightly clayey to clayey silt with mica and manganese stains.
		19-20' Orangish tan silty medium to fine grained sand. Drilling resistance increased at 19'.
5-SB-D (5 - 6') 5-SB-D (10.5 -11.5')		0 - 0.3' brown topsoil as in location 'B' sample description above
		0.3 - 7' reddish tan, fine grained sandy slightly clayey sit, low plasticity throughout boring.
		7 - 9.5' as above but a bit more sandy, some manganese staining, micaceous
		9.5 - 10.5 more clayey than layer above, no manganese stains
		10.5 - 11.5 light gray white fine grained sand
		11.5 - 15' orange tan fine grained sandy silt, some induration, some manganese stains.
5 - SB-E (7-8')		0 - 0.3' brown topsoil, as in location 'B' sample above
		0.3 - 5.5' reddish tan fine grained sandy slightly clayey silt. No manganese stains Low plasticity throughout boring.
		5.5 - 18' orangish tan fine grained sandy, slightly clayey silt with manganese stains, lighter mottling.
		18 - 18.5' light gray, fine grained sand
		18.5 - 20' orangish tan fine grained sandy, slightly clayey silt with manganese stains, lighter mottling.
5-SB-F (4 - 5')	0.3 (1')	0 - 0.3' dark brown clayey silty topsoil
	0.0 rest of boring.	0.3 - 5.5' dark reddish tan slightly clayey slightly plastic silt, micaceous, minor fine grained san
		5.5 - 20' mottled light orangish tan clay silt. Not plastic. Looks like relict rock striations, manganese stains.
5-HA-G (3.5 - 4')	No PID detections	Hand augered as this area was not cleared by private utility locator
		0-3.5' dark reddish tan fine grained sandy silt.
		3.5 - 5' dark brown fine grained sandy silt
5-HA-H (6 - 12") and 5-HA-I (6 - 12")	No odors	0 - 1' - dark brown organic soil with some coal
		1 - 4' reddish brown clayey silt.

Comments:

Associated Monitor Well: 18-MW-1 located adjacent to 18-SB-A.

This area was once used as a small golf course. The light tan sand was likely a sand trap with fill over it. Same sand found in several borings.

Sample A (1/15/2014), Samples B - E (1/16/2014), Samples F - G (1/20/2014); Samples H - I (2/26/2014)

Location F: Soil boring collected using Geoprobe 6620DT (Geologic).

Locations G - I: hand augered as this area was not cleared previously by the private utility locator.

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Boring ID	**Area 6 - Historic Coal Pile Area**	***Sheet : 6 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 7822 DT (Quantex)**
Sample Types	**Grab**	***Boring Diameter***	**2"**
Field Staff	**WMF**	***Total Depth (ft)***	**5 ft**
Start	**1/15/14 - 1440**	***Finish***	**1/15/14 - 1520**
Split Spoon/__Length	**5 ft**	***Well Installed? (type)***	**No**

Sample Name	PID/FID (ppm)	Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)
6-SB-A (1')	Not screened. Tested only for metals.	0 - 2" - topsoil
		2" - 1' - yellowish/tan medium to coarse sand
		1' - 5' - orange/red clayey silt
6-SB-B (1')		0 - 3" - topsoil
		3" - 1' - orange/red sandy clayey silt with fine-medium sand and a little gravel
		1' - 2' - yellowish/tan medium to coarse sand with a little gravel
		2' - 5' - orange/red clayey silt
6-SB-C (1')		0 - 3" - topsoil
		3" - 8" - brown/tan silty fine to medium sand with a little gravel
		8" - 1' - black coal
		1' - 5' - orange/red sandy clayey silt
6-SB-D (1')		0 - 4" - topsoil
		4" - 7" - brown/tan sandy silt with fine to medium sand
		7" - 3.5' - orange/red sandy clayey silt with fine to medium sand.
		3.5 - 4' - grayish/black silty sand with fine to medium sand. Staining, slight odor. 0.5 ppm on PID
		4' - 5' - orange/red sandy clayey silt with fine to medium sand.
6-SB-E (1')		0 - 3" - topsoil
		3" - 5" - tan/brown sandy silt with fine to medium sand
		5" - 9" black coal
		9" - 9' - orange/red clayey silt
		9' -10' - dark gray clayey silt. Staining. Slight odor. PID reading 0.5 ppm.

Comments:
Associated Monitor Well: 18-MW-3 located in this area

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Boring ID	**Area 7 - Landfill Area West of Cemetery**	***Sheet :*** ***7 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Hand Auger**
Sample Types	**Grab**	***Boring Diameter***	**4"**
Field Staff	**PMJ**	***Total Depth (ft)***	**1 ft**
Start	**1/16/2014 - 1350**	***Finish***	**1/16/2014 - 1655**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**No**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
7-HA-A (6-12")	Not screened; pre-determined depth, no volatile testing	reddish brown to brown, sandy clay, no odor
7-HA-B (6-12")		brown sandy clay, moist, no odor
7-HA-C (6-12")		reddish brown clay, moist, no odor
7-HA-D (6-12")		light brown sandy clay, moist, no odor

Comments:
Associated Monitor Well: 19-MW-1 located off the NW corner of the cemetery.

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Boring ID	**Areas 8 - 10 (Former/HW Storage Areas)**	***Sheet :*** ***8 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 7822 DT (Quantex)**
Sample Types	**Grab**	***Boring Diameter***	**2"**
Field Staff	**WMF/PMJ**	***Total Depth (ft)***	**5 ft**
Start	**1/17/2014 - 1420**	***Finish***	**1/17/2014 - 1610**
Split Spoon/__Length	**5 ft**	***Well Installed? (type)***	**No**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
8-SB-A (1 - 2')	No PID detections	All borings 5 feet deep. Lithology consisted of top soil in 0 - 0.3' interval, then consisted of orange red silty clay to orange red clayey silt.
8-SB-B (1 - 2')		
8-SB-C (1 - 2')		
8-SB-D (1 - 2')		
8-SB-E (1 - 2')		
10-SB-A (4 - 5')		
10-SB-B (1 - 2')		
10-SB-C (1 - 2')		
10-SB-D (1 - 2')		

Comments:
Associated Monitor Well: 16-MW-1 located in this area

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Boring ID	**Area 9 - Transformer Storage Area**	***Sheet :*** *9 of 23*	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Hand Auger**
Sample Types	**Grab**	***Boring Diameter***	**4"**
Field Staff	**PMJ**	***Total Depth (ft)***	**1 foot**
Start	**1/17/14 - 0815**	***Finish***	**1/17/14 0955**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**No**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
9-HA-A (6-12")	Not screened; pre-determined depth, no volatile testing	dark topsoil; sandy clay, no odor
9-HA-B (6-12")		mixed medium and dark brown, clay, no odor
9-HA-C (6-12")		mixed medium and dark brown, clay, no odor
9-HA-D (6-8")		Inside Transformer containment area. Dark brown sand, no odor. Concrete at 8"
9-HA-E (6-8")		Inside transformer containment area. Medium brown coarse sand, no odor. Concrete at 8".

Comments:
Associated Monitor Well: None

Samples A - C were collected outside the containment area, in native soil downgradient of the opening on the southwest side of the concrete walls. Samples D and E were collected inside the containment area in the sediment that had accumulated above the concrete pad. The transformers stored in this area had been removed since the Phase I ESA was conducted.

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Boring ID	**Area 11 - Paint Shop**	***Sheet :*** ***10 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 7822 DT (Quantex)**
Sample Types	**Grab**	***Boring Diameter***	**2"**
Field Staff	**WMF**	***Total Depth (ft)***	**5 feet**
Start	**1/14/2014 - 0900**	***Finish***	**1/14/2014 1030**
Split Spoon/__Length	**5 ft**	***Well Installed? (type)***	**No**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
11-SB-A (2')	0	0-6" - topsoil'
		6"-5' - Orange red silty clay
11-SB-A (2')	Not Screened	0-4' - Orange red silty clay
		4-5' - Orange red clayey silt
11-SB-C (2')	Not Screened	0-4' - Orange red silty clay
		4-5' - Orange red clayey silt

Comments:
Associated Monitor Well: None
Organic vapor analyzer malfunction. Called contractor to deliver new instrumentation to site.

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Boring ID	**Area 12 - Garage (former hydraulic lifts)**	***Sheet :*** ***11 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 540DT (Quantex)**
Sample Types	**Grab**	***Boring Diameter***	**2"**
Geologist	**DMJ**	***Total Depth (ft)***	**As shown below**
Start	**1/17/2014 - 1055**	***Finish***	**1/17/2014 - 1125**
Split Spoon/__Length	**5 ft**	***Well Installed? (type)***	**No**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
12-SB-1 (2 - 2.5')	0.6 (1')	0 - 5' reddish tan fine grained sandy slightly clay silt. Some mica and plasticity.
	8.3 (2')	
	1.8 (3')	
	2.7 (4')	
	2.0 (5')	5 - 7' as above but micaceous and with biotite schist pebbles at refusal.
	4.0 (6')	
	2.6 (7')	
12-SB-2 (6-6.5')	0.1 (1')	0 - 7' reddish brown fine grained sandy, slightly silty clay as above. Micaceous, but no biotite schist pebbles.
	0.9 (2')	
	1.0 (3')	
	0.4 (4')	
	0.5 (5')	
	0.8 (6')	
	1.0 (7')	

Comments:
Associated Monitor Well: None
Both samples collected after 6" of concrete removed.
We attempted to advance an additional boring outside the electric lift area with the 7822 DT (Quantex) later in day, but ran into refusal at 2 feet at two locations near former tire machine in garage.

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Boring ID	**Area 13 - Current USTs/ASTs**	***Sheet :*** *12 of 23*	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 7822 DT***
Sample Types	**Grab**	***Boring Diameter***	**2"**
Geologist	**WMF (A - N) / DMJ (O-P)**	***Total Depth (ft)***	**10 ft**
Start	**1/14/2014 - 1125**	***Finish***	**1/17/2014 - 1520**
Split Spoon/__Length	**5 feet**	***Well Installed? (type)***	**No**

Sample Name	PID/FID (ppm)	Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)
13-SB-A (5-6') 13-SB-B (5-6')		0 - 3"- topsoil
		3" - 1' - silty sand, tan/brown
	0 (5')	1 - 4' sandy silt, orange red
	0 (7')	4 - 8' - orange/tan clayey silt
	0 (10')	8 - 10' - orange/tan silt
13-SB-C (5-6') 13-SB-D (5-6')		0 - 6": topsoil
		6" - 4' - orange/red sandy silty clay
		4' - 8' - orange/red silty clay
	0 (5')	8 - 10' - orange/red clayey silt
13-SB-E (5-6') 13-SB-F (5-6')		0 - 4" - topsoil
	0 (5')	4"- 4' - orange/red sandy clayey silt
	0 (7')	4' - 8' - orange/red sandy silty clay
	0 (10')	8' - 10' - orange red clayey silty sand
13-SB-G (1-2') AST	1.02 (1-2')	0 - 3" - topsoil
	1.00 (3-4')	4" - 5' - orange/red silty clay
13-SB-H (7-8') 13-SB-I (7-8')	0.1 (5', 7'); 0.2 (8')	0 - 3" - topsoil
		3" - 2' orange/red silty clay
13-SB-J (8-9') 13-SB-K (8-9')	1.3, 1.4, 1.3 @ 7, 8, 9'	0-3" topsoil
	0.2 @ 8'	2" - 2' orange/red silty clay
		2' - 10' orange red clayey silt
13-SB-L (7-8')	0 at all intervals.	0 - 6" - topsoil
		6" - 2' - gray/tan medium to coarse sand
		2' - 4' - brown orange sandy silt with fine to medium sand
		4 - 5' - gray/tan medium to coarse sand
		5' - 10' - orange/red clayey silt
13-SB-M (1-2') AST 13-SB-N (7-8') UST	0 at all intervals	0 - 6" - topsoil
		6" - 8' - orange/red sandy clayey silt w/ fine to medium sand
		8' - 10' - orange/red silty clay
13-HA-O (2') AST	5.0 (2')	Reddish tan clayey silt. Dry.
13-SB-P (2.5') AST	0 at all intervals	Between generators adjacent to AST. Light reddish tan clayey silt with areas of white clay marbling. More plastic than other silts. Less mica noticeable and somewhat moister than other soil sampled beneath concrete.

Comments:
Associated Monitor Well: None
7822 DT Geoprobe used for 13-SB-A through 13-SB-N
Hand Auger for 13-SB-O
540DT Geoprobe used for 13-SB-P
Both Geoprobes holes were 2" in diameter, 5-foot long core barrel
PID at 0 at other intervals not listed

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Boring ID	**Area 15 - Background Samples**	***Sheet :*** ***13 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Hand Auger**
Sample Types	**Grab**	***Boring Diameter***	**4"**
Geologist	**PMJ**	***Total Depth (ft)***	**2.5 ft**
Start 15-HA-A to 15-HA-F	**1/17/2014 - 1050**	***Finish***	**1/17/2014 - 1335**
Start 15-HA-D-R	**2/5/2014 - 1425**	***Finsih***	**2/5/2014 - 1503**
Split Spoon/__Length	**Not Applicable**	***Well Installed? (type)***	**No**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
15-HA-A (6-12")	Not screened; pre-determined depth, no volatile testing	sand, coarse, medium brown, no odor
15-HA-A (24-30")		clay, red, no odor
15-HA-B (6-12")		silty sand, red, no odor
15-HA-B (24-30")		
15-HA-C (6-12")		clay, red, no odor
15-HA-C (24-30")		
15-HA-D (6-12")		silty clay, red, no odor
15-HA-D (24-30")		
15-HA-D-R (6-12"		sandy clay, reddish brown, no odor
15-HA-D-R (24-30")		
15-HA-E (6-12")		clay, red, no odor
15-HA-E (24-30")		

Comments:
Associated Monitor Well: None

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Boring ID	**16-MW-1**	***Sheet :*** ***14 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 7822 DT (Geologic)**
Sample Types	**Grab**	***Boring Diameter***	**8.25" (Auger)**
Geologist	**DLD**	***Total Depth (ft)***	**36'**
Start	**1/17/2014**	***Finish***	**1/17/2014**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**2"- flush mount Type II**

Sample Name	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
0 - 0.3'		topsoil
0.3' - 25'		red brown clayey silt with fine sand. Low to moderate plasticity, slightly micaceous.
25' - 35'		gray slightly clayey medium to fine sandy silt - slightly saturated
35' - 40'		red brown clayey medium to fine sandy slit
		Notes from Well Construction Record
		0 - 8' red sandy clay
		8 - 24' brown silty sandy clay
		24 - 32' gray silty clay
		32 - 40' brown silty clay

Comments:
Associated Monitor Well: 16-MW-1
screen 26 - 36'.
sand 24 - 40'
bentonite 21 - 24'
grout 0 - 21'
Water level 28 ft

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Boring ID	**17-MW-1**	***Sheet :*** ***15 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Drill Max 2400 Combo Rig**
Sample Types	**Grab**	***Boring Diameter***	**6" (Air Hammer)**
Geologist	**WMF**	***Total Depth (ft)***	**43 ft**
Start	**1/20/2014 - 1350**	***Finish***	**1/20/2014 - 1550**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**2"- flush mount Type II**

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
5 - 11.5'		See Area 1, 1-SB-A lithologic description from soil boring.
		WMF Drilling Notes
31' - 34'		driller hit soft spot
34' - 40'		white dust and sand came up in cuttings.
40-43'		drilled additional 3' when only 4 feet of water in borehole
		Notes from Well Construction Record
		0 - 10' red clay
		10 - 25' brown silt
		25 - 34' brown siltstone
		34-43' tan/white sandstone

Comments:
Associated Monitor Well: 17-MW-1
Air hammer cuttings not logged. In location of 1-SB-A (refusal at 11'). Boring log described above, with drilling notes.
screen 33-43'
sand 31 - 43'
bentonite 26 -31'
grout 0 - 26'

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Boring ID	**17-MW-2**	***Sheet :*** ***16 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Drill Max 2400 Combo Rig**
Sample Types	**Grab**	***Boring Diameter***	**6" (Air Hammer)**
Geologist	**WMF**	***Total Depth (ft)***	**63' (screened 35-45')**
Start	**1/20/2014 - 1400**	***Finish***	**1/21/2014 - 0835**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**2"- flush mount Type II**

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
0-7'	No elevated levels noted during soil sampling/ well drilling.	See 1-SB-D (Area 1) for boring description at this location. No lithology description from well construction.
		Notes from Well Construction Record
		0 - 7' red silty clay
		7 - 32' brown silt
		32 - 63' white/tan sandstone

Comments:

Associated Monitor Well: 18-MW-2

Drilled to 53' on 1/20/2014 and allowed to sit overnight. Drilled 10' more on 1/21/2014; hit fracture at 56', but didn't know until drill string pulled. Estimated flow 10 gallons/minute. DTW 33.4 feet after 15 minutes.

screen 31'-41'

sand 29' - 63'

bentonite 24' - 29'

grout 0 - 24'

water level 33 ft

After this well drilled, Geologic had to have welder come out and weld derrick so it could be lowered. Geologic took rig back to Statesville on afternoon of 1/21/14 for repairs on 1/22/14, and remobilized back to site on 1/23/14.

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Boring ID	**17-MW-3**	***Sheet :*** *17 of 23*	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Drill Max 2400 Combo Rig**
Sample Types	**Grab**	***Boring Diameter***	**6" (Air Hammer)**
Geologist	**WMF**	***Total Depth (ft)***	**45 ft**
Start	**1/23/2014 - 0935**	***Finish***	**1/23/2014 - 1130**
Split Spoon/__Length		***Well Installed? (type)***	**2"- flush mount Type II**

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
0- 4'		See Area 1, 1-SB-E soil boring for 0-4' description. No lithology description during well drilling.
		Notes from Well Construction Record
		0 - 4' brown/red silty clay
		4' - 22' tan/brown siltstone
		22 - 30' brown silt
		30 - 45' tan/white sandstone

Comments:
Associated Monitor Well: 17-MW-3
screen 26 - 36'
sand interval 24 - 45'
bentonite 19 - 24'
grout 0 - 21'
water level 28'

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Boring ID	**17-MW-4**	***Sheet :*** ***18 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Drill Max 2400 Combo Rig**
Sample Types	**Grab**	***Boring Diameter***	**6" (Air Hammer)**
Geologist	**WMF**	***Total Depth (ft)***	**43 ft**
Start	**1/23/2014 - 1145**	***Finish***	**1/23/2014 - 1400**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**2"- flush mount Type II**

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
5 - 14'		See Area 1 - 1-SB-G lithology for this location. No lithology description during well drilling.
		WMF Drilling notes
		Did not encounter any competent rock, mostly sandy silt, not usual light tan/white fine powder from rock in cuttings from other Area 17 wells.
		Notes from Well Construction Record
		0 - 7' red clay
		7 - 24' brown silt
		24 - 43' brown siltstone

Comments:
Associated Monitor Well: 17-MW-4
screen 33 - 43' Tried to pull up 1' but screen would not budge due to bridging in the boring.
sand 31-43'
bentonite 26-31'
grout 1 - 26'
concrete pad 0 -1'
water level 33.6'

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Boring ID	**18-MW-1**	***Sheet :*** ***19 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 7822 DT (Geologic)**
Sample Types	**Grab**	***Boring Diameter***	**8.25" (Auger)**
Geologist	**DMJ**	***Total Depth (ft)***	**36 feet**
Start	**1/16/2014 - 1320**	***Finish***	**1/16/2014 - 1530**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**2"- flush mount Type II**

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
		See Area 5, 5-SB-A for lithology description. No lithology description during well drilling.
		Notes from Well Construction Record
		0 - 8' red clay
		8 - 19' light brown silty sandy clay
		19 - 35' brown silty sandy clay

Comments:
Associated Monitor Well: 18-MW-1
screen 25 - 35'
sand 23 - 35'
bentonite 20 - 23'
grout 0 - 20'
water level 28'

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Boring ID	**18-MW-2**	***Sheet :*** ***20 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 7822 DT (Geologic)**
Sample Types	**Grab**	***Boring Diameter***	**8.25" (Auger)**
Geologist	**WMF**	***Total Depth (ft)***	**20 feet**
Start	**1/16/2014 - 1556**	***Finish***	**1/16/2014 - 1706**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**2"- flush mount Type II**

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
0' - 4'		orange/red sandy clayey silt with fine to medium sand
4' - 4.5'		black coal
4.5' - 5'		orange/tan clayey silt
5' - 20'		tan/red sandy silty clay (clay balls) with fine to medium sand
		Notes from Well Construction Record
		0 -8' brown/red clayey silt
		8 - 10 tan silt

Comments:
Associated Monitor Well: 18-MW-2
screen 10 - 20'
sand l 8 - 20'
bentonite 6 - 8'
grout 0- 6'
water level 13'

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Boring ID	**18-MW-3**	***Sheet :*** ***21 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 6620 DT (Geologic)**
Sample Types	**Grab**	***Boring Diameter***	**7.25" (Auger)**
Geologist	**WMF**	***Total Depth (ft)***	**20 ft**
Start	**1/21/2014 - 0937**	***Finish***	**1/21/2014 - 1020**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**2"- flush mount Type II**

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
		Some lithologic information can be gleaned from Area 18, 18-MIP-04 conductivity log.
		No lithologicy description during well drilling.
		Notes from Well Construction Record
		0 - 4' red clay
		4 - 6' black coal
		6 - 11' red/brown clay
		11 - 20' brown silty sandy clay

Comments:
Associated Monitor Well: 18-MW-3
screened 10 - 20'
sand 8 - 20'
bentonite 6 - 8'
grout 0' - 6'
water level 12'

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Boring ID	**18-MW-4**	***Sheet :*** ***22 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Drill Max 2400 Combo Rig**
Sample Types	**Grab**	***Boring Diameter***	**6" (Air Hammer)**
Geologist	**WMF**	***Total Depth (ft)***	**43 ft**
Start	**1/21/2014 w/ Geoprobe 6620 -1025**	***Finish***	**1/23/2014 - 1540**
Split Spoon/__Length		***Well Installed? (type)***	

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
		No borings collected at this location, and no lithologic description during well drilling.
		Notes from Well Construction Record
		0 - 5' red clay
		5 - 22' brown silt
		22 - 43' white/tan sandstone

Comments:
Associated Monitor Well: 18-MW-4
Started drilling with Geoprobe 6620 on 1/21/14. Met refusal at 16'. Remainder of well drilled with combo rig.
screen 26 - 36'
sand 24 - 43'
bentonite 19 - 24'
grout 0 - 19'
water level 28'

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Boring ID	**19-MW-1**	***Sheet :*** ***23 of 23***	
Job No.	**201336**	***Client***	**City of Raleigh**
Location	**Raleigh, North Carolina**	***Drilling Method***	**Geoprobe 7822 DT (Quantex)**
Sample Types	**Grab**	***Boring Diameter***	**7.25" (auger)**
Geologist	**WMF**	***Total Depth (ft)***	**43 feet**
Start	**1/16/2014 0830**	***Finish***	**1/17/2014 - 1115**
Split Spoon/__Length	**N/A**	***Well Installed? (type)***	**2"-flush mount Type II**

Depth in Feet	**PID/FID (ppm)**	**Lithology (color, grain size, components, moisture content, angularity, plasticity, organic matter)**
0' - 4'	Explosive gas meter used	orange/red sandy silt with medium to coarse sand
4 - 24'		landfill debris
25' - 43'		grayish/tan silty sand with fine to medium sand, same mica flakes, mottling (native material)

Comments:

Associated Monitor Well: 19-MW-1

Drilled at four locations before final location chosen. Lots of problems drilling through landfill debris.

Methane being produced from boring. Used Q-RAE Multi-gas meter as a explosimeter attached to drill rig in breathing zone.

screen 33 - 43'

sand 31 -43'

bentonite 19 - 31' (landfill debris to about 25')

grout 1 - 19'

water level 35.5'

Appendix B

PHOTOGRAPHIC LOG

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Client Name:	Site Location:	Project No.
City of Raleigh	Dorothea Dix Campus; Raleigh, North Carolina	201336

Photo #	Date:
1	1/14/2014

Direction of Photo:
East

Description:
Quantex 7728DT Geoprobe® advances soil borings near an underground storage tank next to the Williams Building (Area 13H-I)

Photo #	Date:
2	1/17/2014

Direction of Photo:
Northwest

Description:
Quantex 540DT Geoprobe® advances a soil boring in the Grounds Shop near a closed floor drain (Area 4).

PHOTOGRAPHIC LOG

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Client Name:	Site Location:	Project No.
City of Raleigh	Dorothea Dix Campus; Raleigh, North Carolina	201336

Photo #	Date:
3	1/15/2014

Direction of Photo:
Not available

Description:
Soil boring laid out on truck tailgate for lithologic description, vapor screening and sampling. The 10-foot white sand interval was quite different than anything encountered at the site, and different thicknesses were located in several borings in Area 5. We later discovered this area had formerly been used as a golf course, and the sand bunkers were beneath fill.

Photo #	Date:
4	1/16/2014

Direction of Photo:
East

Description:
Location of stream sample collected at Area 21B, where the concrete pipe goes beneath the Norfolk Southern railroad track.

PHOTOGRAPHIC LOG

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Client Name:	Site Location:	Project No.
City of Raleigh	Dorothea Dix Campus; Raleigh, North Carolina	201336

Photo # 5 **Date:** 1/16/2014

Direction of Photo:
Northeast

Description:
Location of stream sample collected at Area 21C, where the stream begins south of the concrete discharge pipe.

Photo # 6 **Date:** 1/17/2014

Direction of Photo:
Northwest

Description:
Geologic Exploration's driller's helper pouring the sand filter media in the final construction stages of 16-MW-1.
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PHOTOGRAPHIC LOG

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Client Name:	Site Location:	Project No.
City of Raleigh	Dorothea Dix Campus; Raleigh, North Carolina	201336

Photo #	Date:
7	1/16/2014

Direction of Photo:
Southwest

Description:
After the MIP work was completed, Geologic's 7728DT Geoprobe was used to construct three monitoring wells. This is the location of 18-MW-01, northeast of the steam plant seen in the background.

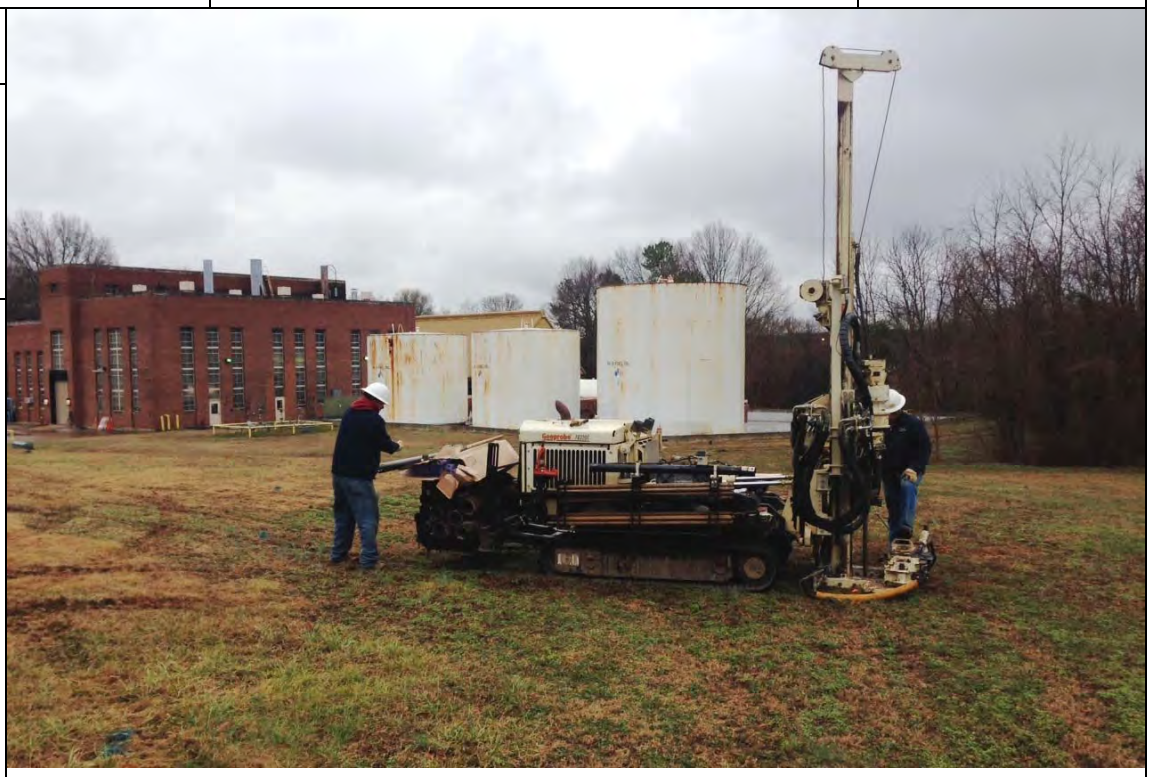

Photo #	Date:
8	1/16/2014

Direction of Photo:
East

Description:
Location of 18-MIP-03 (stake to right of driller). Geologic's driller advances augers for 18-MW-02, west of the fuel oil ASTs north of the steam plant.

PHOTOGRAPHIC LOG

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Client Name:	Site Location:	Project No.
City of Raleigh	Dorothea Dix Campus; Raleigh, North Carolina	201336

Photo # 9 **Date:** 1/20/2014

Direction of Photo: Southwest

Description:
The combination rig set up on 17-MW-02 location. A bolt/weld on the hydraulic cylinders on the derrick broke when the derrick was lifted. Geologic repaired the rig so it could be lowered safely, then took the rig back to their shop for repairs after this well was completed on 1/21/2014. The drill rig was repaired and brought back on 1/23/204 to complete the remaining rock wells.

Photo # 10 **Date:** 1/21/2014

Direction of Photo: Interior

Description:
Even though we had maps of the steam pipes and a private utility locator, we had to access the electrical/HVAC building to determine exactly where the steam pipe to ensure we could advance soil boring 1-SB-G. You can see the Geoprobe outside the door , and a better view in Photo 11 below.

PHOTOGRAPHIC LOG

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Client Name:	Site Location:	Project No.
City of Raleigh	Dorothea Dix Campus; Raleigh, North Carolina	201336

Photo # 11 **Date:** 1/21/14

Direction of Photo: West

Description: Doorway to left is the same door as in previous photo. We advanced soil boring 1-SB-G on 1/21 and this photo was taken on 1/23 when the combo rig had been repaired and was setting up to construct 17-MW-04.

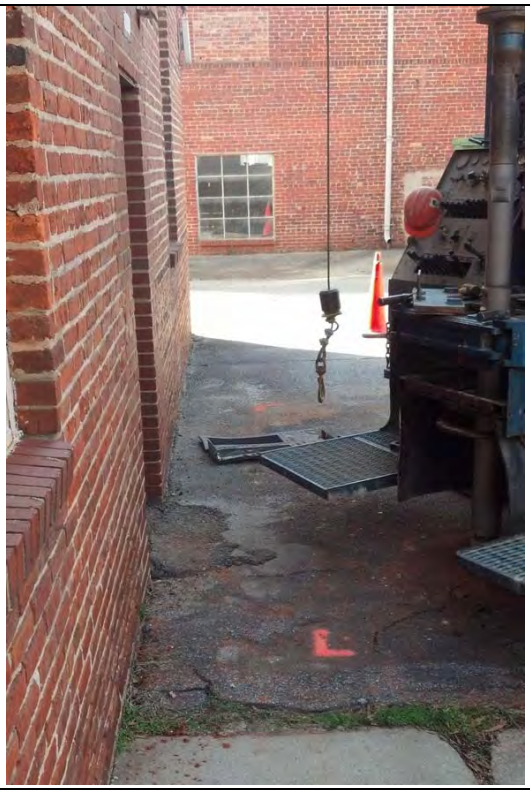

Photo # 12 **Date:** 1/20/2014

Direction of Photo: Southwest

Description: The 6620DT Geoprobe® advances soil boring 1-SB-F, while the combination rig is drilling the boring for 17-MW-01.

PHOTOGRAPHIC LOG

DUNCKLEE & DUNHAM
ENVIRONMENTAL GEOLOGISTS & ENGINEERS

Client Name:	**Site Location:**	**Project No.**
City of Raleigh	Dorothea Dix Campus; Raleigh, North Carolina	201336

Photo # 13 | **Date:** 1/20/2014

Direction of Photo: Northwest

Description: Advancing boring 1-SB-E. This is also the location of 17-MW-3, constructed on 1/23/2014.

Photo # 14 | **Date:** 1/23/2014

Direction of Photo: South

Description: Monitoring well 18-MW-04 was the only well in Area 18 that required the combination rig. The dust was produced from a hard sandy interval in the bedrock.
.

PHOTOGRAPHIC LOG

DUNCKLEE & DUNHAM
ENVIRONMENTAL GEOLOGISTS & ENGINEERS

Client Name:	Site Location:	Project No.
City of Raleigh	Dorothea Dix Campus; Raleigh, North Carolina	201336

Photo # 15 | **Date:** 1/16/2014

Direction of Photo:
Northwest

Description:
Quantex's 7728DT Geoprobe® at one of the preliminary locations of 19-MW-01, north of the cemetery. The final well location was on the northwestern side of the cemetery.

Photo # 16 | **Date:** 1/16/2014

Direction of Photo:
Not available

Description:
Drilling through the landfill debris in 19-MW-01.

PHOTOGRAPHIC LOG

DUNCKLEE & DUNHAM
ENVIRONMENTAL GEOLOGISTS & ENGINEERS

Client Name:	Site Location:	Project No.
City of Raleigh	Dorothea Dix Campus; Raleigh, North Carolina	201336

Photo # 17

Date: 1/16/2014

Direction of Photo:
Not available

Description:
Some of the landfill debris brought to the surface during the drilling of 19-MW-01

Photo # 18

Date: 1/17/2014

Direction of Photo:
South

Description:
One example of the many ruts created by heavy equipment backing over wet soil. A landscaper experienced with this type of repair evened out and filled in ruts, which were seeded with a mixture of rye and fescue before straw was put down to protect the area during the grass germination period.

Appendix C

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

KENNY SARGENT

Well Contractor Name

A - 4226

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

☐Agricultural ☐Municipal/Public

☐Geothermal (Heating/Cooling Supply) ☐Residential Water Supply (single)

☐Industrial/Commercial ☐Residential Water Supply (shared)

☐Irrigation

Non-Water Supply Well:

☑Monitoring ☐Recovery

Injection Well:

☐Aquifer Recharge ☐Groundwater Remediation

☐Aquifer Storage and Recovery ☐Salinity Barrier

☐Aquifer Test ☐Stormwater Drainage

☐Experimental Technology ☐Subsidence Control

☐Geothermal (Closed Loop) ☐Tracer

☐Geothermal (Heating/Cooling Return) ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 01/17/14 **Well ID#** 16-MW-1

5a. Well Location:

DOROTHEA DIX

Facility/Owner Name

Facility ID# (if applicable)

820 SOUTH BOYLAN AVENUE RALEIGH 27603

Physical Address, City, and Zip

WAKE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35° 46' 19.16" N 78° 39' 29.80" W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐Yes or ☑No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 36.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 28.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 8.0 **(in.)**

12. Well construction method: AUGER

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	26.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
26.0 ft.	36.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	21.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
24.0 ft.	36.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	8.0 ft.	RED SANDY CLAY
8.0 ft.	24.0 ft.	BROWN SILTY SANDY CLAY
24.0 ft.	32.0 ft.	GRAY SILTY CLAY
32.0 ft.	40.0 ft.	BROWN SILTY CLAY
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 21.0 TO 24.0 FEET

PREPACK SCREEN

22. Certification:

Signature of Certified Well Contractor

01/29/14

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

NICHOLAS HAYES

Well Contractor Name

A - 4121

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐Agricultural
- ☐Municipal/Public
- ☐Geothermal (Heating/Cooling Supply)
- ☐Residential Water Supply (single)
- ☐Industrial/Commercial
- ☐Residential Water Supply (shared)
- ☐Irrigation

Non-Water Supply Well:

- ☑Monitoring
- ☐Recovery

Injection Well:

- ☐Aquifer Recharge
- ☐Groundwater Remediation
- ☐Aquifer Storage and Recovery
- ☐Salinity Barrier
- ☐Aquifer Test
- ☐Stormwater Drainage
- ☐Experimental Technology
- ☐Subsidence Control
- ☐Geothermal (Closed Loop)
- ☐Tracer
- ☐Geothermal (Heating/Cooling Return)
- ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 01/20/14 **Well ID#** 17-MW-1

5a. Well Location:

DOROTHEA DIX

Facility/Owner Name

Facility ID# (if applicable)

820 SOUTH BOYLAN AVENUE RALEIGH 27603

Physical Address, City, and Zip

WAKE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35° 46' 07.46" N 78° 39' 23.66" W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐**Yes** or ☑**No**

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 43.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 34.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 6.0 **(in.)**

12. Well construction method: AIR ROTARY

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	33.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
33.0 ft.	43.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	26.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
31.0 ft.	43.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	10.0 ft.	RED CLAY
10.0 ft.	25.0 ft.	BROWN SILT
25.0 ft.	34.0 ft.	BROWN SILT STONE
34.0 ft.	43.0 ft.	TAN/WHITE SANDSTONE
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 26.0 TO 31.0 FEET

PREPACK SCREEN

22. Certification:

Nicholas Hayes — 01/29/14

Signature of Certified Well Contractor — Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

NICHOLAS HAYES

Well Contractor Name

A - 4121

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐ Agricultural
- ☐ Municipal/Public
- ☐ Geothermal (Heating/Cooling Supply)
- ☐ Residential Water Supply (single)
- ☐ Industrial/Commercial
- ☐ Residential Water Supply (shared)
- ☐ Irrigation

Non-Water Supply Well:

- ☑ Monitoring
- ☐ Recovery

Injection Well:

- ☐ Aquifer Recharge
- ☐ Groundwater Remediation
- ☐ Aquifer Storage and Recovery
- ☐ Salinity Barrier
- ☐ Aquifer Test
- ☐ Stormwater Drainage
- ☐ Experimental Technology
- ☐ Subsidence Control
- ☐ Geothermal (Closed Loop)
- ☐ Tracer
- ☐ Geothermal (Heating/Cooling Return)
- ☐ Other (explain under #21 Remarks)

4. Date Well(s) Completed: 01/21/14 **Well ID#** 17-MW-2

5a. Well Location:

DOROTHEA DIX

Facility/Owner Name

Facility ID# (if applicable)

820 SOUTH BOYLAN AVENUE RALEIGH 27603

Physical Address, City, and Zip

WAKE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35° 46' 05.01" N 78° 39' 25.96" W

6. Is (are) the well(s): ☑ **Permanent** or ☐ **Temporary**

7. Is this a repair to an existing well: ☐ **Yes** or ☑ **No**

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 41.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 33.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 6.0 **(in.)**

12. Well construction method: AIR ROTARY

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	31.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
31.0 ft.	41.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	24.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
29.0 ft.	41.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	7.0 ft.	RED SILTY CLAY
7.0 ft.	32.0 ft.	BROWN SILT
32.0 ft.	63.0 ft.	WHITE/TAN SANDSTONE
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 24.0 TO 29.0 FEET

PREPACK SCREEN

22. Certification:

Nicholas Hayes

Signature of Certified Well Contractor

01/29/14

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

NICHOLAS HAYES

Well Contractor Name

A - 4121

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐ Agricultural
- ☐ Municipal/Public
- ☐ Geothermal (Heating/Cooling Supply)
- ☐ Residential Water Supply (single)
- ☐ Industrial/Commercial
- ☐ Residential Water Supply (shared)
- ☐ Irrigation

Non-Water Supply Well:

- ☑ Monitoring
- ☐ Recovery

Injection Well:

- ☐ Aquifer Recharge
- ☐ Groundwater Remediation
- ☐ Aquifer Storage and Recovery
- ☐ Salinity Barrier
- ☐ Aquifer Test
- ☐ Stormwater Drainage
- ☐ Experimental Technology
- ☐ Subsidence Control
- ☐ Geothermal (Closed Loop)
- ☐ Tracer
- ☐ Geothermal (Heating/Cooling Return)
- ☐ Other (explain under #21 Remarks)

4. Date Well(s) Completed: 01/23/14 **Well ID#** 17-MW-3

5a. Well Location:

DOROTHEA DIX

Facility/Owner Name

Facility ID# (if applicable)

820 SOUTH BOYLAN AVENUE RALEIGH 27603

Physical Address, City, and Zip

WAKE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35° 46' 04.92" N 78° 39' 23.84" W

6. Is (are) the well(s): ☑ **Permanent** or ☐ **Temporary**

7. Is this a repair to an existing well: ☐ **Yes** or ☑ **No**

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

*For multiple injection or non-water supply wells **ONLY** with the same construction, you can submit one form.*

9. Total well depth below land surface: 36.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 28.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 6.0 **(in.)**

12. Well construction method: AIR ROTARY

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	26.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
26.0 ft.	36.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	19.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
24.0 ft.	36.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	4.0 ft.	BROWN/RED SILTY CLAY
4.0 ft.	22.0 ft.	TAN/BROWN SILT STONE
22.0 ft.	30.0 ft.	BROWN SILT
30.0 ft.	45.0 ft.	TAN/WHITE SANDSTONE
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 19.0 TO 24.0 FEET

PREPACK SCREEN

22. Certification:

Signature of Certified Well Contractor

01/29/14

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

NICHOLAS HAYES

Well Contractor Name

A - 4121

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐ Agricultural
- ☐ Municipal/Public
- ☐ Geothermal (Heating/Cooling Supply)
- ☐ Residential Water Supply (single)
- ☐ Industrial/Commercial
- ☐ Residential Water Supply (shared)
- ☐ Irrigation

Non-Water Supply Well:

- ☑ Monitoring
- ☐ Recovery

Injection Well:

- ☐ Aquifer Recharge
- ☐ Groundwater Remediation
- ☐ Aquifer Storage and Recovery
- ☐ Salinity Barrier
- ☐ Aquifer Test
- ☐ Stormwater Drainage
- ☐ Experimental Technology
- ☐ Subsidence Control
- ☐ Geothermal (Closed Loop)
- ☐ Tracer
- ☐ Geothermal (Heating/Cooling Return)
- ☐ Other (explain under #21 Remarks)

4. Date Well(s) Completed: 01/23/14 **Well ID#** 17-MW-4

5a. Well Location:

DOROTHEA DIX

Facility/Owner Name

Facility ID# (if applicable)

820 SOUTH BOYLAN AVENUE RALEIGH 27603

Physical Address, City, and Zip

WAKE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35° 46' 06.63" N 78° 39' 22.60" W

6. Is (are) the well(s): ☑ **Permanent** or ☐ **Temporary**

7. Is this a repair to an existing well: ☐ **Yes** or ☑ **No**

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 43.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 33.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 6.0 **(in.)**

12. Well construction method: AIR ROTARY

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	33.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
33.0 ft.	43.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	26.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
31.0 ft.	43.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	7.0 ft.	RED CLAY
7.0 ft.	24.0 ft.	BROWN SILT
24.0 ft.	43.0 ft.	BROWN SILT STONE
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 26.0 TO 31.0 FEET

PREPACK SCREEN

22. Certification:

Nicholas Hayes

Signature of Certified Well Contractor

01/29/14

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

KENNY SARGENT

Well Contractor Name

A - 4226

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐Agricultural
- ☐Municipal/Public
- ☐Geothermal (Heating/Cooling Supply)
- ☐Residential Water Supply (single)
- ☐Industrial/Commercial
- ☐Residential Water Supply (shared)
- ☐Irrigation

Non-Water Supply Well:

- ☑Monitoring
- ☐Recovery

Injection Well:

- ☐Aquifer Recharge
- ☐Groundwater Remediation
- ☐Aquifer Storage and Recovery
- ☐Salinity Barrier
- ☐Aquifer Test
- ☐Stormwater Drainage
- ☐Experimental Technology
- ☐Subsidence Control
- ☐Geothermal (Closed Loop)
- ☐Tracer
- ☐Geothermal (Heating/Cooling Return)
- ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 01/16/14 **Well ID#** 18-MW-1

5a. Well Location:

DOROTHEA DIX

Facility/Owner Name

Facility ID# (if applicable)

820 SOUTH BOYLAN AVENUE RALEIGH 27603

Physical Address, City, and Zip

WAKE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35° 46' 05.77" N 78° 39' 32.04" W

6. Is (are) the well(s): ☑Permanent or ☐Temporary

7. Is this a repair to an existing well: ☐Yes or ☑No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

*For multiple injection or non-water supply wells **ONLY** with the **same construction**, you can submit one form.*

9. Total well depth below land surface: 35.0 (ft.)

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 28.0 (ft.)

If water level is above casing, use "+"

11. Borehole diameter: 8.0 (in.)

12. Well construction method: AUGER

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	25.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
25.0 ft.	35.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	20.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
23.0 ft.	35.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	8.0 ft.	RED CLAY
8.0 ft.	19.0 ft.	LIGHT BROWN SILTY SANDY CLAY
19.0 ft.	35.0 ft.	BROWN SILTY SANDY CLAY
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 20.0 TO 23.0 FEET

PREPACK SCREEN

22. Certification:

Signature of Certified Well Contractor

01/29/14

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

DANNY SUMMERS

Well Contractor Name

A - 2579

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

☐Agricultural ☐Municipal/Public

☐Geothermal (Heating/Cooling Supply) ☐Residential Water Supply (single)

☐Industrial/Commercial ☐Residential Water Supply (shared)

☐Irrigation

Non-Water Supply Well:

☑Monitoring ☐Recovery

Injection Well:

☐Aquifer Recharge ☐Groundwater Remediation

☐Aquifer Storage and Recovery ☐Salinity Barrier

☐Aquifer Test ☐Stormwater Drainage

☐Experimental Technology ☐Subsidence Control

☐Geothermal (Closed Loop) ☐Tracer

☐Geothermal (Heating/Cooling Return) ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 01/21/14 **Well ID#** 18-MW-2

5a. Well Location:

DOROTHEA DIX

Facility/Owner Name

Facility ID# (if applicable)

820 SOUTH BOYLAN AVENUE RALEIGH 27603

Physical Address, City, and Zip

WAKE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35° 46' 02.55" N 78° 39' 30.10" W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐Yes or ☑No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 20.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 13.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 7.0 **(in.)**

12. Well construction method: AUGER

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	10.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
10.0 ft.	20.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	6.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
8.0 ft.	20.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	8.0 ft.	BROWN/RED CLAYEY SILT
8.0 ft.	20.0 ft.	TAN SILT
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 6.0 TO 8.0 FEET

PREPACK SCREEN

22. Certification:

Signature of Certified Well Contractor

01/29/14

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

KENNY SARGENT

Well Contractor Name

A - 4226

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐Agricultural
- ☐Municipal/Public
- ☐Geothermal (Heating/Cooling Supply)
- ☐Residential Water Supply (single)
- ☐Industrial/Commercial
- ☐Residential Water Supply (shared)
- ☐Irrigation

Non-Water Supply Well:

- ☑Monitoring
- ☐Recovery

Injection Well:

- ☐Aquifer Recharge
- ☐Groundwater Remediation
- ☐Aquifer Storage and Recovery
- ☐Salinity Barrier
- ☐Aquifer Test
- ☐Stormwater Drainage
- ☐Experimental Technology
- ☐Subsidence Control
- ☐Geothermal (Closed Loop)
- ☐Tracer
- ☐Geothermal (Heating/Cooling Return)
- ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 01/16/14 **Well ID#** 18-MW-3

5a. Well Location:

DOROTHEA DIX

Facility/Owner Name

Facility ID# (if applicable)

820 SOUTH BOYLAN AVENUE RALEIGH 27603

Physical Address, City, and Zip

WAKE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35° 46' 03.86" N 78° 39' 34.34" W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐**Yes** or ☑**No**

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

*For multiple injection or non-water supply wells **ONLY** with the **same construction**, you can submit one form.*

9. Total well depth below land surface: 20.0 (ft.)

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 12.0 (ft.)

If water level is above casing, use "+"

11. Borehole diameter: 8.0 (in.)

12. Well construction method: AUGER

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	10.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
10.0 ft.	20.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	6.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
8.0 ft.	20.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	4.0 ft.	RED CLAY
4.0 ft.	6.0 ft.	BLACK COAL
6.0 ft.	11.0 ft.	RED/BROWN CLAY
11.0 ft.	20.0 ft.	BROWN SILTY SANDY CLAY
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 6.0 TO 8.0 FEET

PREPACK SCREEN

22. Certification:

Signature of Certified Well Contractor

01/29/14

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

NICHOLAS HAYES

Well Contractor Name

A - 4121

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐Agricultural
- ☐Municipal/Public
- ☐Geothermal (Heating/Cooling Supply)
- ☐Residential Water Supply (single)
- ☐Industrial/Commercial
- ☐Residential Water Supply (shared)
- ☐Irrigation

Non-Water Supply Well:

- ☑Monitoring
- ☐Recovery

Injection Well:

- ☐Aquifer Recharge
- ☐Groundwater Remediation
- ☐Aquifer Storage and Recovery
- ☐Salinity Barrier
- ☐Aquifer Test
- ☐Stormwater Drainage
- ☐Experimental Technology
- ☐Subsidence Control
- ☐Geothermal (Closed Loop)
- ☐Tracer
- ☐Geothermal (Heating/Cooling Return)
- ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 01/23/14 **Well ID#** 18-MW-4

5a. Well Location:

DOROTHEA DIX

Facility/Owner Name

Facility ID# (if applicable)

820 SOUTH BOYLAN AVENUE RALEIGH 27603

Physical Address, City, and Zip

WAKE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35° 46' 02.55" N 78° 39' 30.10" W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐Yes or ☑No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 36.0 (ft.)

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 28.0 (ft.)

If water level is above casing, use "+"

11. Borehole diameter: 6.0 (in.)

12. Well construction method: AIR ROTARY

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	26.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
26.0 ft.	36.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	19.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
24.0 ft.	36.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	5.0 ft.	RED CLAY
5.0 ft.	22.0 ft.	BROWN SILT
22.0 ft.	43.0 ft.	WHITE/TAN SANDSTONE
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 19.0 TO 24.0 FEET

PREPACK SCREEN

22. Certification:

Nicholas Hayes

Signature of Certified Well Contractor

01/29/14

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

James D. Barker

Well Contractor Name

3106A

NC Well Contractor Certification Number

Quantex, Inc.

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐Agricultural
- ☐Municipal/Public
- ☐Geothermal (Heating/Cooling Supply)
- ☐Residential Water Supply (single)
- ☐Industrial/Commercial
- ☐Residential Water Supply (shared)
- ☐Irrigation

Non-Water Supply Well:

- ☑Monitoring
- ☐Recovery

Injection Well:

- ☐Aquifer Recharge
- ☐Groundwater Remediation
- ☐Aquifer Storage and Recovery
- ☐Salinity Barrier
- ☐Aquifer Test
- ☐Stormwater Drainage
- ☐Experimental Technology
- ☐Subsidence Control
- ☐Geothermal (Closed Loop)
- ☐Tracer
- ☐Geothermal (Heating/Cooling Return)
- ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 1/17/14 **Well ID#** 19-MW-1

5a. Well Location:

Dorothea Dix — Facility/Owner Name

NA — Facility ID# (if applicable)

Rocky Brand Trail, Raleigh, NC 27606

Physical Address, City, and Zip

Wake — County

NA — Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35.774226 N 78.661935 W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐**Yes** or ☑**No**

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: one

*For multiple injection or non-water supply wells **ONLY** with the **same construction**, you can submit one form.*

9. Total well depth below land surface: 43' **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: NA **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: ~8" **(in.)**

12. Well construction method: Auger

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
27 ft.	32 ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0 ft.	33 ft.	2 in.	SCh 40	PVC

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
33 ft.	43 ft.	2 in.	0.010	Sch 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0 ft.	29 ft.	neat cement	Pour - 344 lbs. neat cement
29 ft.	31 ft.	bentonite	Pour - 20 lbs. 3/8" bentonite
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
31 ft.	43 ft.	#2 sand	Pour
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0 ft.	9 ft.	Fill Material
9 ft.	27 ft.	Brown Silt
27 ft.	43 ft.	Clayey Sandy SILT
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

22. Certification:

James D. Barker — Signature of Certified Well Contractor

2/7/14 — Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

Appendix D

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Wednesday January 29, 2014

Report Number: L679288
Samples Received: 01/22/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-01

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-A 9.5-10.5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	69.6	0.0333	0.100	%		2540 G-2	01/23/14	1
Mercury	0.049	0.0014	0.029	mg/kg		7471	01/23/14	1
Antimony	1.1	0.38	1.4	mg/kg	JO1P1J6	6010C	01/29/14	1
Arsenic	34.	1.6	7.2	mg/kg	O1J6	6010C	01/29/14	5
Beryllium	1.6	0.035	0.14	mg/kg		6010C	01/29/14	1
Cadmium	3.3	0.18	1.8	mg/kg		6010C	01/29/14	5
Chromium	220	0.35	3.6	mg/kg	J6	6010C	01/29/14	5
Copper	190	1.3	7.2	mg/kg		6010C	01/29/14	5
Lead	80.	0.48	1.8	mg/kg	J3J5	6010C	01/29/14	5
Nickel	43.	1.2	7.2	mg/kg	O1	6010C	01/29/14	5
Selenium	U	1.8	7.2	mg/kg	OJ6J3	6010C	01/29/14	5
Silver	2.6	0.70	3.6	mg/kg	JO1	6010C	01/29/14	5
Thallium	U	1.6	7.2	mg/kg	O	6010C	01/29/14	5
Zinc	17.	1.5	11.	mg/kg	O1J5	6010C	01/29/14	5
Volatile Organics								
Acetone	0.017	0.010	0.072	mg/kg	J	8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0072	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0072	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.072	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0072	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0036	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0072	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/24/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-01

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-A 9.5-10.5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0072	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg		8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0072	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0072	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0072	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0072	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0036	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0043	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	96.5			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	94.3			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	92.3			% Rec.		8260B	01/24/14	1

Results listed are dry weight basis.
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Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-01

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-A 9.5-10.5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	98.1			% Rec.		8260B	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.047	mg/kg		8270D	01/24/14	1
Acenaphthylene	U	0.0067	0.047	mg/kg		8270D	01/24/14	1
Anthracene	U	0.0063	0.047	mg/kg		8270D	01/24/14	1
Benzidine	U	0.064	0.48	mg/kg		8270D	01/24/14	1
Benzo(a)anthracene	U	0.0043	0.047	mg/kg		8270D	01/24/14	1
Benzo(b)fluoranthene	U	0.0070	0.047	mg/kg		8270D	01/24/14	1
Benzo(k)fluoranthene	U	0.0058	0.047	mg/kg		8270D	01/24/14	1
Benzo(g,h,i)perylene	U	0.0072	0.047	mg/kg		8270D	01/24/14	1
Benzo(a)pyrene	U	0.0055	0.047	mg/kg		8270D	01/24/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.48	mg/kg		8270D	01/24/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.48	mg/kg		8270D	01/24/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.48	mg/kg		8270D	01/24/14	1
4-Bromophenyl-phenylether	U	0.011	0.48	mg/kg		8270D	01/24/14	1
2-Chloronaphthalene	U	0.0064	0.047	mg/kg		8270D	01/24/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.48	mg/kg		8270D	01/24/14	1
Chrysene	U	0.0056	0.047	mg/kg		8270D	01/24/14	1
Dibenz(a,h)anthracene	U	0.0082	0.047	mg/kg		8270D	01/24/14	1
3,3-Dichlorobenzidine	U	0.079	0.48	mg/kg		8270D	01/24/14	1
2,4-Dinitrotoluene	U	0.0061	0.48	mg/kg		8270D	01/24/14	1
2,6-Dinitrotoluene	U	0.0074	0.48	mg/kg		8270D	01/24/14	1
Fluoranthene	U	0.0050	0.047	mg/kg		8270D	01/24/14	1
Fluorene	U	0.0068	0.047	mg/kg		8270D	01/24/14	1
Hexachlorobenzene	U	0.0086	0.48	mg/kg		8270D	01/24/14	1
Hexachloro-1,3-butadiene	U	0.010	0.48	mg/kg		8270D	01/24/14	1
Hexachlorocyclopentadiene	U	0.059	0.48	mg/kg		8270D	01/24/14	1
Hexachloroethane	U	0.013	0.48	mg/kg		8270D	01/24/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.047	mg/kg		8270D	01/24/14	1
Isophorone	U	0.0052	0.48	mg/kg		8270D	01/24/14	1
Naphthalene	U	0.0089	0.047	mg/kg		8270D	01/24/14	1
Nitrobenzene	U	0.0070	0.48	mg/kg		8270D	01/24/14	1
n-Nitrosodimethylamine	U	0.065	0.48	mg/kg		8270D	01/24/14	1
n-Nitrosodiphenylamine	U	0.0059	0.48	mg/kg		8270D	01/24/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.48	mg/kg		8270D	01/24/14	1
Phenanthrene	U	0.0053	0.047	mg/kg		8270D	01/24/14	1
Benzylbutyl phthalate	U	0.010	0.48	mg/kg		8270D	01/24/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.48	mg/kg		8270D	01/24/14	1
Di-n-butyl phthalate	U	0.011	0.48	mg/kg		8270D	01/24/14	1
Diethyl phthalate	U	0.0069	0.48	mg/kg		8270D	01/24/14	1
Dimethyl phthalate	U	0.0054	0.48	mg/kg		8270D	01/24/14	1
Di-n-octyl phthalate	U	0.0091	0.48	mg/kg		8270D	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
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PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-01

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-A 9.5-10.5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.047	mg/kg		8270D	01/24/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.48	mg/kg		8270D	01/24/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.48	mg/kg		8270D	01/24/14	1
2-Chlorophenol	U	0.0083	0.48	mg/kg		8270D	01/24/14	1
2,4-Dichlorophenol	U	0.0075	0.48	mg/kg		8270D	01/24/14	1
2,4-Dimethylphenol	U	0.047	0.48	mg/kg		8270D	01/24/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.48	mg/kg		8270D	01/24/14	1
2,4-Dinitrophenol	U	0.098	0.48	mg/kg		8270D	01/24/14	1
2-Nitrophenol	U	0.013	0.48	mg/kg		8270D	01/24/14	1
4-Nitrophenol	U	0.052	0.48	mg/kg		8270D	01/24/14	1
Pentachlorophenol	U	0.048	0.48	mg/kg		8270D	01/24/14	1
Phenol	U	0.0070	0.48	mg/kg		8270D	01/24/14	1
2,4,6-Trichlorophenol	U	0.0078	0.48	mg/kg		8270D	01/24/14	1
Surrogate Recovery								
2-Fluorophenol	63.6			% Rec.		8270D	01/24/14	1
Phenol-d5	68.8			% Rec.		8270D	01/24/14	1
Nitrobenzene-d5	63.1			% Rec.		8270D	01/24/14	1
2-Fluorobiphenyl	65.4			% Rec.		8270D	01/24/14	1
2,4,6-Tribromophenol	102.			% Rec.		8270D	01/24/14	1
p-Terphenyl-d14	56.6			% Rec.		8270D	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-02

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-B 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	91.0	0.0333	0.100	%		2540 G-2	01/23/14	1
Mercury	0.012	0.0014	0.022	mg/kg	J	7471	01/23/14	1
Antimony	U	0.38	1.1	mg/kg		6010C	01/29/14	1
Arsenic	5.6	0.32	1.1	mg/kg		6010C	01/29/14	1
Beryllium	0.49	0.035	0.11	mg/kg		6010C	01/29/14	1
Cadmium	0.35	0.035	0.27	mg/kg		6010C	01/29/14	1
Chromium	35.	0.070	0.55	mg/kg		6010C	01/29/14	1
Copper	5.3	0.26	1.1	mg/kg		6010C	01/29/14	1
Lead	12.	0.095	0.27	mg/kg		6010C	01/29/14	1
Nickel	5.0	0.24	1.1	mg/kg		6010C	01/29/14	1
Selenium	U	0.37	1.1	mg/kg		6010C	01/29/14	1
Silver	U	0.14	0.55	mg/kg		6010C	01/29/14	1
Thallium	1.0	0.32	1.1	mg/kg	J	6010C	01/29/14	1
Zinc	8.4	0.30	1.6	mg/kg		6010C	01/29/14	1
Volatile Organics								
Acetone	0.049	0.010	0.055	mg/kg	J	8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.011	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0011	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0011	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0055	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0011	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0011	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0055	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.055	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0055	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0027	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0055	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0011	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0011	mg/kg		8260B	01/24/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-02

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-B 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0055	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,1-Dichloroethene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0011	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0011	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0011	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0011	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	0.0070	0.0047	0.011	mg/kg	J	8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0055	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.011	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0055	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0011	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0011	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0055	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0011	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0011	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0011	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0055	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0027	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0011	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0033	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	96.0			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	100.			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	93.9			% Rec.		8260B	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-02

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-B 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	88.4			% Rec.		8260B	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.036	mg/kg		8270D	01/24/14	1
Acenaphthylene	U	0.0067	0.036	mg/kg		8270D	01/24/14	1
Anthracene	U	0.0063	0.036	mg/kg		8270D	01/24/14	1
Benzidine	U	0.064	0.36	mg/kg		8270D	01/24/14	1
Benzo(a)anthracene	U	0.0043	0.036	mg/kg		8270D	01/24/14	1
Benzo(b)fluoranthene	U	0.0070	0.036	mg/kg		8270D	01/24/14	1
Benzo(k)fluoranthene	U	0.0058	0.036	mg/kg		8270D	01/24/14	1
Benzo(g,h,i)perylene	U	0.0072	0.036	mg/kg		8270D	01/24/14	1
Benzo(a)pyrene	U	0.0055	0.036	mg/kg		8270D	01/24/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.36	mg/kg		8270D	01/24/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.36	mg/kg		8270D	01/24/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.36	mg/kg		8270D	01/24/14	1
4-Bromophenyl-phenylether	U	0.011	0.36	mg/kg		8270D	01/24/14	1
2-Chloronaphthalene	U	0.0064	0.036	mg/kg		8270D	01/24/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.36	mg/kg		8270D	01/24/14	1
Chrysene	U	0.0056	0.036	mg/kg		8270D	01/24/14	1
Dibenz(a,h)anthracene	U	0.0082	0.036	mg/kg		8270D	01/24/14	1
3,3-Dichlorobenzidine	U	0.079	0.36	mg/kg		8270D	01/24/14	1
2,4-Dinitrotoluene	U	0.0061	0.36	mg/kg		8270D	01/24/14	1
2,6-Dinitrotoluene	U	0.0074	0.36	mg/kg		8270D	01/24/14	1
Fluoranthene	U	0.0050	0.036	mg/kg		8270D	01/24/14	1
Fluorene	U	0.0068	0.036	mg/kg		8270D	01/24/14	1
Hexachlorobenzene	U	0.0086	0.36	mg/kg		8270D	01/24/14	1
Hexachloro-1,3-butadiene	U	0.010	0.36	mg/kg		8270D	01/24/14	1
Hexachlorocyclopentadiene	U	0.059	0.36	mg/kg		8270D	01/24/14	1
Hexachloroethane	U	0.013	0.36	mg/kg		8270D	01/24/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.036	mg/kg		8270D	01/24/14	1
Isophorone	U	0.0052	0.36	mg/kg		8270D	01/24/14	1
Naphthalene	U	0.0089	0.036	mg/kg		8270D	01/24/14	1
Nitrobenzene	U	0.0070	0.36	mg/kg		8270D	01/24/14	1
n-Nitrosodimethylamine	U	0.065	0.36	mg/kg		8270D	01/24/14	1
n-Nitrosodiphenylamine	U	0.0059	0.36	mg/kg		8270D	01/24/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.36	mg/kg		8270D	01/24/14	1
Phenanthrene	U	0.0053	0.036	mg/kg		8270D	01/24/14	1
Benzylbutyl phthalate	U	0.010	0.36	mg/kg		8270D	01/24/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.36	mg/kg		8270D	01/24/14	1
Di-n-butyl phthalate	U	0.011	0.36	mg/kg		8270D	01/24/14	1
Diethyl phthalate	U	0.0069	0.36	mg/kg		8270D	01/24/14	1
Dimethyl phthalate	U	0.0054	0.36	mg/kg		8270D	01/24/14	1
Di-n-octyl phthalate	U	0.0091	0.36	mg/kg		8270D	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-02

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-B 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.036	mg/kg		8270D	01/24/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.36	mg/kg		8270D	01/24/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.36	mg/kg		8270D	01/24/14	1
2-Chlorophenol	U	0.0083	0.36	mg/kg		8270D	01/24/14	1
2,4-Dichlorophenol	U	0.0075	0.36	mg/kg		8270D	01/24/14	1
2,4-Dimethylphenol	U	0.047	0.36	mg/kg		8270D	01/24/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.36	mg/kg		8270D	01/24/14	1
2,4-Dinitrophenol	U	0.098	0.36	mg/kg		8270D	01/24/14	1
2-Nitrophenol	U	0.013	0.36	mg/kg		8270D	01/24/14	1
4-Nitrophenol	U	0.052	0.36	mg/kg		8270D	01/24/14	1
Pentachlorophenol	U	0.048	0.36	mg/kg		8270D	01/24/14	1
Phenol	U	0.0070	0.36	mg/kg		8270D	01/24/14	1
2,4,6-Trichlorophenol	U	0.0078	0.36	mg/kg		8270D	01/24/14	1
Surrogate Recovery								
2-Fluorophenol	66.0			% Rec.		8270D	01/24/14	1
Phenol-d5	72.2			% Rec.		8270D	01/24/14	1
Nitrobenzene-d5	67.0			% Rec.		8270D	01/24/14	1
2-Fluorobiphenyl	65.2			% Rec.		8270D	01/24/14	1
2,4,6-Tribromophenol	107.			% Rec.		8270D	01/24/14	1
p-Terphenyl-d14	55.8			% Rec.		8270D	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29, 2014

ESC Sample # : L679288-03

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-C 5.5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:05

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	81.1	0.0333	0.100	%		2540 G-2	01/23/14	1
Mercury	0.063	0.0014	0.025	mg/kg		7471	01/23/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/29/14	1
Arsenic	15.	0.32	1.2	mg/kg		6010C	01/29/14	1
Beryllium	0.74	0.035	0.12	mg/kg		6010C	01/29/14	1
Cadmium	0.78	0.18	1.5	mg/kg	J	6010C	01/29/14	5
Chromium	30.	0.070	0.62	mg/kg		6010C	01/29/14	1
Copper	23.	0.26	1.2	mg/kg		6010C	01/29/14	1
Lead	18.	0.48	1.5	mg/kg		6010C	01/29/14	5
Nickel	14.	0.24	1.2	mg/kg		6010C	01/29/14	1
Selenium	U	1.8	6.2	mg/kg	O	6010C	01/29/14	5
Silver	0.65	0.14	0.62	mg/kg		6010C	01/29/14	1
Thallium	3.4	0.32	1.2	mg/kg		6010C	01/29/14	1
Zinc	34.	0.30	1.8	mg/kg		6010C	01/29/14	1
Volatile Organics								
Acetone	0.039	0.010	0.062	mg/kg	J	8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.012	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0012	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0012	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0012	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0062	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	U	0.00020	0.0012	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0012	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0012	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0062	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.062	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0062	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0031	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0062	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0012	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0012	mg/kg		8260B	01/24/14	1

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PO Box 639
Cary, NC 27512

January 29, 2014

ESC Sample # : L679288-03

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-C 5.5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:05

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0062	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
1,1-Dichloroethene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0012	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0012	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0012	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0012	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0012	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0012	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	U	0.0047	0.012	mg/kg		8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0062	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.012	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0062	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0012	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0012	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0062	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0012	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0012	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0012	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0062	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0031	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0012	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0012	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0037	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	92.7			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	99.8			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	91.2			% Rec.		8260B	01/24/14	1

Results listed are dry weight basis.
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Mt. Juliet, TN 37122
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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29, 2014

ESC Sample # : L679288-03

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-C 5.5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:05

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	69.2			% Rec.	J2	8260B	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.041	mg/kg		8270D	01/24/14	1
Acenaphthylene	U	0.0067	0.041	mg/kg		8270D	01/24/14	1
Anthracene	U	0.0063	0.041	mg/kg		8270D	01/24/14	1
Benzidine	U	0.064	0.41	mg/kg		8270D	01/24/14	1
Benzo(a)anthracene	U	0.0043	0.041	mg/kg		8270D	01/24/14	1
Benzo(b)fluoranthene	U	0.0070	0.041	mg/kg		8270D	01/24/14	1
Benzo(k)fluoranthene	U	0.0058	0.041	mg/kg		8270D	01/24/14	1
Benzo(g,h,i)perylene	U	0.0072	0.041	mg/kg		8270D	01/24/14	1
Benzo(a)pyrene	U	0.0055	0.041	mg/kg		8270D	01/24/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.41	mg/kg		8270D	01/24/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.41	mg/kg		8270D	01/24/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.41	mg/kg		8270D	01/24/14	1
4-Bromophenyl-phenylether	U	0.011	0.41	mg/kg		8270D	01/24/14	1
2-Chloronaphthalene	U	0.0064	0.041	mg/kg		8270D	01/24/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.41	mg/kg		8270D	01/24/14	1
Chrysene	U	0.0056	0.041	mg/kg		8270D	01/24/14	1
Dibenz(a,h)anthracene	U	0.0082	0.041	mg/kg		8270D	01/24/14	1
3,3-Dichlorobenzidine	U	0.079	0.41	mg/kg		8270D	01/24/14	1
2,4-Dinitrotoluene	U	0.0061	0.41	mg/kg		8270D	01/24/14	1
2,6-Dinitrotoluene	U	0.0074	0.41	mg/kg		8270D	01/24/14	1
Fluoranthene	U	0.0050	0.041	mg/kg		8270D	01/24/14	1
Fluorene	U	0.0068	0.041	mg/kg		8270D	01/24/14	1
Hexachlorobenzene	U	0.0086	0.41	mg/kg		8270D	01/24/14	1
Hexachloro-1,3-butadiene	U	0.010	0.41	mg/kg		8270D	01/24/14	1
Hexachlorocyclopentadiene	U	0.059	0.41	mg/kg		8270D	01/24/14	1
Hexachloroethane	U	0.013	0.41	mg/kg		8270D	01/24/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.041	mg/kg		8270D	01/24/14	1
Isophorone	U	0.0052	0.41	mg/kg		8270D	01/24/14	1
Naphthalene	U	0.0089	0.041	mg/kg		8270D	01/24/14	1
Nitrobenzene	U	0.0070	0.41	mg/kg		8270D	01/24/14	1
n-Nitrosodimethylamine	U	0.065	0.41	mg/kg		8270D	01/24/14	1
n-Nitrosodiphenylamine	U	0.0059	0.41	mg/kg		8270D	01/24/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.41	mg/kg		8270D	01/24/14	1
Phenanthrene	U	0.0053	0.041	mg/kg		8270D	01/24/14	1
Benzylbutyl phthalate	U	0.010	0.41	mg/kg		8270D	01/24/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.41	mg/kg		8270D	01/24/14	1
Di-n-butyl phthalate	U	0.011	0.41	mg/kg		8270D	01/24/14	1
Diethyl phthalate	U	0.0069	0.41	mg/kg		8270D	01/24/14	1
Dimethyl phthalate	U	0.0054	0.41	mg/kg		8270D	01/24/14	1
Di-n-octyl phthalate	U	0.0091	0.41	mg/kg		8270D	01/24/14	1

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January 29, 2014

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Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-C 5.5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:05

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.041	mg/kg		8270D	01/24/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.41	mg/kg		8270D	01/24/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.41	mg/kg		8270D	01/24/14	1
2-Chlorophenol	U	0.0083	0.41	mg/kg		8270D	01/24/14	1
2,4-Dichlorophenol	U	0.0075	0.41	mg/kg		8270D	01/24/14	1
2,4-Dimethylphenol	U	0.047	0.41	mg/kg		8270D	01/24/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.41	mg/kg		8270D	01/24/14	1
2,4-Dinitrophenol	U	0.098	0.41	mg/kg		8270D	01/24/14	1
2-Nitrophenol	U	0.013	0.41	mg/kg		8270D	01/24/14	1
4-Nitrophenol	U	0.052	0.41	mg/kg		8270D	01/24/14	1
Pentachlorophenol	U	0.048	0.41	mg/kg		8270D	01/24/14	1
Phenol	U	0.0070	0.41	mg/kg		8270D	01/24/14	1
2,4,6-Trichlorophenol	U	0.0078	0.41	mg/kg		8270D	01/24/14	1
Surrogate Recovery								
2-Fluorophenol	65.5			% Rec.		8270D	01/24/14	1
Phenol-d5	71.2			% Rec.		8270D	01/24/14	1
Nitrobenzene-d5	65.9			% Rec.		8270D	01/24/14	1
2-Fluorobiphenyl	65.4			% Rec.		8270D	01/24/14	1
2,4,6-Tribromophenol	100.			% Rec.		8270D	01/24/14	1
p-Terphenyl-d14	56.2			% Rec.		8270D	01/24/14	1

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REPORT OF ANALYSIS

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January 29,2014

ESC Sample # : L679288-04

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-5

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.44	0.21	1.0	ug/l	JO1P1	6020	01/24/14	1
Arsenic	0.96	0.25	1.0	ug/l	JO1	6020	01/24/14	1
Lead	U	0.24	1.0	ug/l	P1	6020	01/24/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/24/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/23/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/27/14	1
Cadmium	U	0.70	5.0	ug/l		6010C	01/27/14	1
Chromium	U	1.4	10.	ug/l		6010C	01/27/14	1
Copper	U	5.3	20.	ug/l		6010C	01/27/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/27/14	1
Selenium	U	7.4	20.	ug/l		6010C	01/27/14	1
Silver	3.0	2.8	10.	ug/l	J	6010C	01/27/14	1
Zinc	U	5.9	30.	ug/l		6010C	01/27/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/24/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/24/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/24/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/24/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/24/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/24/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/24/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/24/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/24/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/24/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/24/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/24/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/24/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/24/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/24/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/24/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/24/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/24/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/24/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/24/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/24/14	1

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Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-5

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/24/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/24/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/24/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/24/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/24/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/24/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/24/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/24/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/24/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/24/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/24/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/24/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/24/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/24/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/24/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/24/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/24/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	01/24/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/24/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/24/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/24/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/24/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/24/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/24/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	01/24/14	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-04

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-5

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dibromofluoromethane	101.			% Rec.		8260B	01/24/14	1
4-Bromofluorobenzene	100.			% Rec.		8260B	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	01/23/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	01/23/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	01/23/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	01/23/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	01/23/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	01/23/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	01/23/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	01/23/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	01/23/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	01/23/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	01/23/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	01/23/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	01/23/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	01/23/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	01/23/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	01/23/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	01/23/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	01/23/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	01/23/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	01/23/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	01/23/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	01/23/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	01/23/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	01/23/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	01/23/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	01/23/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	01/23/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	01/23/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	01/23/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	01/23/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	01/23/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	01/23/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	01/23/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	01/23/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	01/23/14	1
Bis(2-ethylhexyl)phthalate	0.83	0.71	3.0	ug/l	J	8270 D	01/23/14	1
Di-n-butyl phthalate	0.29	0.27	3.0	ug/l	J	8270 D	01/23/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/23/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/23/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-04

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-5

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Di-n-octyl phthalate	U	0.28	3.0	ug/l		8270 D	01/23/14	1
Pyrene	U	0.33	1.0	ug/l		8270 D	01/23/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	01/23/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	01/23/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	01/23/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	01/23/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	01/23/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	01/23/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	01/23/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	01/23/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	01/23/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	01/23/14	1
Phenol	U	0.33	10.	ug/l		8270 D	01/23/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	01/23/14	1
Surrogate Recovery								
2-Fluorophenol	28.7			% Rec.		8270 D	01/23/14	1
Phenol-d5	23.2			% Rec.		8270 D	01/23/14	1
Nitrobenzene-d5	60.5			% Rec.		8270 D	01/23/14	1
2-Fluorobiphenyl	59.0			% Rec.		8270 D	01/23/14	1
2,4,6-Tribromophenol	75.2			% Rec.		8270 D	01/23/14	1
p-Terphenyl-d14	65.1			% Rec.		8270 D	01/23/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-05

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-D 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	92.8	0.0333	0.100	%		2540 G-2	01/23/14	1
Mercury	0.0087	0.0014	0.022	mg/kg	J	7471	01/23/14	1
Antimony	0.74	0.38	1.1	mg/kg	J	6010C	01/29/14	1
Arsenic	4.5	0.32	1.1	mg/kg		6010C	01/29/14	1
Beryllium	0.42	0.035	0.11	mg/kg		6010C	01/29/14	1
Cadmium	U	0.18	1.3	mg/kg	O	6010C	01/29/14	5
Chromium	3.1	0.070	0.54	mg/kg		6010C	01/29/14	1
Copper	41.	0.26	1.1	mg/kg		6010C	01/29/14	1
Lead	7.1	0.095	0.27	mg/kg		6010C	01/29/14	1
Nickel	2.8	0.24	1.1	mg/kg		6010C	01/29/14	1
Selenium	U	0.37	1.1	mg/kg		6010C	01/29/14	1
Silver	U	0.14	0.54	mg/kg		6010C	01/29/14	1
Thallium	U	0.32	1.1	mg/kg		6010C	01/29/14	1
Zinc	18.	0.30	1.6	mg/kg		6010C	01/29/14	1
Volatile Organics								
Acetone	U	0.010	0.054	mg/kg		8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.011	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0011	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0011	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0054	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0011	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0011	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0054	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.054	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0054	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0027	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0054	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0011	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0011	mg/kg		8260B	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
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PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-05

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-D 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0054	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,1-Dichloroethene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0011	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0011	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0011	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0011	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	U	0.0047	0.011	mg/kg		8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0054	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.011	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0054	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0011	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0011	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0054	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0011	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0011	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0011	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0054	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0027	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0011	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0032	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	95.7			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	90.7			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	94.1			% Rec.		8260B	01/24/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-05

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-D 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	95.1			% Rec.		8260B	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.036	mg/kg		8270D	01/24/14	1
Acenaphthylene	U	0.0067	0.036	mg/kg		8270D	01/24/14	1
Anthracene	U	0.0063	0.036	mg/kg		8270D	01/24/14	1
Benzidine	U	0.064	0.36	mg/kg		8270D	01/24/14	1
Benzo(a)anthracene	U	0.0043	0.036	mg/kg		8270D	01/24/14	1
Benzo(b)fluoranthene	U	0.0070	0.036	mg/kg		8270D	01/24/14	1
Benzo(k)fluoranthene	U	0.0058	0.036	mg/kg		8270D	01/24/14	1
Benzo(g,h,i)perylene	U	0.0072	0.036	mg/kg		8270D	01/24/14	1
Benzo(a)pyrene	U	0.0055	0.036	mg/kg		8270D	01/24/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.36	mg/kg		8270D	01/24/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.36	mg/kg		8270D	01/24/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.36	mg/kg		8270D	01/24/14	1
4-Bromophenyl-phenylether	U	0.011	0.36	mg/kg		8270D	01/24/14	1
2-Chloronaphthalene	U	0.0064	0.036	mg/kg		8270D	01/24/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.36	mg/kg		8270D	01/24/14	1
Chrysene	U	0.0056	0.036	mg/kg		8270D	01/24/14	1
Dibenz(a,h)anthracene	U	0.0082	0.036	mg/kg		8270D	01/24/14	1
3,3-Dichlorobenzidine	U	0.079	0.36	mg/kg		8270D	01/24/14	1
2,4-Dinitrotoluene	U	0.0061	0.36	mg/kg		8270D	01/24/14	1
2,6-Dinitrotoluene	U	0.0074	0.36	mg/kg		8270D	01/24/14	1
Fluoranthene	U	0.0050	0.036	mg/kg		8270D	01/24/14	1
Fluorene	U	0.0068	0.036	mg/kg		8270D	01/24/14	1
Hexachlorobenzene	U	0.0086	0.36	mg/kg		8270D	01/24/14	1
Hexachloro-1,3-butadiene	U	0.010	0.36	mg/kg		8270D	01/24/14	1
Hexachlorocyclopentadiene	U	0.059	0.36	mg/kg		8270D	01/24/14	1
Hexachloroethane	U	0.013	0.36	mg/kg		8270D	01/24/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.036	mg/kg		8270D	01/24/14	1
Isophorone	U	0.0052	0.36	mg/kg		8270D	01/24/14	1
Naphthalene	U	0.0089	0.036	mg/kg		8270D	01/24/14	1
Nitrobenzene	U	0.0070	0.36	mg/kg		8270D	01/24/14	1
n-Nitrosodimethylamine	U	0.065	0.36	mg/kg		8270D	01/24/14	1
n-Nitrosodiphenylamine	U	0.0059	0.36	mg/kg		8270D	01/24/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.36	mg/kg		8270D	01/24/14	1
Phenanthrene	U	0.0053	0.036	mg/kg		8270D	01/24/14	1
Benzylbutyl phthalate	U	0.010	0.36	mg/kg		8270D	01/24/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.36	mg/kg		8270D	01/24/14	1
Di-n-butyl phthalate	U	0.011	0.36	mg/kg		8270D	01/24/14	1
Diethyl phthalate	U	0.0069	0.36	mg/kg		8270D	01/24/14	1
Dimethyl phthalate	U	0.0054	0.36	mg/kg		8270D	01/24/14	1
Di-n-octyl phthalate	U	0.0091	0.36	mg/kg		8270D	01/24/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-05

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-D 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 11:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.036	mg/kg		8270D	01/24/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.36	mg/kg		8270D	01/24/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.36	mg/kg		8270D	01/24/14	1
2-Chlorophenol	U	0.0083	0.36	mg/kg		8270D	01/24/14	1
2,4-Dichlorophenol	U	0.0075	0.36	mg/kg		8270D	01/24/14	1
2,4-Dimethylphenol	U	0.047	0.36	mg/kg		8270D	01/24/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.36	mg/kg		8270D	01/24/14	1
2,4-Dinitrophenol	U	0.098	0.36	mg/kg		8270D	01/24/14	1
2-Nitrophenol	U	0.013	0.36	mg/kg		8270D	01/24/14	1
4-Nitrophenol	U	0.052	0.36	mg/kg		8270D	01/24/14	1
Pentachlorophenol	U	0.048	0.36	mg/kg		8270D	01/24/14	1
Phenol	U	0.0070	0.36	mg/kg		8270D	01/24/14	1
2,4,6-Trichlorophenol	U	0.0078	0.36	mg/kg		8270D	01/24/14	1
Surrogate Recovery								
2-Fluorophenol	63.5			% Rec.		8270D	01/24/14	1
Phenol-d5	68.7			% Rec.		8270D	01/24/14	1
Nitrobenzene-d5	66.8			% Rec.		8270D	01/24/14	1
2-Fluorobiphenyl	66.2			% Rec.		8270D	01/24/14	1
2,4,6-Tribromophenol	101.			% Rec.		8270D	01/24/14	1
p-Terphenyl-d14	57.4			% Rec.		8270D	01/24/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-06

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-E 3-4 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 12:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	80.1	0.0333	0.100	%		2540 G-2	01/23/14	1
Mercury	0.055	0.0014	0.025	mg/kg		7471	01/23/14	1
Antimony	1.1	0.38	1.2	mg/kg	J	6010C	01/29/14	1
Arsenic	16.	0.32	1.2	mg/kg		6010C	01/29/14	1
Beryllium	0.92	0.035	0.12	mg/kg		6010C	01/29/14	1
Cadmium	U	0.18	1.6	mg/kg	O	6010C	01/29/14	5
Chromium	19.	0.070	0.62	mg/kg		6010C	01/29/14	1
Copper	25.	0.26	1.2	mg/kg		6010C	01/29/14	1
Lead	30.	0.48	1.6	mg/kg		6010C	01/29/14	5
Nickel	8.7	0.24	1.2	mg/kg		6010C	01/29/14	1
Selenium	U	1.8	6.2	mg/kg	O	6010C	01/29/14	5
Silver	0.29	0.14	0.62	mg/kg	J	6010C	01/29/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/29/14	1
Zinc	150	0.30	1.9	mg/kg		6010C	01/29/14	1
Volatile Organics								
Acetone	0.029	0.010	0.062	mg/kg	J	8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.012	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0012	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0012	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0012	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0062	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	U	0.00020	0.0012	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0012	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0012	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0062	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.062	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0062	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0031	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0062	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0012	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0012	mg/kg		8260B	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-06

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-E 3-4 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 12:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0062	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
1,1-Dichloroethene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0012	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0012	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0012	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0012	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0012	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0012	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	U	0.0047	0.012	mg/kg		8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0062	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.012	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0062	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0012	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0012	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0062	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0012	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0012	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0012	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0062	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0031	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0012	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0012	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0037	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	97.4			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	93.2			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	90.3			% Rec.		8260B	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-06

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-E 3-4 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 12:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	95.3			% Rec.		8260B	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.041	mg/kg		8270D	01/24/14	1
Acenaphthylene	U	0.0067	0.041	mg/kg		8270D	01/24/14	1
Anthracene	U	0.0063	0.041	mg/kg		8270D	01/24/14	1
Benzidine	U	0.064	0.42	mg/kg		8270D	01/24/14	1
Benzo(a)anthracene	0.035	0.0043	0.041	mg/kg	J	8270D	01/24/14	1
Benzo(b)fluoranthene	0.024	0.0070	0.041	mg/kg	J	8270D	01/24/14	1
Benzo(k)fluoranthene	0.011	0.0058	0.041	mg/kg	J	8270D	01/24/14	1
Benzo(g,h,i)perylene	0.010	0.0072	0.041	mg/kg	J	8270D	01/24/14	1
Benzo(a)pyrene	0.017	0.0055	0.041	mg/kg	J	8270D	01/24/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.42	mg/kg		8270D	01/24/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.42	mg/kg		8270D	01/24/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.42	mg/kg		8270D	01/24/14	1
4-Bromophenyl-phenylether	U	0.011	0.42	mg/kg		8270D	01/24/14	1
2-Chloronaphthalene	U	0.0064	0.041	mg/kg		8270D	01/24/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.42	mg/kg		8270D	01/24/14	1
Chrysene	0.052	0.0056	0.041	mg/kg		8270D	01/24/14	1
Dibenz(a,h)anthracene	U	0.0082	0.041	mg/kg		8270D	01/24/14	1
3,3-Dichlorobenzidine	U	0.079	0.42	mg/kg		8270D	01/24/14	1
2,4-Dinitrotoluene	U	0.0061	0.42	mg/kg		8270D	01/24/14	1
2,6-Dinitrotoluene	U	0.0074	0.42	mg/kg		8270D	01/24/14	1
Fluoranthene	0.056	0.0050	0.041	mg/kg		8270D	01/24/14	1
Fluorene	U	0.0068	0.041	mg/kg		8270D	01/24/14	1
Hexachlorobenzene	U	0.0086	0.42	mg/kg		8270D	01/24/14	1
Hexachloro-1,3-butadiene	U	0.010	0.42	mg/kg		8270D	01/24/14	1
Hexachlorocyclopentadiene	U	0.059	0.42	mg/kg		8270D	01/24/14	1
Hexachloroethane	U	0.013	0.42	mg/kg		8270D	01/24/14	1
Indeno(1,2,3-cd)pyrene	0.010	0.0077	0.041	mg/kg	J	8270D	01/24/14	1
Isophorone	U	0.0052	0.42	mg/kg		8270D	01/24/14	1
Naphthalene	U	0.0089	0.041	mg/kg		8270D	01/24/14	1
Nitrobenzene	U	0.0070	0.42	mg/kg		8270D	01/24/14	1
n-Nitrosodimethylamine	U	0.065	0.42	mg/kg		8270D	01/24/14	1
n-Nitrosodiphenylamine	U	0.0059	0.42	mg/kg		8270D	01/24/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.42	mg/kg		8270D	01/24/14	1
Phenanthrene	0.15	0.0053	0.041	mg/kg		8270D	01/24/14	1
Benzylbutyl phthalate	U	0.010	0.42	mg/kg		8270D	01/24/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.42	mg/kg		8270D	01/24/14	1
Di-n-butyl phthalate	U	0.011	0.42	mg/kg		8270D	01/24/14	1
Diethyl phthalate	U	0.0069	0.42	mg/kg		8270D	01/24/14	1
Dimethyl phthalate	U	0.0054	0.42	mg/kg		8270D	01/24/14	1
Di-n-octyl phthalate	U	0.0091	0.42	mg/kg		8270D	01/24/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-06

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-E 3-4 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 12:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	0.097	0.012	0.041	mg/kg		8270D	01/24/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.42	mg/kg		8270D	01/24/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.42	mg/kg		8270D	01/24/14	1
2-Chlorophenol	U	0.0083	0.42	mg/kg		8270D	01/24/14	1
2,4-Dichlorophenol	U	0.0075	0.42	mg/kg		8270D	01/24/14	1
2,4-Dimethylphenol	U	0.047	0.42	mg/kg		8270D	01/24/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.42	mg/kg		8270D	01/24/14	1
2,4-Dinitrophenol	U	0.098	0.42	mg/kg		8270D	01/24/14	1
2-Nitrophenol	U	0.013	0.42	mg/kg		8270D	01/24/14	1
4-Nitrophenol	U	0.052	0.42	mg/kg		8270D	01/24/14	1
Pentachlorophenol	U	0.048	0.42	mg/kg		8270D	01/24/14	1
Phenol	U	0.0070	0.42	mg/kg		8270D	01/24/14	1
2,4,6-Trichlorophenol	U	0.0078	0.42	mg/kg		8270D	01/24/14	1
Surrogate Recovery								
2-Fluorophenol	63.4			% Rec.		8270D	01/24/14	1
Phenol-d5	67.0			% Rec.		8270D	01/24/14	1
Nitrobenzene-d5	69.6			% Rec.		8270D	01/24/14	1
2-Fluorobiphenyl	66.8			% Rec.		8270D	01/24/14	1
2,4,6-Tribromophenol	106.			% Rec.		8270D	01/24/14	1
p-Terphenyl-d14	51.4			% Rec.		8270D	01/24/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-07

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-F 11-12 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 13:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	90.8	0.0333	0.100	%		2540 G-2	01/23/14	1
Mercury	0.0037	0.0014	0.022	mg/kg	J	7471	01/23/14	1
Antimony	0.75	0.38	1.1	mg/kg	J	6010C	01/29/14	1
Arsenic	2.5	0.32	1.1	mg/kg		6010C	01/29/14	1
Beryllium	0.11	0.035	0.11	mg/kg		6010C	01/29/14	1
Cadmium	U	0.18	1.4	mg/kg	O	6010C	01/29/14	5
Chromium	0.94	0.070	0.55	mg/kg		6010C	01/29/14	1
Copper	31.	0.26	1.1	mg/kg		6010C	01/29/14	1
Lead	44.	0.095	0.28	mg/kg		6010C	01/29/14	1
Nickel	3.7	0.24	1.1	mg/kg		6010C	01/29/14	1
Selenium	U	0.37	1.1	mg/kg		6010C	01/29/14	1
Silver	U	0.14	0.55	mg/kg		6010C	01/29/14	1
Thallium	U	0.32	1.1	mg/kg		6010C	01/29/14	1
Zinc	24.	0.30	1.6	mg/kg		6010C	01/29/14	1
Volatile Organics								
Acetone	U	0.010	0.055	mg/kg		8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.011	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0011	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0011	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0055	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0011	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0011	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0055	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.055	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0055	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0028	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0055	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0011	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0011	mg/kg		8260B	01/24/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-07

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-F 11-12 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 13:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0055	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,1-Dichloroethene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0011	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0011	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0011	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0011	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	U	0.0047	0.011	mg/kg		8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0055	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.011	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0055	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0011	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0011	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0055	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0011	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0011	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0011	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0055	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0028	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0011	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0033	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	96.8			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	97.6			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	92.1			% Rec.		8260B	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-07

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-F 11-12 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 13:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	99.6			% Rec.		8260B	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.036	mg/kg		8270D	01/24/14	1
Acenaphthylene	U	0.0067	0.036	mg/kg		8270D	01/24/14	1
Anthracene	U	0.0063	0.036	mg/kg		8270D	01/24/14	1
Benzidine	U	0.064	0.37	mg/kg		8270D	01/24/14	1
Benzo(a)anthracene	U	0.0043	0.036	mg/kg		8270D	01/24/14	1
Benzo(b)fluoranthene	U	0.0070	0.036	mg/kg		8270D	01/24/14	1
Benzo(k)fluoranthene	U	0.0058	0.036	mg/kg		8270D	01/24/14	1
Benzo(g,h,i)perylene	U	0.0072	0.036	mg/kg		8270D	01/24/14	1
Benzo(a)pyrene	U	0.0055	0.036	mg/kg		8270D	01/24/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.37	mg/kg		8270D	01/24/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.37	mg/kg		8270D	01/24/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.37	mg/kg		8270D	01/24/14	1
4-Bromophenyl-phenylether	U	0.011	0.37	mg/kg		8270D	01/24/14	1
2-Chloronaphthalene	U	0.0064	0.036	mg/kg		8270D	01/24/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.37	mg/kg		8270D	01/24/14	1
Chrysene	U	0.0056	0.036	mg/kg		8270D	01/24/14	1
Dibenz(a,h)anthracene	U	0.0082	0.036	mg/kg		8270D	01/24/14	1
3,3-Dichlorobenzidine	U	0.079	0.37	mg/kg		8270D	01/24/14	1
2,4-Dinitrotoluene	U	0.0061	0.37	mg/kg		8270D	01/24/14	1
2,6-Dinitrotoluene	U	0.0074	0.37	mg/kg		8270D	01/24/14	1
Fluoranthene	U	0.0050	0.036	mg/kg		8270D	01/24/14	1
Fluorene	U	0.0068	0.036	mg/kg		8270D	01/24/14	1
Hexachlorobenzene	U	0.0086	0.37	mg/kg		8270D	01/24/14	1
Hexachloro-1,3-butadiene	U	0.010	0.37	mg/kg		8270D	01/24/14	1
Hexachlorocyclopentadiene	U	0.059	0.37	mg/kg		8270D	01/24/14	1
Hexachloroethane	U	0.013	0.37	mg/kg		8270D	01/24/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.036	mg/kg		8270D	01/24/14	1
Isophorone	U	0.0052	0.37	mg/kg		8270D	01/24/14	1
Naphthalene	U	0.0089	0.036	mg/kg		8270D	01/24/14	1
Nitrobenzene	U	0.0070	0.37	mg/kg		8270D	01/24/14	1
n-Nitrosodimethylamine	U	0.065	0.37	mg/kg		8270D	01/24/14	1
n-Nitrosodiphenylamine	U	0.0059	0.37	mg/kg		8270D	01/24/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.37	mg/kg		8270D	01/24/14	1
Phenanthrene	U	0.0053	0.036	mg/kg		8270D	01/24/14	1
Benzylbutyl phthalate	U	0.010	0.37	mg/kg		8270D	01/24/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.37	mg/kg		8270D	01/24/14	1
Di-n-butyl phthalate	U	0.011	0.37	mg/kg		8270D	01/24/14	1
Diethyl phthalate	U	0.0069	0.37	mg/kg		8270D	01/24/14	1
Dimethyl phthalate	U	0.0054	0.37	mg/kg		8270D	01/24/14	1
Di-n-octyl phthalate	U	0.0091	0.37	mg/kg		8270D	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-07

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-F 11-12 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 13:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.036	mg/kg		8270D	01/24/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.37	mg/kg		8270D	01/24/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.37	mg/kg		8270D	01/24/14	1
2-Chlorophenol	U	0.0083	0.37	mg/kg		8270D	01/24/14	1
2,4-Dichlorophenol	U	0.0075	0.37	mg/kg		8270D	01/24/14	1
2,4-Dimethylphenol	U	0.047	0.37	mg/kg		8270D	01/24/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.37	mg/kg		8270D	01/24/14	1
2,4-Dinitrophenol	U	0.098	0.37	mg/kg		8270D	01/24/14	1
2-Nitrophenol	U	0.013	0.37	mg/kg		8270D	01/24/14	1
4-Nitrophenol	U	0.052	0.37	mg/kg		8270D	01/24/14	1
Pentachlorophenol	U	0.048	0.37	mg/kg		8270D	01/24/14	1
Phenol	U	0.0070	0.37	mg/kg		8270D	01/24/14	1
2,4,6-Trichlorophenol	U	0.0078	0.37	mg/kg		8270D	01/24/14	1
Surrogate Recovery								
2-Fluorophenol	63.9			% Rec.		8270D	01/24/14	1
Phenol-d5	67.7			% Rec.		8270D	01/24/14	1
Nitrobenzene-d5	62.7			% Rec.		8270D	01/24/14	1
2-Fluorobiphenyl	65.0			% Rec.		8270D	01/24/14	1
2,4,6-Tribromophenol	95.7			% Rec.		8270D	01/24/14	1
p-Terphenyl-d14	61.8			% Rec.		8270D	01/24/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29, 2014

ESC Sample # : L679288-08

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-G 7-8 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/21/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	74.8	0.0333	0.100	%		2540 G-2	01/23/14	1
Mercury	0.047	0.0014	0.027	mg/kg		7471	01/23/14	1
Antimony	U	0.38	1.3	mg/kg		6010C	01/29/14	1
Arsenic	36.	1.6	6.7	mg/kg		6010C	01/29/14	5
Beryllium	1.9	0.035	0.13	mg/kg		6010C	01/29/14	1
Cadmium	4.5	0.18	1.7	mg/kg		6010C	01/29/14	5
Chromium	27.	0.35	3.3	mg/kg		6010C	01/29/14	5
Copper	66.	1.3	6.7	mg/kg		6010C	01/29/14	5
Lead	28.	0.48	1.7	mg/kg		6010C	01/29/14	5
Nickel	24.	1.2	6.7	mg/kg		6010C	01/29/14	5
Selenium	U	1.8	6.7	mg/kg	O	6010C	01/29/14	5
Silver	3.5	0.70	3.3	mg/kg		6010C	01/29/14	5
Thallium	U	1.6	6.7	mg/kg	O	6010C	01/29/14	5
Zinc	47.	1.5	10.	mg/kg		6010C	01/29/14	5
Volatile Organics								
Acetone	0.027	0.010	0.067	mg/kg	J	8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.013	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0013	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0013	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0013	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0013	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0067	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0013	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	U	0.00020	0.0013	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0013	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0013	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0013	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0067	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.067	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0067	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0033	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0013	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0013	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0067	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0013	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0013	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0013	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0013	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0013	mg/kg		8260B	01/24/14	1

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29, 2014

ESC Sample # : L679288-08

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-G 7-8 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/21/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0067	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0013	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0013	mg/kg		8260B	01/24/14	1
1,1-Dichloroethene	U	0.00030	0.0013	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0013	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0013	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0013	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0013	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0013	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0013	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0013	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0013	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0013	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0013	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0013	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0013	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0013	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	U	0.0047	0.013	mg/kg		8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0067	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.013	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0013	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0067	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0013	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0013	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0013	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0013	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0067	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0013	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0013	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0013	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0013	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0013	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0067	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0033	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0013	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0013	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0040	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	97.4			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	96.1			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	95.7			% Rec.		8260B	01/24/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29, 2014

ESC Sample # : L679288-08

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-G 7-8 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/21/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	98.9			% Rec.		8260B	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.044	mg/kg		8270D	01/24/14	1
Acenaphthylene	U	0.0067	0.044	mg/kg		8270D	01/24/14	1
Anthracene	U	0.0063	0.044	mg/kg		8270D	01/24/14	1
Benzidine	U	0.064	0.44	mg/kg		8270D	01/24/14	1
Benzo(a)anthracene	U	0.0043	0.044	mg/kg		8270D	01/24/14	1
Benzo(b)fluoranthene	U	0.0070	0.044	mg/kg		8270D	01/24/14	1
Benzo(k)fluoranthene	U	0.0058	0.044	mg/kg		8270D	01/24/14	1
Benzo(g,h,i)perylene	U	0.0072	0.044	mg/kg		8270D	01/24/14	1
Benzo(a)pyrene	U	0.0055	0.044	mg/kg		8270D	01/24/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.44	mg/kg		8270D	01/24/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.44	mg/kg		8270D	01/24/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.44	mg/kg		8270D	01/24/14	1
4-Bromophenyl-phenylether	U	0.011	0.44	mg/kg		8270D	01/24/14	1
2-Chloronaphthalene	U	0.0064	0.044	mg/kg		8270D	01/24/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.44	mg/kg		8270D	01/24/14	1
Chrysene	U	0.0056	0.044	mg/kg		8270D	01/24/14	1
Dibenz(a,h)anthracene	U	0.0082	0.044	mg/kg		8270D	01/24/14	1
3,3-Dichlorobenzidine	U	0.079	0.44	mg/kg		8270D	01/24/14	1
2,4-Dinitrotoluene	U	0.0061	0.44	mg/kg		8270D	01/24/14	1
2,6-Dinitrotoluene	U	0.0074	0.44	mg/kg		8270D	01/24/14	1
Fluoranthene	U	0.0050	0.044	mg/kg		8270D	01/24/14	1
Fluorene	U	0.0068	0.044	mg/kg		8270D	01/24/14	1
Hexachlorobenzene	U	0.0086	0.44	mg/kg		8270D	01/24/14	1
Hexachloro-1,3-butadiene	U	0.010	0.44	mg/kg		8270D	01/24/14	1
Hexachlorocyclopentadiene	U	0.059	0.44	mg/kg		8270D	01/24/14	1
Hexachloroethane	U	0.013	0.44	mg/kg		8270D	01/24/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.044	mg/kg		8270D	01/24/14	1
Isophorone	U	0.0052	0.44	mg/kg		8270D	01/24/14	1
Naphthalene	U	0.0089	0.044	mg/kg		8270D	01/24/14	1
Nitrobenzene	U	0.0070	0.44	mg/kg		8270D	01/24/14	1
n-Nitrosodimethylamine	U	0.065	0.44	mg/kg		8270D	01/24/14	1
n-Nitrosodiphenylamine	U	0.0059	0.44	mg/kg		8270D	01/24/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.44	mg/kg		8270D	01/24/14	1
Phenanthrene	U	0.0053	0.044	mg/kg		8270D	01/24/14	1
Benzylbutyl phthalate	U	0.010	0.44	mg/kg		8270D	01/24/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.44	mg/kg		8270D	01/24/14	1
Di-n-butyl phthalate	U	0.011	0.44	mg/kg		8270D	01/24/14	1
Diethyl phthalate	U	0.0069	0.44	mg/kg		8270D	01/24/14	1
Dimethyl phthalate	U	0.0054	0.44	mg/kg		8270D	01/24/14	1
Di-n-octyl phthalate	U	0.0091	0.44	mg/kg		8270D	01/24/14	1

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Cary, NC 27512

January 29, 2014

ESC Sample # : L679288-08

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-G 7-8 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/21/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.044	mg/kg		8270D	01/24/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.44	mg/kg		8270D	01/24/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.44	mg/kg		8270D	01/24/14	1
2-Chlorophenol	U	0.0083	0.44	mg/kg		8270D	01/24/14	1
2,4-Dichlorophenol	U	0.0075	0.44	mg/kg		8270D	01/24/14	1
2,4-Dimethylphenol	U	0.047	0.44	mg/kg		8270D	01/24/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.44	mg/kg		8270D	01/24/14	1
2,4-Dinitrophenol	U	0.098	0.44	mg/kg		8270D	01/24/14	1
2-Nitrophenol	U	0.013	0.44	mg/kg		8270D	01/24/14	1
4-Nitrophenol	U	0.052	0.44	mg/kg		8270D	01/24/14	1
Pentachlorophenol	U	0.048	0.44	mg/kg		8270D	01/24/14	1
Phenol	U	0.0070	0.44	mg/kg		8270D	01/24/14	1
2,4,6-Trichlorophenol	U	0.0078	0.44	mg/kg		8270D	01/24/14	1
Surrogate Recovery								
2-Fluorophenol	65.0			% Rec.		8270D	01/24/14	1
Phenol-d5	66.1			% Rec.		8270D	01/24/14	1
Nitrobenzene-d5	66.7			% Rec.		8270D	01/24/14	1
2-Fluorobiphenyl	63.6			% Rec.		8270D	01/24/14	1
2,4,6-Tribromophenol	96.4			% Rec.		8270D	01/24/14	1
p-Terphenyl-d14	58.7			% Rec.		8270D	01/24/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-09

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/21/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	23.	10.	50.	ug/l	J	8260B	01/25/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/25/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/25/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/25/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/25/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/25/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/25/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/25/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/25/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/25/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/25/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/25/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/25/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/25/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/25/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/25/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/25/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/25/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/25/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/25/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/25/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/25/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/25/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/25/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/25/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/25/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/25/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/25/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/25/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/25/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/25/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/25/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/25/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/25/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/25/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/25/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/25/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/25/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/25/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/25/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/25/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/25/14	1

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January 29,2014

ESC Sample # : L679288-09

Date Received : January 22, 2014
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Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/21/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/25/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/25/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/25/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/25/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/25/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/25/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/25/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/25/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/25/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/25/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	01/25/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/25/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/25/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/25/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/25/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/25/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/25/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/25/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/25/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/25/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/25/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	01/25/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/25/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/25/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/25/14	1
Surrogate Recovery								
Toluene-d8	98.3			% Rec.		8260B	01/25/14	1
Dibromofluoromethane	95.7			% Rec.		8260B	01/25/14	1
4-Bromofluorobenzene	99.8			% Rec.		8260B	01/25/14	1

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REPORT OF ANALYSIS

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January 29,2014

ESC Sample # : L679288-10

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-F 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 14:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	72.5	0.0333	0.100	%		2540 G-2	01/23/14	1
Mercury	0.098	0.0014	0.028	mg/kg		7471	01/23/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/29/14	1
Arsenic	14.	0.32	1.4	mg/kg		6010C	01/29/14	1
Beryllium	0.63	0.035	0.14	mg/kg		6010C	01/29/14	1
Cadmium	1.0	0.035	0.34	mg/kg		6010C	01/29/14	1
Chromium	43.	0.070	0.69	mg/kg		6010C	01/29/14	1
Copper	80.	0.26	1.4	mg/kg		6010C	01/29/14	1
Lead	7.6	0.095	0.34	mg/kg		6010C	01/29/14	1
Nickel	19.	0.24	1.4	mg/kg		6010C	01/29/14	1
Selenium	U	0.37	1.4	mg/kg		6010C	01/29/14	1
Silver	1.0	0.14	0.69	mg/kg		6010C	01/29/14	1
Thallium	U	0.32	1.4	mg/kg		6010C	01/29/14	1
Zinc	28.	0.30	2.1	mg/kg		6010C	01/29/14	1
Volatile Organics								
Acetone	0.019	0.010	0.069	mg/kg	J	8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0069	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0069	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.069	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0069	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0034	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0069	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/24/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-10

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-F 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 14:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0069	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg		8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0069	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0069	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0069	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0069	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0034	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0041	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	98.2			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	96.8			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	95.5			% Rec.		8260B	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-10

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-F 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 14:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	98.2			% Rec.		8260B	01/24/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.023	mg/kg		8082	01/24/14	1
PCB 1221	U	0.0054	0.023	mg/kg		8082	01/24/14	1
PCB 1232	U	0.0042	0.023	mg/kg		8082	01/24/14	1
PCB 1242	U	0.0032	0.023	mg/kg		8082	01/24/14	1
PCB 1248	U	0.0032	0.023	mg/kg		8082	01/24/14	1
PCB 1254	U	0.0047	0.023	mg/kg		8082	01/24/14	1
PCB 1260	U	0.0049	0.023	mg/kg		8082	01/24/14	1
PCBs Surrogates								
Decachlorobiphenyl	81.6			% Rec.		8082	01/24/14	1
Tetrachloro-m-xylene	93.1			% Rec.		8082	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.046	mg/kg		8270D	01/24/14	1
Acenaphthylene	U	0.0067	0.046	mg/kg		8270D	01/24/14	1
Anthracene	U	0.0063	0.046	mg/kg		8270D	01/24/14	1
Benzidine	U	0.064	0.46	mg/kg		8270D	01/24/14	1
Benzo(a)anthracene	U	0.0043	0.046	mg/kg		8270D	01/24/14	1
Benzo(b)fluoranthene	U	0.0070	0.046	mg/kg		8270D	01/24/14	1
Benzo(k)fluoranthene	U	0.0058	0.046	mg/kg		8270D	01/24/14	1
Benzo(g,h,i)perylene	U	0.0072	0.046	mg/kg		8270D	01/24/14	1
Benzo(a)pyrene	U	0.0055	0.046	mg/kg		8270D	01/24/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.46	mg/kg		8270D	01/24/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.46	mg/kg		8270D	01/24/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.46	mg/kg		8270D	01/24/14	1
4-Bromophenyl-phenylether	U	0.011	0.46	mg/kg		8270D	01/24/14	1
2-Chloronaphthalene	U	0.0064	0.046	mg/kg		8270D	01/24/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.46	mg/kg		8270D	01/24/14	1
Chrysene	U	0.0056	0.046	mg/kg		8270D	01/24/14	1
Dibenz(a,h)anthracene	U	0.0082	0.046	mg/kg		8270D	01/24/14	1
3,3-Dichlorobenzidine	U	0.079	0.46	mg/kg		8270D	01/24/14	1
2,4-Dinitrotoluene	U	0.0061	0.46	mg/kg		8270D	01/24/14	1
2,6-Dinitrotoluene	U	0.0074	0.46	mg/kg		8270D	01/24/14	1
Fluoranthene	U	0.0050	0.046	mg/kg		8270D	01/24/14	1
Fluorene	U	0.0068	0.046	mg/kg		8270D	01/24/14	1
Hexachlorobenzene	U	0.0086	0.46	mg/kg		8270D	01/24/14	1
Hexachloro-1,3-butadiene	U	0.010	0.46	mg/kg		8270D	01/24/14	1
Hexachlorocyclopentadiene	U	0.059	0.46	mg/kg		8270D	01/24/14	1
Hexachloroethane	U	0.013	0.46	mg/kg		8270D	01/24/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.046	mg/kg		8270D	01/24/14	1
Isophorone	U	0.0052	0.46	mg/kg		8270D	01/24/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-10

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-F 4-5 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 14:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Naphthalene	U	0.0089	0.046	mg/kg		8270D	01/24/14	1
Nitrobenzene	U	0.0070	0.46	mg/kg		8270D	01/24/14	1
n-Nitrosodimethylamine	U	0.065	0.46	mg/kg		8270D	01/24/14	1
n-Nitrosodiphenylamine	U	0.0059	0.46	mg/kg		8270D	01/24/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.46	mg/kg		8270D	01/24/14	1
Phenanthrene	U	0.0053	0.046	mg/kg		8270D	01/24/14	1
Benzylbutyl phthalate	U	0.010	0.46	mg/kg		8270D	01/24/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.46	mg/kg		8270D	01/24/14	1
Di-n-butyl phthalate	U	0.011	0.46	mg/kg		8270D	01/24/14	1
Diethyl phthalate	U	0.0069	0.46	mg/kg		8270D	01/24/14	1
Dimethyl phthalate	U	0.0054	0.46	mg/kg		8270D	01/24/14	1
Di-n-octyl phthalate	U	0.0091	0.46	mg/kg		8270D	01/24/14	1
Pyrene	U	0.012	0.046	mg/kg		8270D	01/24/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.46	mg/kg		8270D	01/24/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.46	mg/kg		8270D	01/24/14	1
2-Chlorophenol	U	0.0083	0.46	mg/kg		8270D	01/24/14	1
2,4-Dichlorophenol	U	0.0075	0.46	mg/kg		8270D	01/24/14	1
2,4-Dimethylphenol	U	0.047	0.46	mg/kg		8270D	01/24/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.46	mg/kg		8270D	01/24/14	1
2,4-Dinitrophenol	U	0.098	0.46	mg/kg		8270D	01/24/14	1
2-Nitrophenol	U	0.013	0.46	mg/kg		8270D	01/24/14	1
4-Nitrophenol	U	0.052	0.46	mg/kg		8270D	01/24/14	1
Pentachlorophenol	U	0.048	0.46	mg/kg		8270D	01/24/14	1
Phenol	U	0.0070	0.46	mg/kg		8270D	01/24/14	1
2,4,6-Trichlorophenol	U	0.0078	0.46	mg/kg		8270D	01/24/14	1
Surrogate Recovery								
2-Fluorophenol	63.1			% Rec.		8270D	01/24/14	1
Phenol-d5	66.2			% Rec.		8270D	01/24/14	1
Nitrobenzene-d5	63.2			% Rec.		8270D	01/24/14	1
2-Fluorobiphenyl	58.0			% Rec.		8270D	01/24/14	1
2,4,6-Tribromophenol	92.6			% Rec.		8270D	01/24/14	1
p-Terphenyl-d14	49.3			% Rec.		8270D	01/24/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-11

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-G 3.5-4 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 15:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	79.5	0.0333	0.100	%		2540 G-2	01/23/14	1
Mercury	0.072	0.0014	0.025	mg/kg	O1	7471	01/23/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/29/14	1
Arsenic	8.2	0.32	1.2	mg/kg		6010C	01/29/14	1
Beryllium	0.79	0.035	0.12	mg/kg		6010C	01/29/14	1
Cadmium	0.39	0.035	0.31	mg/kg		6010C	01/29/14	1
Chromium	24.	0.070	0.63	mg/kg		6010C	01/29/14	1
Copper	29.	0.26	1.2	mg/kg		6010C	01/29/14	1
Lead	25.	0.095	0.31	mg/kg		6010C	01/29/14	1
Nickel	10.	0.24	1.2	mg/kg		6010C	01/29/14	1
Selenium	U	0.37	1.2	mg/kg		6010C	01/29/14	1
Silver	0.35	0.14	0.63	mg/kg	J	6010C	01/29/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/29/14	1
Zinc	40.	0.30	1.9	mg/kg		6010C	01/29/14	1
Volatile Organics								
Acetone	0.060	0.010	0.063	mg/kg	J	8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.012	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0012	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0012	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0012	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0063	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	U	0.00020	0.0012	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0012	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0012	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0063	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.063	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0063	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0031	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0063	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0012	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0012	mg/kg		8260B	01/24/14	1

Results listed are dry weight basis.
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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-11

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-G 3.5-4 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 15:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0063	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
1,1-Dichloroethene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0012	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0012	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0012	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0012	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0012	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0012	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0012	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0012	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	U	0.0047	0.012	mg/kg		8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0063	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.012	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0063	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0012	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0012	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0012	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0063	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0012	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0012	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0012	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0012	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0063	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0031	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0012	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0012	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0038	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	95.2			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	96.1			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	91.0			% Rec.		8260B	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 29,2014

ESC Sample # : L679288-11

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-G 3.5-4 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 15:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	79.0			% Rec.		8260B	01/24/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.021	mg/kg		8082	01/24/14	1
PCB 1221	U	0.0054	0.021	mg/kg		8082	01/24/14	1
PCB 1232	U	0.0042	0.021	mg/kg		8082	01/24/14	1
PCB 1242	U	0.0032	0.021	mg/kg		8082	01/24/14	1
PCB 1248	U	0.0032	0.021	mg/kg		8082	01/24/14	1
PCB 1254	U	0.0047	0.021	mg/kg		8082	01/24/14	1
PCB 1260	U	0.0049	0.021	mg/kg		8082	01/24/14	1
PCBs Surrogates								
Decachlorobiphenyl	85.9			% Rec.		8082	01/24/14	1
Tetrachloro-m-xylene	95.6			% Rec.		8082	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.13	0.83	mg/kg		8270D	01/24/14	20
Acenaphthylene	0.19	0.13	0.83	mg/kg	J	8270D	01/24/14	20
Anthracene	0.83	0.13	0.83	mg/kg		8270D	01/24/14	20
Benzidine	U	1.3	8.4	mg/kg		8270D	01/24/14	20
Benzo(a)anthracene	2.6	0.086	0.83	mg/kg		8270D	01/24/14	20
Benzo(b)fluoranthene	1.6	0.14	0.83	mg/kg		8270D	01/24/14	20
Benzo(k)fluoranthene	0.57	0.12	0.83	mg/kg	J	8270D	01/24/14	20
Benzo(g,h,i)perylene	0.62	0.14	0.83	mg/kg	J	8270D	01/24/14	20
Benzo(a)pyrene	1.8	0.11	0.83	mg/kg		8270D	01/24/14	20
Bis(2-chlorethoxy)methane	U	0.15	8.4	mg/kg		8270D	01/24/14	20
Bis(2-chloroethyl)ether	U	0.18	8.4	mg/kg		8270D	01/24/14	20
Bis(2-chloroisopropyl)ether	U	0.15	8.4	mg/kg		8270D	01/24/14	20
4-Bromophenyl-phenylether	U	0.23	8.4	mg/kg		8270D	01/24/14	20
2-Chloronaphthalene	U	0.13	0.83	mg/kg		8270D	01/24/14	20
4-Chlorophenyl-phenylether	U	0.12	8.4	mg/kg		8270D	01/24/14	20
Chrysene	3.1	0.11	0.83	mg/kg		8270D	01/24/14	20
Dibenz(a,h)anthracene	U	0.16	0.83	mg/kg		8270D	01/24/14	20
3,3-Dichlorobenzidine	U	1.6	8.4	mg/kg		8270D	01/24/14	20
2,4-Dinitrotoluene	U	0.12	8.4	mg/kg		8270D	01/24/14	20
2,6-Dinitrotoluene	U	0.15	8.4	mg/kg		8270D	01/24/14	20
Fluoranthene	1.9	0.099	0.83	mg/kg		8270D	01/24/14	20
Fluorene	U	0.14	0.83	mg/kg		8270D	01/24/14	20
Hexachlorobenzene	U	0.17	8.4	mg/kg		8270D	01/24/14	20
Hexachloro-1,3-butadiene	U	0.20	8.4	mg/kg		8270D	01/24/14	20
Hexachlorocyclopentadiene	U	1.2	8.4	mg/kg		8270D	01/24/14	20
Hexachloroethane	U	0.27	8.4	mg/kg		8270D	01/24/14	20
Indeno(1,2,3-cd)pyrene	0.62	0.15	0.83	mg/kg	J	8270D	01/24/14	20
Isophorone	U	0.10	8.4	mg/kg		8270D	01/24/14	20

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Cary, NC 27512

January 29,2014

ESC Sample # : L679288-11

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-G 3.5-4 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 15:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Naphthalene	U	0.18	0.83	mg/kg		8270D	01/24/14	20
Nitrobenzene	U	0.14	8.4	mg/kg		8270D	01/24/14	20
n-Nitrosodimethylamine	U	1.3	8.4	mg/kg		8270D	01/24/14	20
n-Nitrosodiphenylamine	U	0.12	8.4	mg/kg		8270D	01/24/14	20
n-Nitrosodi-n-propylamine	U	0.18	8.4	mg/kg		8270D	01/24/14	20
Phenanthrene	4.9	0.10	0.83	mg/kg		8270D	01/24/14	20
Benzylbutyl phthalate	U	0.21	8.4	mg/kg		8270D	01/24/14	20
Bis(2-ethylhexyl)phthalate	U	0.24	8.4	mg/kg		8270D	01/24/14	20
Di-n-butyl phthalate	U	0.22	8.4	mg/kg		8270D	01/24/14	20
Diethyl phthalate	U	0.14	8.4	mg/kg		8270D	01/24/14	20
Dimethyl phthalate	U	0.11	8.4	mg/kg		8270D	01/24/14	20
Di-n-octyl phthalate	U	0.18	8.4	mg/kg		8270D	01/24/14	20
Pyrene	3.9	0.25	0.83	mg/kg		8270D	01/24/14	20
1,2,4-Trichlorobenzene	U	0.18	8.4	mg/kg		8270D	01/24/14	20
Acid Extractables								
4-Chloro-3-methylphenol	U	0.095	8.4	mg/kg		8270D	01/24/14	20
2-Chlorophenol	U	0.17	8.4	mg/kg		8270D	01/24/14	20
2,4-Dichlorophenol	U	0.15	8.4	mg/kg		8270D	01/24/14	20
2,4-Dimethylphenol	U	0.94	8.4	mg/kg		8270D	01/24/14	20
4,6-Dinitro-2-methylphenol	U	2.5	8.4	mg/kg		8270D	01/24/14	20
2,4-Dinitrophenol	U	2.0	8.4	mg/kg		8270D	01/24/14	20
2-Nitrophenol	U	0.26	8.4	mg/kg		8270D	01/24/14	20
4-Nitrophenol	U	1.0	8.4	mg/kg		8270D	01/24/14	20
Pentachlorophenol	U	0.96	8.4	mg/kg		8270D	01/24/14	20
Phenol	U	0.14	8.4	mg/kg		8270D	01/24/14	20
2,4,6-Trichlorophenol	U	0.16	8.4	mg/kg		8270D	01/24/14	20
Surrogate Recovery								
2-Fluorophenol	55.1			% Rec.	J7	8270D	01/24/14	20
Phenol-d5	54.8			% Rec.	J7	8270D	01/24/14	20
Nitrobenzene-d5	60.2			% Rec.	J7	8270D	01/24/14	20
2-Fluorobiphenyl	63.8			% Rec.	J7	8270D	01/24/14	20
2,4,6-Tribromophenol	76.3			% Rec.	J7	8270D	01/24/14	20
p-Terphenyl-d14	54.4			% Rec.	J7	8270D	01/24/14	20

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L679288-01	WG702854	SAMP	Acetone	R2879260	J
	WG703709	SAMP	Antimony	R2880630	JO1P1J6
	WG703709	SAMP	Arsenic	R2880573	O1J6
	WG703709	SAMP	Chromium	R2880573	J6
	WG703709	SAMP	Lead	R2880573	J3J5
	WG703709	SAMP	Nickel	R2880573	O1
	WG703709	SAMP	Selenium	R2880573	OJ6J3
	WG703709	SAMP	Silver	R2880573	JO1
	WG703709	SAMP	Thallium	R2880573	O
	WG703709	SAMP	Zinc	R2880573	O1J5
L679288-02	WG702733	SAMP	Mercury	R2878971	J
	WG702854	SAMP	Acetone	R2879260	J
	WG702854	SAMP	2-Butanone (MEK)	R2879260	J
	WG703709	SAMP	Thallium	R2880573	J
L679288-03	WG702854	SAMP	Acetone	R2879260	J
	WG702854	SAMP	4-Bromofluorobenzene	R2879260	J2
	WG703709	SAMP	Cadmium	R2880573	J
	WG703709	SAMP	Selenium	R2880573	O
L679288-04	WG702820	SAMP	Antimony	R2879486	JO1P1
	WG702820	SAMP	Arsenic	R2879486	JO1
	WG702820	SAMP	Lead	R2879486	P1
	WG702620	SAMP	Bis(2-ethylhexyl)phthalate	R2878820	J
	WG702620	SAMP	Di-n-butyl phthalate	R2878820	J
	WG702798	SAMP	Silver	R2880121	J
L679288-05	WG702733	SAMP	Mercury	R2878971	J
	WG703709	SAMP	Antimony	R2880630	J
	WG703709	SAMP	Cadmium	R2880573	O
L679288-06	WG702939	SAMP	Benzo(a)anthracene	R2879341	J
	WG702939	SAMP	Benzo(b)fluoranthene	R2879341	J
	WG702939	SAMP	Benzo(k)fluoranthene	R2879341	J
	WG702939	SAMP	Benzo(g,h,i)perylene	R2879341	J
	WG702939	SAMP	Benzo(a)pyrene	R2879341	J
	WG702939	SAMP	Indeno(1,2,3-cd)pyrene	R2879341	J
	WG702854	SAMP	Acetone	R2879260	J
	WG703709	SAMP	Antimony	R2880630	J
	WG703709	SAMP	Cadmium	R2880573	O
	WG703709	SAMP	Selenium	R2880573	O
	WG703709	SAMP	Silver	R2880573	J
L679288-07	WG702733	SAMP	Mercury	R2878971	J
	WG703709	SAMP	Antimony	R2880630	J
	WG703709	SAMP	Cadmium	R2880573	O
L679288-08	WG702854	SAMP	Acetone	R2879260	J
	WG703709	SAMP	Selenium	R2880573	O
	WG703709	SAMP	Thallium	R2880573	O
L679288-09	WG703279	SAMP	Acetone	R2879849	J
L679288-10	WG702854	SAMP	Acetone	R2879260	J
L679288-11	WG702792	SAMP	Mercury	R2879107	O1
	WG702939	SAMP	Acenaphthylene	R2879341	J
	WG702939	SAMP	Benzo(k)fluoranthene	R2879341	J
	WG702939	SAMP	Benzo(g,h,i)perylene	R2879341	J
	WG702939	SAMP	Indeno(1,2,3-cd)pyrene	R2879341	J
	WG702939	SAMP	2-Fluorophenol	R2879341	J7
	WG702939	SAMP	Phenol-d5	R2879341	J7
	WG702939	SAMP	Nitrobenzene-d5	R2879341	J7
	WG702939	SAMP	2-Fluorobiphenyl	R2879341	J7
	WG702939	SAMP	2,4,6-Tribromophenol	R2879341	J7
	WG702939	SAMP	p-Terphenyl-d14	R2879341	J7
	WG702854	SAMP	Acetone	R2879260	J
	WG703709	SAMP	Silver	R2880573	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/29/14 at 19:06:33

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L679288-01 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-02 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-03 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-04 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-05 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-06 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-07 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-08 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-09 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-10 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

Sample: L679288-11 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 01/29/14 00:00 RPT Date: 01/29/14 19:04

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L679288

January 29, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG702817	01/23/14 07:36
1,2,4-Trichlorobenzene	< .01	mg/l			WG702620	01/23/14 02:06
2,4,6-Trichlorophenol	< .01	mg/l			WG702620	01/23/14 02:06
2,4-Dichlorophenol	< .01	mg/l			WG702620	01/23/14 02:06
2,4-Dimethylphenol	< .01	mg/l			WG702620	01/23/14 02:06
2,4-Dinitrophenol	< .01	mg/l			WG702620	01/23/14 02:06
2,4-Dinitrotoluene	< .01	mg/l			WG702620	01/23/14 02:06
2,6-Dinitrotoluene	< .01	mg/l			WG702620	01/23/14 02:06
2-Chloronaphthalene	< .001	mg/l			WG702620	01/23/14 02:06
2-Chlorophenol	< .01	mg/l			WG702620	01/23/14 02:06
2-Nitrophenol	< .01	mg/l			WG702620	01/23/14 02:06
3,3-Dichlorobenzidine	< .01	mg/l			WG702620	01/23/14 02:06
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG702620	01/23/14 02:06
4-Bromophenyl-phenylether	< .01	mg/l			WG702620	01/23/14 02:06
4-Chloro-3-methylphenol	< .01	mg/l			WG702620	01/23/14 02:06
4-Chlorophenyl-phenylether	< .01	mg/l			WG702620	01/23/14 02:06
4-Nitrophenol	< .01	mg/l			WG702620	01/23/14 02:06
Acenaphthene	< .001	mg/l			WG702620	01/23/14 02:06
Acenaphthylene	< .001	mg/l			WG702620	01/23/14 02:06
Anthracene	< .001	mg/l			WG702620	01/23/14 02:06
Benzidine	< .01	mg/l			WG702620	01/23/14 02:06
Benzo(a)anthracene	< .001	mg/l			WG702620	01/23/14 02:06
Benzo(a)pyrene	< .001	mg/l			WG702620	01/23/14 02:06
Benzo(b)fluoranthene	< .001	mg/l			WG702620	01/23/14 02:06
Benzo(g,h,i)perylene	< .001	mg/l			WG702620	01/23/14 02:06
Benzo(k)fluoranthene	< .001	mg/l			WG702620	01/23/14 02:06
Benzylbutyl phthalate	< .003	mg/l			WG702620	01/23/14 02:06
Bis(2-chlorethoxy)methane	< .01	mg/l			WG702620	01/23/14 02:06
Bis(2-chloroethyl)ether	< .01	mg/l			WG702620	01/23/14 02:06
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG702620	01/23/14 02:06
Bis(2-ethylhexyl)phthalate	< .003	mg/l			WG702620	01/23/14 02:06
Chrysene	< .001	mg/l			WG702620	01/23/14 02:06
Di-n-butyl phthalate	< .003	mg/l			WG702620	01/23/14 02:06
Di-n-octyl phthalate	< .003	mg/l			WG702620	01/23/14 02:06
Dibenz(a,h)anthracene	< .001	mg/l			WG702620	01/23/14 02:06
Diethyl phthalate	< .003	mg/l			WG702620	01/23/14 02:06
Dimethyl phthalate	< .003	mg/l			WG702620	01/23/14 02:06
Fluoranthene	< .001	mg/l			WG702620	01/23/14 02:06
Fluorene	< .001	mg/l			WG702620	01/23/14 02:06
Hexachloro-1,3-butadiene	< .01	mg/l			WG702620	01/23/14 02:06
Hexachlorobenzene	< .001	mg/l			WG702620	01/23/14 02:06
Hexachlorocyclopentadiene	< .01	mg/l			WG702620	01/23/14 02:06
Hexachloroethane	< .01	mg/l			WG702620	01/23/14 02:06
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG702620	01/23/14 02:06
Isophorone	< .01	mg/l			WG702620	01/23/14 02:06
n-Nitrosodi-n-propylamine	< .01	mg/l			WG702620	01/23/14 02:06
n-Nitrosodimethylamine	< .01	mg/l			WG702620	01/23/14 02:06
n-Nitrosodiphenylamine	< .01	mg/l			WG702620	01/23/14 02:06
Naphthalene	< .001	mg/l			WG702620	01/23/14 02:06
Nitrobenzene	< .01	mg/l			WG702620	01/23/14 02:06
Pentachlorophenol	< .001	mg/l			WG702620	01/23/14 02:06
Phenanthrene	< .001	mg/l			WG702620	01/23/14 02:06
Phenol	< .01	mg/l			WG702620	01/23/14 02:06
Pyrene	< .001	mg/l			WG702620	01/23/14 02:06
2,4,6-Tribromophenol		% Rec.	74.40	11.2-130	WG702620	01/23/14 02:06
2-Fluorobiphenyl		% Rec.	66.40	29.5-131	WG702620	01/23/14 02:06
2-Fluorophenol		% Rec.	33.60	10-77.9	WG702620	01/23/14 02:06

* Performance of this Analyte is outside of established criteria.
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Quality Assurance Report
Level II

L679288

January 29, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Nitrobenzene-d5		% Rec.	71.10	21.8-123		01/23/14 02:06
Phenol-d5		% Rec.	27.40	5-70.1		01/23/14 02:06
p-Terphenyl-d14		% Rec.	70.10	29.3-137		01/23/14 02:06
Mercury	< .02	mg/kg			WG702733	01/23/14 08:17
Mercury	< .0002	mg/l			WG702882	01/23/14 19:20
Mercury	< .02	mg/kg			WG702792	01/23/14 16:59
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG702854	01/24/14 01:09
1,1,1-Trichloroethane	< .001	mg/kg			WG702854	01/24/14 01:09
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG702854	01/24/14 01:09
1,1,2-Trichloroethane	< .001	mg/kg			WG702854	01/24/14 01:09
1,1-Dichloroethane	< .001	mg/kg			WG702854	01/24/14 01:09
1,1-Dichloroethene	< .001	mg/kg			WG702854	01/24/14 01:09
1,1-Dichloropropene	< .001	mg/kg			WG702854	01/24/14 01:09
1,2,3-Trichlorobenzene	< .001	mg/kg			WG702854	01/24/14 01:09
1,2,3-Trichloropropane	< .0025	mg/kg			WG702854	01/24/14 01:09
1,2,4-Trichlorobenzene	< .001	mg/kg			WG702854	01/24/14 01:09
1,2,4-Trimethylbenzene	< .001	mg/kg			WG702854	01/24/14 01:09
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG702854	01/24/14 01:09
1,2-Dibromoethane	< .001	mg/kg			WG702854	01/24/14 01:09
1,2-Dichlorobenzene	< .001	mg/kg			WG702854	01/24/14 01:09
1,2-Dichloroethane	< .001	mg/kg			WG702854	01/24/14 01:09
1,2-Dichloropropane	< .001	mg/kg			WG702854	01/24/14 01:09
1,3,5-Trimethylbenzene	< .001	mg/kg			WG702854	01/24/14 01:09
1,3-Dichlorobenzene	< .001	mg/kg			WG702854	01/24/14 01:09
1,3-Dichloropropane	< .001	mg/kg			WG702854	01/24/14 01:09
1,4-Dichlorobenzene	< .001	mg/kg			WG702854	01/24/14 01:09
2,2-Dichloropropane	< .001	mg/kg			WG702854	01/24/14 01:09
2-Butanone (MEK)	< .01	mg/kg			WG702854	01/24/14 01:09
2-Chloroethyl vinyl ether	< .05	mg/kg			WG702854	01/24/14 01:09
2-Chlorotoluene	< .001	mg/kg			WG702854	01/24/14 01:09
4-Chlorotoluene	< .001	mg/kg			WG702854	01/24/14 01:09
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG702854	01/24/14 01:09
Acetone	< .05	mg/kg			WG702854	01/24/14 01:09
Acrylonitrile	< .01	mg/kg			WG702854	01/24/14 01:09
Benzene	< .001	mg/kg			WG702854	01/24/14 01:09
Bromobenzene	< .001	mg/kg			WG702854	01/24/14 01:09
Bromodichloromethane	< .001	mg/kg			WG702854	01/24/14 01:09
Bromoform	< .001	mg/kg			WG702854	01/24/14 01:09
Bromomethane	< .005	mg/kg			WG702854	01/24/14 01:09
Carbon tetrachloride	< .001	mg/kg			WG702854	01/24/14 01:09
Chlorobenzene	< .001	mg/kg			WG702854	01/24/14 01:09
Chlorodibromomethane	< .001	mg/kg			WG702854	01/24/14 01:09
Chloroethane	< .005	mg/kg			WG702854	01/24/14 01:09
Chloroform	< .005	mg/kg			WG702854	01/24/14 01:09
Chloromethane	< .0025	mg/kg			WG702854	01/24/14 01:09
cis-1,2-Dichloroethene	< .001	mg/kg			WG702854	01/24/14 01:09
cis-1,3-Dichloropropene	< .001	mg/kg			WG702854	01/24/14 01:09
Di-isopropyl ether	< .001	mg/kg			WG702854	01/24/14 01:09
Dibromomethane	< .001	mg/kg			WG702854	01/24/14 01:09
Dichlorodifluoromethane	< .005	mg/kg			WG702854	01/24/14 01:09
Ethylbenzene	< .001	mg/kg			WG702854	01/24/14 01:09
Hexachloro-1,3-butadiene	< .001	mg/kg			WG702854	01/24/14 01:09
Isopropylbenzene	< .001	mg/kg			WG702854	01/24/14 01:09

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Level II

L679288

January 29, 2014

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Methyl tert-butyl ether	< .001	mg/kg			WG702854	01/24/14 01:09
Methylene Chloride	< .005	mg/kg			WG702854	01/24/14 01:09
n-Butylbenzene	< .001	mg/kg			WG702854	01/24/14 01:09
n-Propylbenzene	< .001	mg/kg			WG702854	01/24/14 01:09
Naphthalene	< .005	mg/kg			WG702854	01/24/14 01:09
p-Isopropyltoluene	< .001	mg/kg			WG702854	01/24/14 01:09
sec-Butylbenzene	< .001	mg/kg			WG702854	01/24/14 01:09
Styrene	< .001	mg/kg			WG702854	01/24/14 01:09
tert-Butylbenzene	< .001	mg/kg			WG702854	01/24/14 01:09
Tetrachloroethene	< .001	mg/kg			WG702854	01/24/14 01:09
Toluene	< .005	mg/kg			WG702854	01/24/14 01:09
trans-1,2-Dichloroethene	< .001	mg/kg			WG702854	01/24/14 01:09
trans-1,3-Dichloropropene	< .001	mg/kg			WG702854	01/24/14 01:09
Trichloroethene	< .001	mg/kg			WG702854	01/24/14 01:09
Trichlorofluoromethane	< .005	mg/kg			WG702854	01/24/14 01:09
Vinyl chloride	< .001	mg/kg			WG702854	01/24/14 01:09
Xylenes, Total	< .003	mg/kg			WG702854	01/24/14 01:09
4-Bromofluorobenzene		% Rec.	98.10	71-126	WG702854	01/24/14 01:09
Dibromofluoromethane		% Rec.	92.90	78.3-121	WG702854	01/24/14 01:09
Toluene-d8		% Rec.	96.30	88.5-111	WG702854	01/24/14 01:09
a,a,a-Trifluorotoluene		% Rec.	101.0	85-114	WG702854	01/24/14 01:09
PCB 1016	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1221	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1232	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1242	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1248	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1254	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1260	< .017	mg/kg			WG702937	01/24/14 08:36
Decachlorobiphenyl		% Rec.	78.30	10-145	WG702937	01/24/14 08:36
Tetrachloro-m-xylene		% Rec.	84.60	21.1-148	WG702937	01/24/14 08:36
1,2,4-Trichlorobenzene	< .333	mg/kg			WG702939	01/24/14 05:43
2,4,6-Trichlorophenol	< .333	mg/kg			WG702939	01/24/14 05:43
2,4-Dichlorophenol	< .333	mg/kg			WG702939	01/24/14 05:43
2,4-Dimethylphenol	< .333	mg/kg			WG702939	01/24/14 05:43
2,4-Dinitrophenol	< .333	mg/kg			WG702939	01/24/14 05:43
2,4-Dinitrotoluene	< .333	mg/kg			WG702939	01/24/14 05:43
2,6-Dinitrotoluene	< .333	mg/kg			WG702939	01/24/14 05:43
2-Chloronaphthalene	< .033	mg/kg			WG702939	01/24/14 05:43
2-Chlorophenol	< .333	mg/kg			WG702939	01/24/14 05:43
2-Nitrophenol	< .333	mg/kg			WG702939	01/24/14 05:43
3,3-Dichlorobenzidine	< .333	mg/kg			WG702939	01/24/14 05:43
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG702939	01/24/14 05:43
4-Bromophenyl-phenylether	< .333	mg/kg			WG702939	01/24/14 05:43
4-Chloro-3-methylphenol	< .333	mg/kg			WG702939	01/24/14 05:43
4-Chlorophenyl-phenylether	< .333	mg/kg			WG702939	01/24/14 05:43
4-Nitrophenol	< .333	mg/kg			WG702939	01/24/14 05:43
Acenaphthene	< .033	mg/kg			WG702939	01/24/14 05:43
Acenaphthylene	< .033	mg/kg			WG702939	01/24/14 05:43
Anthracene	< .033	mg/kg			WG702939	01/24/14 05:43
Benzidine	< .333	mg/kg			WG702939	01/24/14 05:43
Benzo(a)anthracene	< .033	mg/kg			WG702939	01/24/14 05:43
Benzo(a)pyrene	< .033	mg/kg			WG702939	01/24/14 05:43
Benzo(b)fluoranthene	< .033	mg/kg			WG702939	01/24/14 05:43
Benzo(g,h,i)perylene	< .033	mg/kg			WG702939	01/24/14 05:43
Benzo(k)fluoranthene	< .033	mg/kg			WG702939	01/24/14 05:43

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzylbutyl phthalate	< .333	mg/kg			WG702939	01/24/14 05:43
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG702939	01/24/14 05:43
Bis(2-chloroethyl)ether	< .333	mg/kg			WG702939	01/24/14 05:43
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG702939	01/24/14 05:43
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG702939	01/24/14 05:43
Chrysene	< .033	mg/kg			WG702939	01/24/14 05:43
Di-n-butyl phthalate	< .333	mg/kg			WG702939	01/24/14 05:43
Di-n-octyl phthalate	< .333	mg/kg			WG702939	01/24/14 05:43
Dibenz(a,h)anthracene	< .033	mg/kg			WG702939	01/24/14 05:43
Diethyl phthalate	< .333	mg/kg			WG702939	01/24/14 05:43
Dimethyl phthalate	< .333	mg/kg			WG702939	01/24/14 05:43
Fluoranthene	< .033	mg/kg			WG702939	01/24/14 05:43
Fluorene	< .033	mg/kg			WG702939	01/24/14 05:43
Hexachloro-1,3-butadiene	< .333	mg/kg			WG702939	01/24/14 05:43
Hexachlorobenzene	< .333	mg/kg			WG702939	01/24/14 05:43
Hexachlorocyclopentadiene	< .333	mg/kg			WG702939	01/24/14 05:43
Hexachloroethane	< .333	mg/kg			WG702939	01/24/14 05:43
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG702939	01/24/14 05:43
Isophorone	< .333	mg/kg			WG702939	01/24/14 05:43
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG702939	01/24/14 05:43
n-Nitrosodimethylamine	< .333	mg/kg			WG702939	01/24/14 05:43
n-Nitrosodiphenylamine	< .333	mg/kg			WG702939	01/24/14 05:43
Naphthalene	< .033	mg/kg			WG702939	01/24/14 05:43
Nitrobenzene	< .333	mg/kg			WG702939	01/24/14 05:43
Pentachlorophenol	< .333	mg/kg			WG702939	01/24/14 05:43
Phenanthrene	< .033	mg/kg			WG702939	01/24/14 05:43
Phenol	< .333	mg/kg			WG702939	01/24/14 05:43
Pyrene	< .033	mg/kg			WG702939	01/24/14 05:43
2,4,6-Tribromophenol		% Rec.	84.70	21.6-142	WG702939	01/24/14 05:43
2-Fluorobiphenyl		% Rec.	60.60	34.9-129	WG702939	01/24/14 05:43
2-Fluorophenol		% Rec.	59.40	21.1-116	WG702939	01/24/14 05:43
Nitrobenzene-d5		% Rec.	60.80	21.9-129	WG702939	01/24/14 05:43
Phenol-d5		% Rec.	64.40	26.3-121	WG702939	01/24/14 05:43
p-Terphenyl-d14		% Rec.	57.70	21.5-128	WG702939	01/24/14 05:43
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG702839	01/24/14 04:21
1,1,1-Trichloroethane	< .001	mg/l			WG702839	01/24/14 04:21
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG702839	01/24/14 04:21
1,1,2-Trichloroethane	< .001	mg/l			WG702839	01/24/14 04:21
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG702839	01/24/14 04:21
1,1-Dichloroethane	< .001	mg/l			WG702839	01/24/14 04:21
1,1-Dichloroethene	< .001	mg/l			WG702839	01/24/14 04:21
1,1-Dichloropropene	< .001	mg/l			WG702839	01/24/14 04:21
1,2,3-Trichlorobenzene	< .001	mg/l			WG702839	01/24/14 04:21
1,2,3-Trichloropropane	< .001	mg/l			WG702839	01/24/14 04:21
1,2,3-Trimethylbenzene	< .001	mg/l			WG702839	01/24/14 04:21
1,2,4-Trichlorobenzene	< .001	mg/l			WG702839	01/24/14 04:21
1,2,4-Trimethylbenzene	< .001	mg/l			WG702839	01/24/14 04:21
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG702839	01/24/14 04:21
1,2-Dibromoethane	< .001	mg/l			WG702839	01/24/14 04:21
1,2-Dichlorobenzene	< .001	mg/l			WG702839	01/24/14 04:21
1,2-Dichloroethane	< .001	mg/l			WG702839	01/24/14 04:21
1,2-Dichloropropane	< .001	mg/l			WG702839	01/24/14 04:21
1,3,5-Trimethylbenzene	< .001	mg/l			WG702839	01/24/14 04:21
1,3-Dichlorobenzene	< .001	mg/l			WG702839	01/24/14 04:21
1,3-Dichloropropane	< .001	mg/l			WG702839	01/24/14 04:21
1,4-Dichlorobenzene	< .001	mg/l			WG702839	01/24/14 04:21
2,2-Dichloropropane	< .001	mg/l			WG702839	01/24/14 04:21

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PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L679288

January 29, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
2-Butanone (MEK)	< .01	mg/l			WG702839	01/24/14 04:21
2-Chloroethyl vinyl ether	< .05	mg/l			WG702839	01/24/14 04:21
2-Chlorotoluene	< .001	mg/l			WG702839	01/24/14 04:21
4-Chlorotoluene	< .001	mg/l			WG702839	01/24/14 04:21
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG702839	01/24/14 04:21
Acetone	< .05	mg/l			WG702839	01/24/14 04:21
Acrolein	< .025	mg/l			WG702839	01/24/14 04:21
Acrylonitrile	< .01	mg/l			WG702839	01/24/14 04:21
Benzene	< .001	mg/l			WG702839	01/24/14 04:21
Bromobenzene	< .001	mg/l			WG702839	01/24/14 04:21
Bromodichloromethane	< .001	mg/l			WG702839	01/24/14 04:21
Bromoform	< .001	mg/l			WG702839	01/24/14 04:21
Bromomethane	< .005	mg/l			WG702839	01/24/14 04:21
Carbon tetrachloride	< .001	mg/l			WG702839	01/24/14 04:21
Chlorobenzene	< .001	mg/l			WG702839	01/24/14 04:21
Chlorodibromomethane	< .001	mg/l			WG702839	01/24/14 04:21
Chloroethane	< .005	mg/l			WG702839	01/24/14 04:21
Chloroform	< .005	mg/l			WG702839	01/24/14 04:21
Chloromethane	< .0025	mg/l			WG702839	01/24/14 04:21
cis-1,2-Dichloroethene	< .001	mg/l			WG702839	01/24/14 04:21
cis-1,3-Dichloropropene	< .001	mg/l			WG702839	01/24/14 04:21
Di-isopropyl ether	< .001	mg/l			WG702839	01/24/14 04:21
Dibromomethane	< .001	mg/l			WG702839	01/24/14 04:21
Dichlorodifluoromethane	< .005	mg/l			WG702839	01/24/14 04:21
Ethylbenzene	< .001	mg/l			WG702839	01/24/14 04:21
Hexachloro-1,3-butadiene	< .001	mg/l			WG702839	01/24/14 04:21
Isopropylbenzene	< .001	mg/l			WG702839	01/24/14 04:21
Methyl tert-butyl ether	< .001	mg/l			WG702839	01/24/14 04:21
Methylene Chloride	< .005	mg/l			WG702839	01/24/14 04:21
n-Butylbenzene	< .001	mg/l			WG702839	01/24/14 04:21
n-Propylbenzene	< .001	mg/l			WG702839	01/24/14 04:21
Naphthalene	< .005	mg/l			WG702839	01/24/14 04:21
p-Isopropyltoluene	< .001	mg/l			WG702839	01/24/14 04:21
sec-Butylbenzene	< .001	mg/l			WG702839	01/24/14 04:21
Styrene	< .001	mg/l			WG702839	01/24/14 04:21
tert-Butylbenzene	< .001	mg/l			WG702839	01/24/14 04:21
Tetrachloroethene	< .001	mg/l			WG702839	01/24/14 04:21
Toluene	< .005	mg/l			WG702839	01/24/14 04:21
trans-1,2-Dichloroethene	< .001	mg/l			WG702839	01/24/14 04:21
trans-1,3-Dichloropropene	< .001	mg/l			WG702839	01/24/14 04:21
Trichloroethene	< .001	mg/l			WG702839	01/24/14 04:21
Trichlorofluoromethane	< .005	mg/l			WG702839	01/24/14 04:21
Vinyl chloride	< .001	mg/l			WG702839	01/24/14 04:21
Xylenes, Total	< .003	mg/l			WG702839	01/24/14 04:21
4-Bromofluorobenzene		% Rec.	105.0	71-126	WG702839	01/24/14 04:21
Dibromofluoromethane		% Rec.	101.0	78.3-121	WG702839	01/24/14 04:21
Toluene-d8		% Rec.	106.0	88.5-111	WG702839	01/24/14 04:21
a,a,a-Trifluorotoluene		% Rec.	106.0	85-114	WG702839	01/24/14 04:21
Antimony	< .001	mg/l			WG702820	01/24/14 13:49
Arsenic	< .001	mg/l			WG702820	01/24/14 13:49
Lead	< .001	mg/l			WG702820	01/24/14 13:49
Thallium	< .001	mg/l			WG702820	01/24/14 13:49
Beryllium	< .002	mg/l			WG702798	01/25/14 10:59
Cadmium	< .005	mg/l			WG702798	01/25/14 10:59
Chromium	< .01	mg/l			WG702798	01/25/14 10:59

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Level II

L679288

January 29, 2014

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Copper	< .02	mg/l			WG702798	01/25/14 10:59
Nickel	< .02	mg/l			WG702798	01/25/14 10:59
Selenium	< .02	mg/l			WG702798	01/25/14 10:59
Silver	< .01	mg/l			WG702798	01/25/14 10:59
Zinc	< .03	mg/l			WG702798	01/25/14 10:59
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG703279	01/25/14 21:30
1,1,1-Trichloroethane	< .001	mg/l			WG703279	01/25/14 21:30
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG703279	01/25/14 21:30
1,1,2-Trichloroethane	< .001	mg/l			WG703279	01/25/14 21:30
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG703279	01/25/14 21:30
1,1-Dichloroethane	< .001	mg/l			WG703279	01/25/14 21:30
1,1-Dichloroethene	< .001	mg/l			WG703279	01/25/14 21:30
1,1-Dichloropropene	< .001	mg/l			WG703279	01/25/14 21:30
1,2,3-Trichlorobenzene	< .001	mg/l			WG703279	01/25/14 21:30
1,2,3-Trichloropropane	< .001	mg/l			WG703279	01/25/14 21:30
1,2,3-Trimethylbenzene	< .001	mg/l			WG703279	01/25/14 21:30
1,2,4-Trichlorobenzene	< .001	mg/l			WG703279	01/25/14 21:30
1,2,4-Trimethylbenzene	< .001	mg/l			WG703279	01/25/14 21:30
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG703279	01/25/14 21:30
1,2-Dibromoethane	< .001	mg/l			WG703279	01/25/14 21:30
1,2-Dichlorobenzene	< .001	mg/l			WG703279	01/25/14 21:30
1,2-Dichloroethane	< .001	mg/l			WG703279	01/25/14 21:30
1,2-Dichloropropane	< .001	mg/l			WG703279	01/25/14 21:30
1,3,5-Trimethylbenzene	< .001	mg/l			WG703279	01/25/14 21:30
1,3-Dichlorobenzene	< .001	mg/l			WG703279	01/25/14 21:30
1,3-Dichloropropane	< .001	mg/l			WG703279	01/25/14 21:30
1,4-Dichlorobenzene	< .001	mg/l			WG703279	01/25/14 21:30
2,2-Dichloropropane	< .001	mg/l			WG703279	01/25/14 21:30
2-Butanone (MEK)	< .01	mg/l			WG703279	01/25/14 21:30
2-Chloroethyl vinyl ether	< .05	mg/l			WG703279	01/25/14 21:30
2-Chlorotoluene	< .001	mg/l			WG703279	01/25/14 21:30
4-Chlorotoluene	< .001	mg/l			WG703279	01/25/14 21:30
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG703279	01/25/14 21:30
Acetone	< .05	mg/l			WG703279	01/25/14 21:30
Acrolein	< .025	mg/l			WG703279	01/25/14 21:30
Acrylonitrile	< .01	mg/l			WG703279	01/25/14 21:30
Benzene	< .001	mg/l			WG703279	01/25/14 21:30
Bromobenzene	< .001	mg/l			WG703279	01/25/14 21:30
Bromodichloromethane	< .001	mg/l			WG703279	01/25/14 21:30
Bromoform	< .001	mg/l			WG703279	01/25/14 21:30
Bromomethane	< .005	mg/l			WG703279	01/25/14 21:30
Carbon tetrachloride	< .001	mg/l			WG703279	01/25/14 21:30
Chlorobenzene	< .001	mg/l			WG703279	01/25/14 21:30
Chlorodibromomethane	< .001	mg/l			WG703279	01/25/14 21:30
Chloroethane	< .005	mg/l			WG703279	01/25/14 21:30
Chloroform	< .005	mg/l			WG703279	01/25/14 21:30
Chloromethane	< .0025	mg/l			WG703279	01/25/14 21:30
cis-1,2-Dichloroethene	< .001	mg/l			WG703279	01/25/14 21:30
cis-1,3-Dichloropropene	< .001	mg/l			WG703279	01/25/14 21:30
Di-isopropyl ether	< .001	mg/l			WG703279	01/25/14 21:30
Dibromomethane	< .001	mg/l			WG703279	01/25/14 21:30
Dichlorodifluoromethane	< .005	mg/l			WG703279	01/25/14 21:30
Ethylbenzene	< .001	mg/l			WG703279	01/25/14 21:30
Hexachloro-1,3-butadiene	< .001	mg/l			WG703279	01/25/14 21:30
Isopropylbenzene	< .001	mg/l			WG703279	01/25/14 21:30
Methyl tert-butyl ether	< .001	mg/l			WG703279	01/25/14 21:30
Methylene Chloride	< .005	mg/l			WG703279	01/25/14 21:30

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Quality Assurance Report
Level II

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January 29, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
n-Butylbenzene	< .001	mg/l			WG703279	01/25/14 21:30
n-Propylbenzene	< .001	mg/l			WG703279	01/25/14 21:30
Naphthalene	< .005	mg/l			WG703279	01/25/14 21:30
p-Isopropyltoluene	< .001	mg/l			WG703279	01/25/14 21:30
sec-Butylbenzene	< .001	mg/l			WG703279	01/25/14 21:30
Styrene	< .001	mg/l			WG703279	01/25/14 21:30
tert-Butylbenzene	< .001	mg/l			WG703279	01/25/14 21:30
Tetrachloroethene	< .001	mg/l			WG703279	01/25/14 21:30
Toluene	< .005	mg/l			WG703279	01/25/14 21:30
trans-1,2-Dichloroethene	< .001	mg/l			WG703279	01/25/14 21:30
trans-1,3-Dichloropropene	< .001	mg/l			WG703279	01/25/14 21:30
Trichloroethene	< .001	mg/l			WG703279	01/25/14 21:30
Trichlorofluoromethane	< .005	mg/l			WG703279	01/25/14 21:30
Vinyl chloride	< .001	mg/l			WG703279	01/25/14 21:30
Xylenes, Total	< .003	mg/l			WG703279	01/25/14 21:30
4-Bromofluorobenzene		% Rec.	98.60	71-126	WG703279	01/25/14 21:30
Dibromofluoromethane		% Rec.	98.60	78.3-121	WG703279	01/25/14 21:30
Toluene-d8		% Rec.	97.20	88.5-111	WG703279	01/25/14 21:30
a,a,a-Trifluorotoluene		% Rec.	101.0	85-114	WG703279	01/25/14 21:30
Beryllium	< .002	mg/l			WG702798	01/27/14 17:57
Cadmium	< .005	mg/l			WG702798	01/27/14 17:57
Chromium	< .01	mg/l			WG702798	01/27/14 17:57
Copper	< .02	mg/l			WG702798	01/27/14 17:57
Nickel	< .02	mg/l			WG702798	01/27/14 17:57
Selenium	< .02	mg/l			WG702798	01/27/14 17:57
Silver	< .01	mg/l			WG702798	01/27/14 17:57
Zinc	< .03	mg/l			WG702798	01/27/14 17:57
Arsenic	< 1	mg/kg			WG703709	01/29/14 10:48
Beryllium	< .1	mg/kg			WG703709	01/29/14 10:48
Cadmium	< .25	mg/kg			WG703709	01/29/14 10:48
Chromium	< .5	mg/kg			WG703709	01/29/14 10:48
Copper	< 1	mg/kg			WG703709	01/29/14 10:48
Lead	< .25	mg/kg			WG703709	01/29/14 10:48
Nickel	< 1	mg/kg			WG703709	01/29/14 10:48
Selenium	< 1	mg/kg			WG703709	01/29/14 10:48
Silver	< .5	mg/kg			WG703709	01/29/14 10:48
Thallium	< 1	mg/kg			WG703709	01/29/14 10:48
Zinc	< 1.5	mg/kg			WG703709	01/29/14 10:48
Antimony	< 1	mg/kg			WG703709	01/29/14 17:00

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	81.2	81.1	0.167	5	L679297-01	WG702817
Mercury	mg/kg	0.0	0.00679	9.00	20	L679224-01	WG702733
Mercury	mg/l	0.0	0.0000487	4.00	20	L679335-01	WG702882
Mercury	mg/kg	0.0650	0.0575	13.0	20	L679288-11	WG702792

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Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Antimony	mg/l	0.0	0.000440	52.0*	20	L679288-04	WG702820
Arsenic	mg/l	0.00110	0.000960	14.0	20	L679288-04	WG702820
Lead	mg/l	0.0	0.000200	57.0*	20	L679288-04	WG702820
Thallium	mg/l	0.0	-0.000180	12.0	20	L679288-04	WG702820
Beryllium	mg/l	0.0	0.000183	15.0	20	L679230-02	WG702798
Cadmium	mg/l	0.0	0.00104	160.*	20	L679230-02	WG702798
Chromium	mg/l	0.0	0.00521	1.00	20	L679230-02	WG702798
Copper	mg/l	0.0	0.00135	33.0*	20	L679230-02	WG702798
Nickel	mg/l	0.0	0.0103	31.0*	20	L679230-02	WG702798
Selenium	mg/l	0.0	-0.00775	228.*	20	L679230-02	WG702798
Silver	mg/l	0.0	0.000613	100.*	20	L679230-02	WG702798
Zinc	mg/l	0.0	0.0154	52.0*	20	L679230-02	WG702798
Beryllium	mg/l	0.0	-0.0000266	235.*	20	L679230-02	WG702798
Cadmium	mg/l	0.0	0.000863	37.0*	20	L679230-02	WG702798
Chromium	mg/l	0.0	0.00547	11.0	20	L679230-02	WG702798
Copper	mg/l	0.0	0.000600	257.*	20	L679230-02	WG702798
Nickel	mg/l	0.0	0.00832	9.00	20	L679230-02	WG702798
Selenium	mg/l	0.0	-0.00236	42.0*	20	L679230-02	WG702798
Silver	mg/l	0.0	-0.00163	527.*	20	L679230-02	WG702798
Zinc	mg/l	0.0	0.0166	45.0*	20	L679230-02	WG702798
Arsenic	mg/kg	24.0	23.9	0.0	20	L679288-01	WG703709
Cadmium	mg/kg	2.30	2.29	0.0	20	L679288-01	WG703709
Chromium	mg/kg	120.	147.	17.0	20	L679288-01	WG703709
Copper	mg/kg	140.	131.	4.00	20	L679288-01	WG703709
Lead	mg/kg	85.0	55.5	42.0*	20	L679288-01	WG703709
Nickel	mg/kg	33.0	30.5	9.00	20	L679288-01	WG703709
Selenium	mg/kg	0.0	-4.68	55.0*	20	L679288-01	WG703709
Silver	mg/kg	0.0	1.86	8.00	20	L679288-01	WG703709
Thallium	mg/kg	0.0	-5.58	46.0*	20	L679288-01	WG703709
Zinc	mg/kg	12.0	12.2	2.00	20	L679288-01	WG703709
Beryllium	mg/kg	1.20	1.10	5.00	20	L679288-01	WG703709
Antimony	mg/kg	0.0	0.758	98.0*	20	L679288-01	WG703709

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
			Laboratory Control Sample			
Total Solids	%	50	50.0	100.	85-115	WG702817
1,2,4-Trichlorobenzene	mg/l	.025	0.0147	58.7	22.9-96.1	WG702620
2,4,6-Trichlorophenol	mg/l	.025	0.0137	54.8	29.8-107	WG702620
2,4-Dichlorophenol	mg/l	.025	0.0149	59.7	31.4-103	WG702620
2,4-Dimethylphenol	mg/l	.025	0.0189	75.6	31.9-107	WG702620
2,4-Dinitrophenol	mg/l	.025	0.0121	48.5	24.2-128	WG702620
2,4-Dinitrotoluene	mg/l	.025	0.0198	79.3	31.2-105	WG702620
2,6-Dinitrotoluene	mg/l	.025	0.0192	76.7	30.6-106	WG702620
2-Chloronaphthalene	mg/l	.025	0.0161	64.4	33.6-105	WG702620
2-Chlorophenol	mg/l	.025	0.0113	45.3	26.2-91.5	WG702620
2-Nitrophenol	mg/l	.025	0.0133	53.2	25.9-106	WG702620
3,3-Dichlorobenzidine	mg/l	.025	0.0231	92.4	27.2-142	WG702620
4,6-Dinitro-2-methylphenol	mg/l	.025	0.0153	61.2	18.4-148	WG702620
4-Bromophenyl-phenylether	mg/l	.025	0.0201	80.3	40.7-116	WG702620
4-Chloro-3-methylphenol	mg/l	.025	0.0165	66.0	35.7-100	WG702620
4-Chlorophenyl-phenylether	mg/l	.025	0.0173	69.2	39-113	WG702620
4-Nitrophenol	mg/l	.025	0.00526	21.0	10-52.7	WG702620

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Acenaphthene	mg/l	.025	0.0179	71.8	38.7-109	WG702620
Acenaphthylene	mg/l	.025	0.0177	71.0	36-106	WG702620
Anthracene	mg/l	.025	0.0195	78.2	43.6-113	WG702620
Benzidine	mg/l	.025	0.00807	32.3	10-165.2	WG702620
Benzo(a)anthracene	mg/l	.025	0.0179	71.6	51.2-112	WG702620
Benzo(a)pyrene	mg/l	.025	0.0165	65.9	45.6-106	WG702620
Benzo(b)fluoranthene	mg/l	.025	0.0170	68.1	47.6-111	WG702620
Benzo(g,h,i)perylene	mg/l	.025	0.0176	70.6	45.2-117	WG702620
Benzo(k)fluoranthene	mg/l	.025	0.0177	70.9	49.4-114	WG702620
Benzylbutyl phthalate	mg/l	.025	0.0234	93.8	31.8-123	WG702620
Bis(2-chlorethoxy)methane	mg/l	.025	0.0179	71.7	37.2-111	WG702620
Bis(2-chloroethyl)ether	mg/l	.025	0.0145	58.2	22.6-108	WG702620
Bis(2-chloroisopropyl)ether	mg/l	.025	0.0180	72.1	32.9-100	WG702620
Bis(2-ethylhexyl)phthalate	mg/l	.025	0.0208	83.4	36.9-134	WG702620
Chrysene	mg/l	.025	0.0180	71.9	54.6-120	WG702620
Di-n-butyl phthalate	mg/l	.025	0.0230	91.9	41.8-120	WG702620
Di-n-octyl phthalate	mg/l	.025	0.0202	80.7	39.7-112	WG702620
Dibenz(a,h)anthracene	mg/l	.025	0.0185	74.0	42.8-118	WG702620
Diethyl phthalate	mg/l	.025	0.0224	89.8	36.5-129	WG702620
Dimethyl phthalate	mg/l	.025	0.0209	83.5	35.3-128	WG702620
Fluoranthene	mg/l	.025	0.0182	72.8	45.9-115	WG702620
Fluorene	mg/l	.025	0.0181	72.6	41-112	WG702620
Hexachloro-1,3-butadiene	mg/l	.025	0.0164	65.7	16.1-104	WG702620
Hexachlorobenzene	mg/l	.025	0.0205	82.2	38.5-116	WG702620
Hexachlorocyclopentadiene	mg/l	.025	0.0132	52.6	10-121	WG702620
Hexachloroethane	mg/l	.025	0.0142	56.9	16.5-89.8	WG702620
Indeno(1,2,3-cd)pyrene	mg/l	.025	0.0184	73.6	45-116	WG702620
Isophorone	mg/l	.025	0.0213	85.1	35.4-112	WG702620
n-Nitrosodi-n-propylamine	mg/l	.025	0.0177	70.8	33.2-106	WG702620
n-Nitrosodimethylamine	mg/l	.025	0.00990	39.6	10-80.1	WG702620
n-Nitrosodiphenylamine	mg/l	.025	0.0203	81.4	44.4-113	WG702620
Naphthalene	mg/l	.025	0.0156	62.4	32.2-101	WG702620
Nitrobenzene	mg/l	.025	0.0176	70.3	31.4-106	WG702620
Pentachlorophenol	mg/l	.025	0.0149	59.7	10-97.4	WG702620
Phenanthrene	mg/l	.025	0.0187	74.9	46.4-113	WG702620
Phenol	mg/l	.025	0.00592	23.7	10-57.9	WG702620
Pyrene	mg/l	.025	0.0188	75.4	46.3-117	WG702620
2,4,6-Tribromophenol				72.70	11.2-130	WG702620
2-Fluorobiphenyl				67.20	29.5-131	WG702620
2-Fluorophenol				31.90	10-77.9	WG702620
Nitrobenzene-d5				80.40	21.8-123	WG702620
Phenol-d5				22.90	5-70.1	WG702620
p-Terphenyl-d14				68.10	29.3-137	WG702620
Mercury	mg/kg	12.4	10.6	86.0	71.6-128	WG702733
Mercury	mg/l	.003	0.00284	95.0	85-115	WG702882
Mercury	mg/kg	12.4	15.3	123.	71.6-128	WG702792
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0247	98.8	72.9-124	WG702854
1,1,1-Trichloroethane	mg/kg	.025	0.0254	102.	73.7-124	WG702854
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0218	87.1	69.4-122	WG702854
1,1,2-Trichloroethane	mg/kg	.025	0.0239	95.8	79.1-118	WG702854
1,1-Dichloroethane	mg/kg	.025	0.0263	105.	75-124	WG702854

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Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,1-Dichloroethene	mg/kg	.025	0.0265	106.	70.4-129	WG702854
1,1-Dichloropropene	mg/kg	.025	0.0282	113.	74.9-124	WG702854
1,2,3-Trichlorobenzene	mg/kg	.025	0.0237	94.8	69.3-131	WG702854
1,2,3-Trichloropropane	mg/kg	.025	0.0226	90.5	71.4-123	WG702854
1,2,4-Trichlorobenzene	mg/kg	.025	0.0262	105.	71.9-137	WG702854
1,2,4-Trimethylbenzene	mg/kg	.025	0.0255	102.	75.5-122	WG702854
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0206	82.6	62.8-133	WG702854
1,2-Dibromoethane	mg/kg	.025	0.0249	99.5	78.6-120	WG702854
1,2-Dichlorobenzene	mg/kg	.025	0.0248	99.3	78.3-118	WG702854
1,2-Dichloroethane	mg/kg	.025	0.0240	96.1	70.1-124	WG702854
1,2-Dichloropropane	mg/kg	.025	0.0256	102.	77.9-119	WG702854
1,3,5-Trimethylbenzene	mg/kg	.025	0.0264	106.	75.9-124	WG702854
1,3-Dichlorobenzene	mg/kg	.025	0.0265	106.	72-126	WG702854
1,3-Dichloropropane	mg/kg	.025	0.0255	102.	79.1-117	WG702854
1,4-Dichlorobenzene	mg/kg	.025	0.0254	101.	78.3-117	WG702854
2,2-Dichloropropane	mg/kg	.025	0.0257	103.	61.3-136	WG702854
2-Butanone (MEK)	mg/kg	.125	0.114	90.8	53.7-153	WG702854
2-Chloroethyl vinyl ether	mg/kg	.125	0.122	97.9	37.7-157	WG702854
2-Chlorotoluene	mg/kg	.025	0.0255	102.	75.6-121	WG702854
4-Chlorotoluene	mg/kg	.025	0.0265	106.	77.3-120	WG702854
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.116	92.9	70.4-137	WG702854
Acetone	mg/kg	.125	0.0768	61.5	35.1-175	WG702854
Acrylonitrile	mg/kg	.125	0.111	89.1	56.4-128	WG702854
Benzene	mg/kg	.025	0.0263	105.	77.1-121	WG702854
Bromobenzene	mg/kg	.025	0.0250	100.	78.2-115	WG702854
Bromodichloromethane	mg/kg	.025	0.0212	84.7	74.9-115	WG702854
Bromoform	mg/kg	.025	0.0225	90.0	65.9-132	WG702854
Bromomethane	mg/kg	.025	0.0229	91.6	48.7-165	WG702854
Carbon tetrachloride	mg/kg	.025	0.0250	100.	70-124	WG702854
Chlorobenzene	mg/kg	.025	0.0267	107.	79.1-119	WG702854
Chlorodibromomethane	mg/kg	.025	0.0233	93.1	73.5-121	WG702854
Chloroethane	mg/kg	.025	0.0249	99.8	66.2-132	WG702854
Chloroform	mg/kg	.025	0.0250	99.9	76.7-122	WG702854
Chloromethane	mg/kg	.025	0.0238	95.2	63.4-131	WG702854
cis-1,2-Dichloroethene	mg/kg	.025	0.0251	100.	78.2-119	WG702854
cis-1,3-Dichloropropene	mg/kg	.025	0.0252	101.	79.6-120	WG702854
Di-isopropyl ether	mg/kg	.025	0.0251	100.	70.4-133	WG702854
Dibromomethane	mg/kg	.025	0.0233	93.2	79.4-120	WG702854
Dichlorodifluoromethane	mg/kg	.025	0.0257	103.	57.1-137	WG702854
Ethylbenzene	mg/kg	.025	0.0271	108.	79.7-122	WG702854
Hexachloro-1,3-butadiene	mg/kg	.025	0.0262	105.	68.2-123	WG702854
Isopropylbenzene	mg/kg	.025	0.0289	116.	80-135	WG702854
Methyl tert-butyl ether	mg/kg	.025	0.0215	85.8	73-129	WG702854
Methylene Chloride	mg/kg	.025	0.0244	97.6	72.6-120	WG702854
n-Butylbenzene	mg/kg	.025	0.0271	109.	77.5-126	WG702854
n-Propylbenzene	mg/kg	.025	0.0268	107.	77.9-123	WG702854
Naphthalene	mg/kg	.025	0.0221	88.3	69.8-128	WG702854
p-Isopropyltoluene	mg/kg	.025	0.0279	111.	75.8-129	WG702854
sec-Butylbenzene	mg/kg	.025	0.0270	108.	75.8-126	WG702854
Styrene	mg/kg	.025	0.0271	108.	82.4-126	WG702854
tert-Butylbenzene	mg/kg	.025	0.0280	112.	76.4-126	WG702854
Tetrachloroethene	mg/kg	.025	0.0269	108.	73.9-125	WG702854
Toluene	mg/kg	.025	0.0257	103.	79.7-118	WG702854
trans-1,2-Dichloroethene	mg/kg	.025	0.0256	102.	73.8-122	WG702854
trans-1,3-Dichloropropene	mg/kg	.025	0.0242	96.7	75.9-124	WG702854
Trichloroethene	mg/kg	.025	0.0249	99.6	77.9-118	WG702854
Trichlorofluoromethane	mg/kg	.025	0.0253	101.	67.7-131	WG702854
Vinyl chloride	mg/kg	.025	0.0260	104.	66.7-130	WG702854
Xylenes, Total	mg/kg	.075	0.0799	107.	78.8-121	WG702854

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Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
4-Bromofluorobenzene				94.80	71-126	
Dibromofluoromethane				90.90	78.3-121	
Toluene-d8				96.60	88.5-111	
a,a,a-Trifluorotoluene				96.20	85-114	
PCB 1016	mg/kg	.167	0.139	83.0	63.2-118	WG702937
PCB 1260	mg/kg	.167	0.154	92.4	64.6-123	WG702937
Decachlorobiphenyl				92.80	10-145	WG702937
Tetrachloro-m-xylene				102.0	21.1-148	WG702937
1,2,4-Trichlorobenzene	mg/kg	.333	0.214	64.3	39.8-100	WG702939
2,4,6-Trichlorophenol	mg/kg	.333	0.237	71.1	44.4-108	WG702939
2,4-Dichlorophenol	mg/kg	.333	0.255	76.6	46.2-109	WG702939
2,4-Dimethylphenol	mg/kg	.333	0.289	86.8	42.2-110	WG702939
2,4-Dinitrophenol	mg/kg	.333	0.194	58.3	10-105	WG702939
2,4-Dinitrotoluene	mg/kg	.333	0.274	82.2	53-112	WG702939
2,6-Dinitrotoluene	mg/kg	.333	0.263	79.0	51.6-110	WG702939
2-Chloronaphthalene	mg/kg	.333	0.213	63.9	47.1-105	WG702939
2-Chlorophenol	mg/kg	.333	0.216	64.8	40.8-103	WG702939
2-Nitrophenol	mg/kg	.333	0.256	76.8	44.2-113	WG702939
3,3-Dichlorobenzidine	mg/kg	.333	0.241	72.5	21-101	WG702939
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.282	84.6	23.1-119	WG702939
4-Bromophenyl-phenylether	mg/kg	.333	0.244	73.4	51.4-110	WG702939
4-Chloro-3-methylphenol	mg/kg	.333	0.281	84.3	51.1-113	WG702939
4-Chlorophenyl-phenylether	mg/kg	.333	0.209	62.6	48.1-108	WG702939
4-Nitrophenol	mg/kg	.333	0.228	68.5	34.8-109	WG702939
Acenaphthene	mg/kg	.333	0.222	66.8	48.9-107	WG702939
Acenaphthylene	mg/kg	.333	0.230	69.0	49.2-111	WG702939
Anthracene	mg/kg	.333	0.244	73.3	52-112	WG702939
Benzidine	mg/kg	.333	0.0299	8.98	0-48	WG702939
Benzo(a)anthracene	mg/kg	.333	0.224	67.4	52.3-106	WG702939
Benzo(a)pyrene	mg/kg	.333	0.203	61.0	51.9-106	WG702939
Benzo(b)fluoranthene	mg/kg	.333	0.209	62.7	51.3-106	WG702939
Benzo(g,h,i)perylene	mg/kg	.333	0.220	66.0	45.8-108	WG702939
Benzo(k)fluoranthene	mg/kg	.333	0.221	66.3	52.9-107	WG702939
Benzylbutyl phthalate	mg/kg	.333	0.293	88.1	47.5-115	WG702939
Bis(2-chlorethoxy)methane	mg/kg	.333	0.229	68.8	44.9-108	WG702939
Bis(2-chloroethyl)ether	mg/kg	.333	0.185	55.5	32.5-112	WG702939
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.220	66.0	40.4-99	WG702939
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.266	80.0	48.1-116	WG702939
Chrysene	mg/kg	.333	0.221	66.4	54.4-110	WG702939
Di-n-butyl phthalate	mg/kg	.333	0.294	88.3	49.7-113	WG702939
Di-n-octyl phthalate	mg/kg	.333	0.260	78.2	49.6-112	WG702939
Dibenz(a,h)anthracene	mg/kg	.333	0.226	67.8	45.7-111	WG702939
Diethyl phthalate	mg/kg	.333	0.276	83.0	52-112	WG702939
Dimethyl phthalate	mg/kg	.333	0.256	77.0	51.4-108	WG702939
Fluoranthene	mg/kg	.333	0.230	69.1	53.7-110	WG702939
Fluorene	mg/kg	.333	0.235	70.5	51.1-109	WG702939
Hexachloro-1,3-butadiene	mg/kg	.333	0.254	76.3	41.5-112	WG702939
Hexachlorobenzene	mg/kg	.333	0.268	80.6	43.2-104	WG702939
Hexachlorocyclopentadiene	mg/kg	.333	0.198	59.5	13.5-123	WG702939
Hexachloroethane	mg/kg	.333	0.236	71.0	36.2-103	WG702939
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.230	69.0	47.5-109	WG702939
Isophorone	mg/kg	.333	0.276	82.9	28.8-104	WG702939
n-Nitrosodi-n-propylamine	mg/kg	.333	0.228	68.5	43.3-109	WG702939
n-Nitrosodimethylamine	mg/kg	.333	0.192	57.5	18.1-122	WG702939
n-Nitrosodiphenylamine	mg/kg	.333	0.257	77.2	48.8-107	WG702939
Naphthalene	mg/kg	.333	0.206	61.8	43.4-103	WG702939
Nitrobenzene	mg/kg	.333	0.241	72.2	40.7-109	WG702939

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Pentachlorophenol	mg/kg	.333	0.269	80.7	16.2-102	WG702939
Phenanthrene	mg/kg	.333	0.226	68.0	51.6-107	WG702939
Phenol	mg/kg	.333	0.218	65.6	41.5-106	WG702939
Pyrene	mg/kg	.333	0.224	67.1	47.1-108	WG702939
2,4,6-Tribromophenol				88.20	21.6-142	WG702939
2-Fluorobiphenyl				58.40	34.9-129	WG702939
2-Fluorophenol				57.00	21.1-116	WG702939
Nitrobenzene-d5				67.00	21.9-129	WG702939
Phenol-d5				62.10	26.3-121	WG702939
p-Terphenyl-d14				51.50	21.5-128	WG702939
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0265	106.	74.2-124	WG702839
1,1,1-Trichloroethane	mg/l	.025	0.0254	101.	73.2-123	WG702839
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0244	97.8	70.7-122	WG702839
1,1,2-Trichloroethane	mg/l	.025	0.0249	99.7	77.7-118	WG702839
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0258	103.	67.2-143	WG702839
1,1-Dichloroethane	mg/l	.025	0.0255	102.	70.7-126	WG702839
1,1-Dichloroethene	mg/l	.025	0.0250	100.	67.8-129	WG702839
1,1-Dichloropropene	mg/l	.025	0.0253	101.	73.1-125	WG702839
1,2,3-Trichlorobenzene	mg/l	.025	0.0256	102.	64.9-135	WG702839
1,2,3-Trichloropropane	mg/l	.025	0.0244	97.4	71.8-121	WG702839
1,2,3-Trimethylbenzene	mg/l	.025	0.0215	86.0	72.3-116	WG702839
1,2,4-Trichlorobenzene	mg/l	.025	0.0283	113.	69.7-136	WG702839
1,2,4-Trimethylbenzene	mg/l	.025	0.0263	105.	75-123	WG702839
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0257	103.	65.4-128	WG702839
1,2-Dibromoethane	mg/l	.025	0.0255	102.	76.6-121	WG702839
1,2-Dichlorobenzene	mg/l	.025	0.0256	102.	78.4-117	WG702839
1,2-Dichloroethane	mg/l	.025	0.0237	94.8	68.8-124	WG702839
1,2-Dichloropropane	mg/l	.025	0.0241	96.3	76.5-119	WG702839
1,3,5-Trimethylbenzene	mg/l	.025	0.0267	107.	75.6-124	WG702839
1,3-Dichlorobenzene	mg/l	.025	0.0266	106.	70.8-128	WG702839
1,3-Dichloropropane	mg/l	.025	0.0241	96.5	77.4-117	WG702839
1,4-Dichlorobenzene	mg/l	.025	0.0249	99.7	78.8-115	WG702839
2,2-Dichloropropane	mg/l	.025	0.0262	105.	62.4-133	WG702839
2-Butanone (MEK)	mg/l	.125	0.126	101.	55-149	WG702839
2-Chloroethyl vinyl ether	mg/l	.125	0.131	105.	43.8-150	WG702839
2-Chlorotoluene	mg/l	.025	0.0261	104.	74.7-122	WG702839
4-Chlorotoluene	mg/l	.025	0.0270	108.	77.5-120	WG702839
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.132	106.	70.5-133	WG702839
Acetone	mg/l	.125	0.130	104.	35.6-163	WG702839
Acrolein	mg/l	.125	0.124	99.1	10-190	WG702839
Acrylonitrile	mg/l	.125	0.129	103.	55.2-130	WG702839
Benzene	mg/l	.025	0.0241	96.5	74.8-121	WG702839
Bromobenzene	mg/l	.025	0.0249	99.6	77.5-116	WG702839
Bromodichloromethane	mg/l	.025	0.0241	96.6	75.1-116	WG702839
Bromoform	mg/l	.025	0.0264	106.	67.5-130	WG702839
Bromomethane	mg/l	.025	0.0290	116.	49.9-162	WG702839
Carbon tetrachloride	mg/l	.025	0.0254	102.	70.2-123	WG702839
Chlorobenzene	mg/l	.025	0.0262	105.	78.1-119	WG702839
Chlorodibromomethane	mg/l	.025	0.0251	100.	74-121	WG702839
Chloroethane	mg/l	.025	0.0243	97.0	61.7-135	WG702839
Chloroform	mg/l	.025	0.0245	98.0	76-121	WG702839
Chloromethane	mg/l	.025	0.0243	97.4	61.5-129	WG702839
cis-1,2-Dichloroethene	mg/l	.025	0.0246	98.3	76-119	WG702839
cis-1,3-Dichloropropene	mg/l	.025	0.0248	99.2	78.2-120	WG702839
Di-isopropyl ether	mg/l	.025	0.0242	96.9	65.6-132	WG702839
Dibromomethane	mg/l	.025	0.0251	100.	79.5-118	WG702839
Dichlorodifluoromethane	mg/l	.025	0.0244	97.6	54.8-135	WG702839

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Fax (615) 758-5859

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
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Cary, NC 27512

Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Ethylbenzene	mg/l	.025	0.0268	107.	78.8-122	WG702839
Hexachloro-1,3-butadiene	mg/l	.025	0.0254	102.	64.7-129	WG702839
Isopropylbenzene	mg/l	.025	0.0296	118.	78.6-132	WG702839
Methyl tert-butyl ether	mg/l	.025	0.0236	94.5	71.2-126	WG702839
Methylene Chloride	mg/l	.025	0.0229	91.7	70.3-120	WG702839
n-Butylbenzene	mg/l	.025	0.0272	109.	76.2-126	WG702839
n-Propylbenzene	mg/l	.025	0.0267	107.	78.2-122	WG702839
Naphthalene	mg/l	.025	0.0254	102.	68.4-128	WG702839
p-Isopropyltoluene	mg/l	.025	0.0280	112.	74-131	WG702839
sec-Butylbenzene	mg/l	.025	0.0270	108.	74.4-127	WG702839
Styrene	mg/l	.025	0.0281	112.	80.4-126	WG702839
tert-Butylbenzene	mg/l	.025	0.0273	109.	75.3-126	WG702839
Tetrachloroethene	mg/l	.025	0.0267	107.	72.6-126	WG702839
Toluene	mg/l	.025	0.0247	98.8	79.7-116	WG702839
trans-1,2-Dichloroethene	mg/l	.025	0.0253	101.	72.6-121	WG702839
trans-1,3-Dichloropropene	mg/l	.025	0.0253	101.	74.3-123	WG702839
Trichloroethene	mg/l	.025	0.0256	102.	77.7-118	WG702839
Trichlorofluoromethane	mg/l	.025	0.0271	108.	63.5-135	WG702839
Vinyl chloride	mg/l	.025	0.0254	102.	65.9-128	WG702839
Xylenes, Total	mg/l	.075	0.0802	107.	78.7-121	WG702839
4-Bromofluorobenzene				103.0	71-126	WG702839
Dibromofluoromethane				100.0	78.3-121	WG702839
Toluene-d8				104.0	88.5-111	WG702839
a,a,a-Trifluorotoluene				105.0	85-114	WG702839
Antimony	mg/l	.05	0.0483	97.0	85-115	WG702820
Arsenic	mg/l	.05	0.0481	96.0	85-115	WG702820
Lead	mg/l	.05	0.0494	99.0	85-115	WG702820
Thallium	mg/l	.05	0.0493	99.0	85-115	WG702820
Beryllium	mg/l	1	1.07	107.	85-115	WG702798
Cadmium	mg/l	1	1.10	110.	85-115	WG702798
Chromium	mg/l	1	1.08	108.	85-115	WG702798
Copper	mg/l	1	1.05	105.	85-115	WG702798
Nickel	mg/l	1	0.958	96.0	85-115	WG702798
Selenium	mg/l	1	1.08	108.	85-115	WG702798
Silver	mg/l	1	0.937	94.0	85-115	WG702798
Zinc	mg/l	1	1.06	106.	85-115	WG702798
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0231	92.4	74.2-124	WG703279
1,1,1-Trichloroethane	mg/l	.025	0.0244	97.6	73.2-123	WG703279
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0215	86.0	70.7-122	WG703279
1,1,2-Trichloroethane	mg/l	.025	0.0222	88.9	77.7-118	WG703279
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0262	105.	67.2-143	WG703279
1,1-Dichloroethane	mg/l	.025	0.0256	102.	70.7-126	WG703279
1,1-Dichloroethene	mg/l	.025	0.0254	102.	67.8-129	WG703279
1,1-Dichloropropene	mg/l	.025	0.0268	107.	73.1-125	WG703279
1,2,3-Trichlorobenzene	mg/l	.025	0.0236	94.3	64.9-135	WG703279
1,2,3-Trichloropropane	mg/l	.025	0.0226	90.5	71.8-121	WG703279
1,2,3-Trimethylbenzene	mg/l	.025	0.0202	80.9	72.3-116	WG703279
1,2,4-Trichlorobenzene	mg/l	.025	0.0253	101.	69.7-136	WG703279
1,2,4-Trimethylbenzene	mg/l	.025	0.0234	93.5	75-123	WG703279
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0207	82.7	65.4-128	WG703279
1,2-Dibromoethane	mg/l	.025	0.0231	92.6	76.6-121	WG703279
1,2-Dichlorobenzene	mg/l	.025	0.0239	95.6	78.4-117	WG703279
1,2-Dichloroethane	mg/l	.025	0.0238	95.2	68.8-124	WG703279

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L679288

January 29, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,2-Dichloropropane	mg/l	.025	0.0243	97.0	76.5-119	WG703279
1,3,5-Trimethylbenzene	mg/l	.025	0.0238	95.3	75.6-124	WG703279
1,3-Dichlorobenzene	mg/l	.025	0.0241	96.6	70.8-128	WG703279
1,3-Dichloropropane	mg/l	.025	0.0237	94.9	77.4-117	WG703279
1,4-Dichlorobenzene	mg/l	.025	0.0236	94.2	78.8-115	WG703279
2,2-Dichloropropane	mg/l	.025	0.0239	95.7	62.4-133	WG703279
2-Butanone (MEK)	mg/l	.125	0.124	99.3	55-149	WG703279
2-Chloroethyl vinyl ether	mg/l	.125	0.111	89.2	43.8-150	WG703279
2-Chlorotoluene	mg/l	.025	0.0238	95.2	74.7-122	WG703279
4-Chlorotoluene	mg/l	.025	0.0240	96.0	77.5-120	WG703279
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.119	94.8	70.5-133	WG703279
Acetone	mg/l	.125	0.105	84.2	35.6-163	WG703279
Acrolein	mg/l	.125	0.126	101.	10-190	WG703279
Acrylonitrile	mg/l	.125	0.119	95.1	55.2-130	WG703279
Benzene	mg/l	.025	0.0255	102.	74.8-121	WG703279
Bromobenzene	mg/l	.025	0.0236	94.5	77.5-116	WG703279
Bromodichloromethane	mg/l	.025	0.0204	81.7	75.1-116	WG703279
Bromoform	mg/l	.025	0.0210	84.1	67.5-130	WG703279
Bromomethane	mg/l	.025	0.0219	87.8	49.9-162	WG703279
Carbon tetrachloride	mg/l	.025	0.0236	94.5	70.2-123	WG703279
Chlorobenzene	mg/l	.025	0.0240	96.0	78.1-119	WG703279
Chlorodibromomethane	mg/l	.025	0.0215	86.1	74-121	WG703279
Chloroethane	mg/l	.025	0.0231	92.5	61.7-135	WG703279
Chloroform	mg/l	.025	0.0248	99.0	76-121	WG703279
Chloromethane	mg/l	.025	0.0223	89.1	61.5-129	WG703279
cis-1,2-Dichloroethene	mg/l	.025	0.0251	101.	76-119	WG703279
cis-1,3-Dichloropropene	mg/l	.025	0.0234	93.8	78.2-120	WG703279
Di-isopropyl ether	mg/l	.025	0.0248	99.2	65.6-132	WG703279
Dibromomethane	mg/l	.025	0.0231	92.4	79.5-118	WG703279
Dichlorodifluoromethane	mg/l	.025	0.0208	83.2	54.8-135	WG703279
Ethylbenzene	mg/l	.025	0.0248	99.3	78.8-122	WG703279
Hexachloro-1,3-butadiene	mg/l	.025	0.0235	94.2	64.7-129	WG703279
Isopropylbenzene	mg/l	.025	0.0259	104.	78.6-132	WG703279
Methyl tert-butyl ether	mg/l	.025	0.0221	88.5	71.2-126	WG703279
Methylene Chloride	mg/l	.025	0.0239	95.8	70.3-120	WG703279
n-Butylbenzene	mg/l	.025	0.0251	100.	76.2-126	WG703279
n-Propylbenzene	mg/l	.025	0.0243	97.1	78.2-122	WG703279
Naphthalene	mg/l	.025	0.0225	90.0	68.4-128	WG703279
p-Isopropyltoluene	mg/l	.025	0.0247	98.9	74-131	WG703279
sec-Butylbenzene	mg/l	.025	0.0242	96.8	74.4-127	WG703279
Styrene	mg/l	.025	0.0246	98.3	80.4-126	WG703279
tert-Butylbenzene	mg/l	.025	0.0248	99.1	75.3-126	WG703279
Tetrachloroethene	mg/l	.025	0.0236	94.5	72.6-126	WG703279
Toluene	mg/l	.025	0.0241	96.4	79.7-116	WG703279
trans-1,2-Dichloroethene	mg/l	.025	0.0248	99.3	72.6-121	WG703279
trans-1,3-Dichloropropene	mg/l	.025	0.0225	89.9	74.3-123	WG703279
Trichloroethene	mg/l	.025	0.0235	94.2	77.7-118	WG703279
Trichlorofluoromethane	mg/l	.025	0.0236	94.4	63.5-135	WG703279
Vinyl chloride	mg/l	.025	0.0242	96.9	65.9-128	WG703279
Xylenes, Total	mg/l	.075	0.0725	96.6	78.7-121	WG703279
4-Bromofluorobenzene				92.90	71-126	WG703279
Dibromofluoromethane				95.50	78.3-121	WG703279
Toluene-d8				97.30	88.5-111	WG703279
a,a,a-Trifluorotoluene				96.80	85-114	WG703279
Beryllium	mg/l	1	1.05	105.	85-115	WG702798
Cadmium	mg/l	1	1.08	108.	85-115	WG702798
Chromium	mg/l	1	1.05	105.	85-115	WG702798

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Quality Assurance Report
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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Copper	mg/l	1	1.05	105.	85-115	WG702798
Nickel	mg/l	1	0.933	93.0	85-115	WG702798
Selenium	mg/l	1	1.05	105.	85-115	WG702798
Silver	mg/l	1	0.914	91.0	85-115	WG702798
Zinc	mg/l	1	1.04	104.	85-115	WG702798
Arsenic	mg/kg	237	252.	106.	83.1-117	WG703709
Beryllium	mg/kg	93.3	95.6	102.	83.3-117	WG703709
Cadmium	mg/kg	191	178.	93.0	83.2-117	WG703709
Chromium	mg/kg	128	122.	96.0	81.3-118	WG703709
Copper	mg/kg	123	129.	105.	83.7-116	WG703709
Lead	mg/kg	103	99.4	97.0	83.1-117	WG703709
Nickel	mg/kg	118	121.	102.	82-118	WG703709
Selenium	mg/kg	110	117.	107.	78.7-122	WG703709
Silver	mg/kg	47.3	49.4	105.	66.2-134	WG703709
Thallium	mg/kg	158	154.	98.0	81-119	WG703709
Zinc	mg/kg	183	184.	100.	82-118	WG703709
Antimony	mg/kg	113	60.9	54.0	0.88-223	WG703709

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2,4-Trichlorobenzene	mg/l	0.0145	0.0147	58.0	22.9-96.1	0.920	27.5	WG702620
2,4,6-Trichlorophenol	mg/l	0.0152	0.0137	61.0	29.8-107	10.1	24.1	WG702620
2,4-Dichlorophenol	mg/l	0.0169	0.0149	68.0	31.4-103	12.6	24.9	WG702620
2,4-Dimethylphenol	mg/l	0.0200	0.0189	80.0	31.9-107	5.43	25.7	WG702620
2,4-Dinitrophenol	mg/l	0.0144	0.0121	58.0	24.2-128	17.5	20.5	WG702620
2,4-Dinitrotoluene	mg/l	0.0213	0.0198	85.0	31.2-105	7.05	22	WG702620
2,6-Dinitrotoluene	mg/l	0.0214	0.0192	86.0	30.6-106	11.2	23.1	WG702620
2-Chloronaphthalene	mg/l	0.0167	0.0161	67.0	33.6-105	3.96	23	WG702620
2-Chlorophenol	mg/l	0.0133	0.0113	53.0	26.2-91.5	16.1	26.5	WG702620
2-Nitrophenol	mg/l	0.0164	0.0133	66.0	25.9-106	20.9	26.9	WG702620
3,3-Dichlorobenzidine	mg/l	0.0249	0.0231	100.	27.2-142	7.57	22.3	WG702620
4,6-Dinitro-2-methylphenol	mg/l	0.0182	0.0153	73.0	18.4-148	17.5	24.4	WG702620
4-Bromophenyl-phenylether	mg/l	0.0214	0.0201	86.0	40.7-116	6.33	21	WG702620
4-Chloro-3-methylphenol	mg/l	0.0181	0.0165	72.0	35.7-100	9.05	22.9	WG702620
4-Chlorophenyl-phenylether	mg/l	0.0177	0.0173	71.0	39-113	2.16	20.9	WG702620
4-Nitrophenol	mg/l	0.00652	0.00526	26.0	10-52.7	21.5	40	WG702620
Acenaphthene	mg/l	0.0182	0.0179	73.0	38.7-109	1.53	21.5	WG702620
Acenaphthylene	mg/l	0.0185	0.0177	74.0	36-106	4.27	21	WG702620
Anthracene	mg/l	0.0208	0.0195	83.0	43.6-113	6.44	18.8	WG702620
Benzidine	mg/l	0.00709	0.00807	28.0	10-165.2	13.0	40	WG702620
Benzo(a)anthracene	mg/l	0.0196	0.0179	78.0	51.2-112	9.03	20	WG702620
Benzo(a)pyrene	mg/l	0.0185	0.0165	74.0	45.6-106	11.5	20	WG702620
Benzo(b)fluoranthene	mg/l	0.0188	0.0170	75.0	47.6-111	10.1	20	WG702620
Benzo(g,h,i)perylene	mg/l	0.0203	0.0176	81.0	45.2-117	14.0	20	WG702620
Benzo(k)fluoranthene	mg/l	0.0202	0.0177	81.0	49.4-114	13.0	20	WG702620
Benzylbutyl phthalate	mg/l	0.0257	0.0234	103.	31.8-123	9.07	20.7	WG702620
Bis(2-chlorethoxy)methane	mg/l	0.0181	0.0179	72.0	37.2-111	1.24	24.1	WG702620
Bis(2-chloroethyl)ether	mg/l	0.0154	0.0145	62.0	22.6-108	5.66	27.9	WG702620
Bis(2-chloroisopropyl)ether	mg/l	0.0173	0.0180	69.0	32.9-100	3.96	25.1	WG702620
Bis(2-ethylhexyl)phthalate	mg/l	0.0231	0.0208	92.0	36.9-134	10.5	23.6	WG702620
Chrysene	mg/l	0.0199	0.0180	79.0	54.6-120	9.92	20	WG702620
Di-n-butyl phthalate	mg/l	0.0263	0.0230	105.	41.8-120	13.5	20.2	WG702620
Di-n-octyl phthalate	mg/l	0.0222	0.0202	89.0	39.7-112	9.69	21.1	WG702620
Dibenz(a,h)anthracene	mg/l	0.0207	0.0185	83.0	42.8-118	11.1	20	WG702620
Diethyl phthalate	mg/l	0.0247	0.0224	99.0	36.5-129	9.53	20	WG702620
Dimethyl phthalate	mg/l	0.0219	0.0209	88.0	35.3-128	4.97	20.8	WG702620

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Quality Assurance Report
Level II

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Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Fluoranthene	mg/l	0.0204	0.0182	82.0	45.9-115	11.4	20	WG702620
Fluorene	mg/l	0.0198	0.0181	79.0	41-112	8.68	20.2	WG702620
Hexachloro-1,3-butadiene	mg/l	0.0149	0.0164	60.0	16.1-104	9.45	31.2	WG702620
Hexachlorobenzene	mg/l	0.0229	0.0205	92.0	38.5-116	10.9	20.1	WG702620
Hexachlorocyclopentadiene	mg/l	0.0121	0.0132	48.0	10-121	8.31	27.9	WG702620
Hexachloroethane	mg/l	0.0136	0.0142	54.0	16.5-89.8	4.33	30.7	WG702620
Indeno(1,2,3-cd)pyrene	mg/l	0.0207	0.0184	83.0	45-116	11.6	20	WG702620
Isophorone	mg/l	0.0231	0.0213	92.0	35.4-112	8.03	21.5	WG702620
n-Nitrosodi-n-propylamine	mg/l	0.0194	0.0177	78.0	33.2-106	9.48	23.7	WG702620
n-Nitrosodimethylamine	mg/l	0.00996	0.00990	40.0	10-80.1	0.550	37.5	WG702620
n-Nitrosodiphenylamine	mg/l	0.0222	0.0203	89.0	44.4-113	8.64	20	WG702620
Naphthalene	mg/l	0.0158	0.0156	63.0	32.2-101	1.27	23.8	WG702620
Nitrobenzene	mg/l	0.0191	0.0176	76.0	31.4-106	8.31	25.7	WG702620
Pentachlorophenol	mg/l	0.0172	0.0149	69.0	10-97.4	14.0	35.1	WG702620
Phenanthrene	mg/l	0.0201	0.0187	80.0	46.4-113	6.84	20	WG702620
Phenol	mg/l	0.00641	0.00592	26.0	10-57.9	7.95	35	WG702620
Pyrene	mg/l	0.0202	0.0188	81.0	46.3-117	6.85	20	WG702620
2,4,6-Tribromophenol				86.10	11.2-130			WG702620
2-Fluorobiphenyl				67.10	29.5-131			WG702620
2-Fluorophenol				32.70	10-77.9			WG702620
Nitrobenzene-d5				80.50	21.8-123			WG702620
Phenol-d5				27.10	5-70.1			WG702620
p-Terphenyl-d14				70.20	29.3-137			WG702620
1,1,1,2-Tetrachloroethane	mg/kg	0.0252	0.0247	101.	72.9-124	2.12	20	WG702854
1,1,1-Trichloroethane	mg/kg	0.0249	0.0254	100.	73.7-124	1.96	20	WG702854
1,1,2,2-Tetrachloroethane	mg/kg	0.0221	0.0218	88.0	69.4-122	1.39	20	WG702854
1,1,2-Trichloroethane	mg/kg	0.0235	0.0239	94.0	79.1-118	2.01	20	WG702854
1,1-Dichloroethane	mg/kg	0.0256	0.0263	102.	75-124	2.64	20	WG702854
1,1-Dichloroethene	mg/kg	0.0255	0.0265	102.	70.4-129	3.93	20	WG702854
1,1-Dichloropropene	mg/kg	0.0269	0.0282	108.	74.9-124	4.64	20	WG702854
1,2,3-Trichlorobenzene	mg/kg	0.0247	0.0237	99.0	69.3-131	4.21	20	WG702854
1,2,3-Trichloropropane	mg/kg	0.0226	0.0226	90.0	71.4-123	0.120	20	WG702854
1,2,4-Trichlorobenzene	mg/kg	0.0266	0.0262	106.	71.9-137	1.33	20	WG702854
1,2,4-Trimethylbenzene	mg/kg	0.0266	0.0255	106.	75.5-122	4.08	20	WG702854
1,2-Dibromo-3-Chloropropane	mg/kg	0.0215	0.0206	86.0	62.8-133	4.05	20	WG702854
1,2-Dibromoethane	mg/kg	0.0240	0.0249	96.0	78.6-120	3.57	20	WG702854
1,2-Dichlorobenzene	mg/kg	0.0247	0.0248	99.0	78.3-118	0.480	20	WG702854
1,2-Dichloroethane	mg/kg	0.0234	0.0240	94.0	70.1-124	2.44	20	WG702854
1,2-Dichloropropane	mg/kg	0.0248	0.0256	99.0	77.9-119	3.32	20	WG702854
1,3,5-Trimethylbenzene	mg/kg	0.0275	0.0264	110.	75.9-124	4.03	20	WG702854
1,3-Dichlorobenzene	mg/kg	0.0267	0.0265	107.	72-126	0.810	20	WG702854
1,3-Dichloropropane	mg/kg	0.0245	0.0255	98.0	79.1-117	3.82	20	WG702854
1,4-Dichlorobenzene	mg/kg	0.0242	0.0254	97.0	78.3-117	4.54	20	WG702854
2,2-Dichloropropane	mg/kg	0.0252	0.0257	101.	61.3-136	2.27	20	WG702854
2-Butanone (MEK)	mg/kg	0.108	0.114	86.0	53.7-153	5.31	21.2	WG702854
2-Chloroethyl vinyl ether	mg/kg	0.114	0.122	92.0	37.7-157	6.70	20	WG702854
2-Chlorotoluene	mg/kg	0.0267	0.0255	107.	75.6-121	4.87	20	WG702854
4-Chlorotoluene	mg/kg	0.0264	0.0265	106.	77.3-120	0.270	20	WG702854
4-Methyl-2-pentanone (MIBK)	mg/kg	0.118	0.116	95.0	70.4-137	1.88	20	WG702854
Acetone	mg/kg	0.0744	0.0768	60.0	35.1-175	3.22	26.1	WG702854
Acrylonitrile	mg/kg	0.112	0.111	90.0	56.4-128	0.680	20	WG702854
Benzene	mg/kg	0.0251	0.0263	100.	77.1-121	4.88	20	WG702854
Bromobenzene	mg/kg	0.0252	0.0250	101.	78.2-115	0.650	20	WG702854
Bromodichloromethane	mg/kg	0.0208	0.0212	83.0	74.9-115	1.75	20	WG702854
Bromoform	mg/kg	0.0222	0.0225	89.0	65.9-132	1.26	20	WG702854
Bromomethane	mg/kg	0.0229	0.0229	91.0	48.7-165	0.170	20	WG702854
Carbon tetrachloride	mg/kg	0.0246	0.0250	98.0	70-124	1.72	20	WG702854

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L679288

January 29, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Chlorobenzene	mg/kg	0.0265	0.0267	106.	79.1-119	0.750	20	WG702854
Chlorodibromomethane	mg/kg	0.0230	0.0233	92.0	73.5-121	1.04	20	WG702854
Chloroethane	mg/kg	0.0239	0.0249	96.0	66.2-132	4.35	20	WG702854
Chloroform	mg/kg	0.0246	0.0250	98.0	76.7-122	1.45	20	WG702854
Chloromethane	mg/kg	0.0237	0.0238	95.0	63.4-131	0.480	20	WG702854
cis-1,2-Dichloroethene	mg/kg	0.0247	0.0251	99.0	78.2-119	1.48	20	WG702854
cis-1,3-Dichloropropene	mg/kg	0.0241	0.0252	96.0	79.6-120	4.30	20	WG702854
Di-isopropyl ether	mg/kg	0.0246	0.0251	98.0	70.4-133	2.19	20	WG702854
Dibromomethane	mg/kg	0.0223	0.0233	89.0	79.4-120	4.21	20	WG702854
Dichlorodifluoromethane	mg/kg	0.0251	0.0257	100.	57.1-137	2.40	20	WG702854
Ethylbenzene	mg/kg	0.0275	0.0271	110.	79.7-122	1.65	20	WG702854
Hexachloro-1,3-butadiene	mg/kg	0.0268	0.0262	107.	68.2-123	2.51	20	WG702854
Isopropylbenzene	mg/kg	0.0301	0.0289	120.	80-135	4.26	20	WG702854
Methyl tert-butyl ether	mg/kg	0.0216	0.0215	86.0	73-129	0.550	20	WG702854
Methylene Chloride	mg/kg	0.0234	0.0244	94.0	72.6-120	4.16	20	WG702854
n-Butylbenzene	mg/kg	0.0274	0.0271	109.	77.5-126	0.870	20	WG702854
n-Propylbenzene	mg/kg	0.0275	0.0268	110.	77.9-123	2.59	20	WG702854
Naphthalene	mg/kg	0.0225	0.0221	90.0	69.8-128	1.80	20	WG702854
p-Isopropyltoluene	mg/kg	0.0285	0.0279	114.	75.8-129	2.34	20	WG702854
sec-Butylbenzene	mg/kg	0.0284	0.0270	114.	75.8-126	5.05	20	WG702854
Styrene	mg/kg	0.0267	0.0271	107.	82.4-126	1.68	20	WG702854
tert-Butylbenzene	mg/kg	0.0291	0.0280	116.	76.4-126	3.61	20	WG702854
Tetrachloroethene	mg/kg	0.0270	0.0269	108.	73.9-125	0.270	20	WG702854
Toluene	mg/kg	0.0249	0.0257	100.	79.7-118	3.10	20	WG702854
trans-1,2-Dichloroethene	mg/kg	0.0246	0.0256	98.0	73.8-122	3.94	20	WG702854
trans-1,3-Dichloropropene	mg/kg	0.0223	0.0242	89.0	75.9-124	8.08	20	WG702854
Trichloroethene	mg/kg	0.0247	0.0249	99.0	77.9-118	0.750	20	WG702854
Trichlorofluoromethane	mg/kg	0.0243	0.0253	97.0	67.7-131	3.83	20	WG702854
Vinyl chloride	mg/kg	0.0257	0.0260	103.	66.7-130	1.39	20	WG702854
Xylenes, Total	mg/kg	0.0820	0.0799	109.	78.8-121	2.58	20	WG702854
4-Bromofluorobenzene				96.50	71-126			WG702854
Dibromofluoromethane				91.80	78.3-121			WG702854
Toluene-d8				97.20	88.5-111			WG702854
a,a,a-Trifluorotoluene				99.30	85-114			WG702854
PCB 1016	mg/kg	0.152	0.139	91.0	63.2-118	9.11	20	WG702937
PCB 1260	mg/kg	0.169	0.154	101.	64.6-123	9.31	20.8	WG702937
Decachlorobiphenyl				93.70	10-145			WG702937
Tetrachloro-m-xylene				101.0	21.1-148			WG702937
1,2,4-Trichlorobenzene	mg/kg	0.227	0.214	68.0	39.8-100	5.82	20	WG702939
2,4,6-Trichlorophenol	mg/kg	0.256	0.237	77.0	44.4-108	7.66	20	WG702939
2,4-Dichlorophenol	mg/kg	0.277	0.255	83.0	46.2-109	8.26	20	WG702939
2,4-Dimethylphenol	mg/kg	0.315	0.289	94.0	42.2-110	8.56	20	WG702939
2,4-Dinitrophenol	mg/kg	0.232	0.194	70.0	10-105	17.8	36.5	WG702939
2,4-Dinitrotoluene	mg/kg	0.286	0.274	86.0	53-112	4.42	20	WG702939
2,6-Dinitrotoluene	mg/kg	0.280	0.263	84.0	51.6-110	6.37	20	WG702939
2-Chloronaphthalene	mg/kg	0.228	0.213	68.0	47.1-105	6.78	20	WG702939
2-Chlorophenol	mg/kg	0.236	0.216	71.0	40.8-103	9.03	20	WG702939
2-Nitrophenol	mg/kg	0.284	0.256	85.0	44.2-113	10.4	20.9	WG702939
3,3-Dichlorobenzidine	mg/kg	0.234	0.241	70.0	21-101	3.29	22	WG702939
4,6-Dinitro-2-methylphenol	mg/kg	0.299	0.282	90.0	23.1-119	6.05	23.7	WG702939
4-Bromophenyl-phenylether	mg/kg	0.255	0.244	76.0	51.4-110	4.10	20	WG702939
4-Chloro-3-methylphenol	mg/kg	0.305	0.281	92.0	51.1-113	8.20	20	WG702939
4-Chlorophenyl-phenylether	mg/kg	0.231	0.209	69.0	48.1-108	10.3	20	WG702939
4-Nitrophenol	mg/kg	0.258	0.228	77.0	34.8-109	12.3	20	WG702939
Acenaphthene	mg/kg	0.246	0.222	74.0	48.9-107	10.1	20	WG702939

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Quality Assurance Report
Level II

L679288

January 29, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Acenaphthylene	mg/kg	0.243	0.230	73.0	49.2-111	5.61	20	WG702939
Anthracene	mg/kg	0.252	0.244	76.0	52-112	3.38	20	WG702939
Benzidine	mg/kg	0.0224	0.0299	7.00	0-48	28.8	40	WG702939
Benzo(a)anthracene	mg/kg	0.225	0.224	68.0	52.3-106	0.390	20	WG702939
Benzo(a)pyrene	mg/kg	0.217	0.203	65.0	51.9-106	6.53	20	WG702939
Benzo(b)fluoranthene	mg/kg	0.219	0.209	66.0	51.3-106	4.91	20	WG702939
Benzo(g,h,i)perylene	mg/kg	0.233	0.220	70.0	45.8-108	5.74	20	WG702939
Benzo(k)fluoranthene	mg/kg	0.235	0.221	71.0	52.9-107	6.36	20	WG702939
Benzylbutyl phthalate	mg/kg	0.301	0.293	90.0	47.5-115	2.76	20	WG702939
Bis(2-chlorethoxy)methane	mg/kg	0.244	0.229	73.0	44.9-108	6.12	20	WG702939
Bis(2-chloroethyl)ether	mg/kg	0.205	0.185	62.0	32.5-112	10.4	26	WG702939
Bis(2-chloroisopropyl)ether	mg/kg	0.253	0.220	76.0	40.4-99	14.0	20.7	WG702939
Bis(2-ethylhexyl)phthalate	mg/kg	0.264	0.266	79.0	48.1-116	0.840	20.5	WG702939
Chrysene	mg/kg	0.227	0.221	68.0	54.4-110	2.88	20	WG702939
Di-n-butyl phthalate	mg/kg	0.307	0.294	92.0	49.7-113	4.32	20	WG702939
Di-n-octyl phthalate	mg/kg	0.266	0.260	80.0	49.6-112	1.95	22	WG702939
Dibenz(a,h)anthracene	mg/kg	0.238	0.226	72.0	45.7-111	5.39	20	WG702939
Diethyl phthalate	mg/kg	0.302	0.276	91.0	52-112	8.92	20	WG702939
Dimethyl phthalate	mg/kg	0.273	0.256	82.0	51.4-108	6.16	20	WG702939
Fluoranthene	mg/kg	0.248	0.230	74.0	53.7-110	7.38	20	WG702939
Fluorene	mg/kg	0.249	0.235	75.0	51.1-109	5.84	20	WG702939
Hexachloro-1,3-butadiene	mg/kg	0.273	0.254	82.0	41.5-112	6.95	20	WG702939
Hexachlorobenzene	mg/kg	0.271	0.268	81.0	43.2-104	0.870	20.1	WG702939
Hexachlorocyclopentadiene	mg/kg	0.219	0.198	66.0	13.5-123	10.1	20.7	WG702939
Hexachloroethane	mg/kg	0.261	0.236	78.0	36.2-103	9.95	22.7	WG702939
Indeno(1,2,3-cd)pyrene	mg/kg	0.238	0.230	72.0	47.5-109	3.63	20	WG702939
Isophorone	mg/kg	0.295	0.276	88.0	28.8-104	6.54	20	WG702939
n-Nitrosodi-n-propylamine	mg/kg	0.257	0.228	77.0	43.3-109	12.0	20	WG702939
n-Nitrosodimethylamine	mg/kg	0.214	0.192	64.0	18.1-122	11.3	23.5	WG702939
n-Nitrosodiphenylamine	mg/kg	0.277	0.257	83.0	48.8-107	7.43	20	WG702939
Naphthalene	mg/kg	0.222	0.206	66.0	43.4-103	7.39	20	WG702939
Nitrobenzene	mg/kg	0.250	0.241	75.0	40.7-109	3.73	21	WG702939
Pentachlorophenol	mg/kg	0.295	0.269	88.0	16.2-102	9.28	22.9	WG702939
Phenanthrene	mg/kg	0.233	0.226	70.0	51.6-107	2.74	20	WG702939
Phenol	mg/kg	0.246	0.218	74.0	41.5-106	11.9	20	WG702939
Pyrene	mg/kg	0.227	0.224	68.0	47.1-108	1.39	20	WG702939
2,4,6-Tribromophenol				92.20	21.6-142			WG702939
2-Fluorobiphenyl				63.70	34.9-129			WG702939
2-Fluorophenol				63.40	21.1-116			WG702939
Nitrobenzene-d5				71.70	21.9-129			WG702939
Phenol-d5				70.00	26.3-121			WG702939
p-Terphenyl-d14				54.30	21.5-128			WG702939
1,1,1,2-Tetrachloroethane	mg/l	0.0261	0.0265	104.	74.2-124	1.31	20	WG702839
1,1,1-Trichloroethane	mg/l	0.0250	0.0254	100.	73.2-123	1.45	20	WG702839
1,1,2,2-Tetrachloroethane	mg/l	0.0238	0.0244	95.0	70.7-122	2.55	20	WG702839
1,1,2-Trichloroethane	mg/l	0.0253	0.0249	101.	77.7-118	1.40	20	WG702839
1,1,2-Trichlorotrifluoroethane	mg/l	0.0253	0.0258	101.	67.2-143	1.97	20	WG702839
1,1-Dichloroethane	mg/l	0.0248	0.0255	99.0	70.7-126	2.98	20	WG702839
1,1-Dichloroethene	mg/l	0.0245	0.0250	98.0	67.8-129	2.06	20	WG702839
1,1-Dichloropropene	mg/l	0.0248	0.0253	99.0	73.1-125	1.94	20	WG702839
1,2,3-Trichlorobenzene	mg/l	0.0253	0.0256	101.	64.9-135	1.23	20	WG702839
1,2,3-Trichloropropane	mg/l	0.0249	0.0244	99.0	71.8-121	2.06	20	WG702839
1,2,3-Trimethylbenzene	mg/l	0.0215	0.0215	86.0	72.3-116	0.220	20	WG702839
1,2,4-Trichlorobenzene	mg/l	0.0280	0.0283	112.	69.7-136	1.14	20	WG702839
1,2,4-Trimethylbenzene	mg/l	0.0264	0.0263	106.	75-123	0.330	20	WG702839
1,2-Dibromo-3-Chloropropane	mg/l	0.0245	0.0257	98.0	65.4-128	4.90	20	WG702839
1,2-Dibromoethane	mg/l	0.0259	0.0255	104.	76.6-121	1.73	20	WG702839

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Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2-Dichlorobenzene	mg/l	0.0256	0.0256	102.	78.4-117	0.110	20	WG702839
1,2-Dichloroethane	mg/l	0.0232	0.0237	93.0	68.8-124	1.92	20	WG702839
1,2-Dichloropropane	mg/l	0.0246	0.0241	98.0	76.5-119	2.22	20	WG702839
1,3,5-Trimethylbenzene	mg/l	0.0264	0.0267	106.	75.6-124	1.09	20	WG702839
1,3-Dichlorobenzene	mg/l	0.0261	0.0266	104.	70.8-128	2.05	20	WG702839
1,3-Dichloropropane	mg/l	0.0244	0.0241	97.0	77.4-117	0.970	20	WG702839
1,4-Dichlorobenzene	mg/l	0.0253	0.0249	101.	78.8-115	1.37	20	WG702839
2,2-Dichloropropane	mg/l	0.0260	0.0262	104.	62.4-133	0.900	20	WG702839
2-Butanone (MEK)	mg/l	0.115	0.126	92.0	55-149	8.94	20	WG702839
2-Chloroethyl vinyl ether	mg/l	0.130	0.131	104.	43.8-150	0.410	20	WG702839
2-Chlorotoluene	mg/l	0.0258	0.0261	103.	74.7-122	1.11	20	WG702839
4-Chlorotoluene	mg/l	0.0262	0.0270	105.	77.5-120	3.13	20	WG702839
4-Methyl-2-pentanone (MIBK)	mg/l	0.127	0.132	102.	70.5-133	3.79	20	WG702839
Acetone	mg/l	0.118	0.130	95.0	35.6-163	9.27	23.9	WG702839
Acrolein	mg/l	0.119	0.124	96.0	10-190	3.64	28.1	WG702839
Acrylonitrile	mg/l	0.121	0.129	97.0	55.2-130	5.76	20	WG702839
Benzene	mg/l	0.0238	0.0241	95.0	74.8-121	1.43	20	WG702839
Bromobenzene	mg/l	0.0242	0.0249	97.0	77.5-116	2.83	20	WG702839
Bromodichloromethane	mg/l	0.0245	0.0241	98.0	75.1-116	1.38	20	WG702839
Bromoform	mg/l	0.0262	0.0264	105.	67.5-130	0.510	20	WG702839
Bromomethane	mg/l	0.0295	0.0290	118.	49.9-162	1.88	20	WG702839
Carbon tetrachloride	mg/l	0.0249	0.0254	100.	70.2-123	2.27	20	WG702839
Chlorobenzene	mg/l	0.0260	0.0262	104.	78.1-119	0.860	20	WG702839
Chlorodibromomethane	mg/l	0.0251	0.0251	100.	74-121	0.140	20	WG702839
Chloroethane	mg/l	0.0242	0.0243	97.0	61.7-135	0.150	20	WG702839
Chloroform	mg/l	0.0242	0.0245	97.0	76-121	1.35	20	WG702839
Chloromethane	mg/l	0.0233	0.0243	93.0	61.5-129	4.48	20	WG702839
cis-1,2-Dichloroethene	mg/l	0.0247	0.0246	99.0	76-119	0.380	20	WG702839
cis-1,3-Dichloropropene	mg/l	0.0250	0.0248	100.	78.2-120	1.02	20	WG702839
Di-isopropyl ether	mg/l	0.0235	0.0242	94.0	65.6-132	3.25	20	WG702839
Dibromomethane	mg/l	0.0255	0.0251	102.	79.5-118	1.59	20	WG702839
Dichlorodifluoromethane	mg/l	0.0242	0.0244	97.0	54.8-135	0.750	20	WG702839
Ethylbenzene	mg/l	0.0264	0.0268	106.	78.8-122	1.28	20	WG702839
Hexachloro-1,3-butadiene	mg/l	0.0250	0.0254	100.	64.7-129	1.52	20	WG702839
Isopropylbenzene	mg/l	0.0291	0.0296	116.	78.6-132	1.66	20	WG702839
Methyl tert-butyl ether	mg/l	0.0229	0.0236	92.0	71.2-126	2.91	20	WG702839
Methylene Chloride	mg/l	0.0225	0.0229	90.0	70.3-120	1.92	20	WG702839
n-Butylbenzene	mg/l	0.0272	0.0272	109.	76.2-126	0.140	20	WG702839
n-Propylbenzene	mg/l	0.0262	0.0267	105.	78.2-122	1.91	20	WG702839
Naphthalene	mg/l	0.0244	0.0254	98.0	68.4-128	3.88	20	WG702839
p-Isopropyltoluene	mg/l	0.0275	0.0280	110.	74-131	1.90	20	WG702839
sec-Butylbenzene	mg/l	0.0268	0.0270	107.	74.4-127	0.680	20	WG702839
Styrene	mg/l	0.0277	0.0281	111.	80.4-126	1.52	20	WG702839
tert-Butylbenzene	mg/l	0.0271	0.0273	108.	75.3-126	0.950	20	WG702839
Tetrachloroethene	mg/l	0.0259	0.0267	104.	72.6-126	3.20	20	WG702839
Toluene	mg/l	0.0253	0.0247	101.	79.7-116	2.53	20	WG702839
trans-1,2-Dichloroethene	mg/l	0.0250	0.0253	100.	72.6-121	1.21	20	WG702839
trans-1,3-Dichloropropene	mg/l	0.0260	0.0253	104.	74.3-123	3.01	20	WG702839
Trichloroethene	mg/l	0.0254	0.0256	102.	77.7-118	0.690	20	WG702839
Trichlorofluoromethane	mg/l	0.0262	0.0271	105.	63.5-135	3.60	20	WG702839
Vinyl chloride	mg/l	0.0247	0.0254	99.0	65.9-128	2.75	20	WG702839
Xylenes, Total	mg/l	0.0797	0.0802	106.	78.7-121	0.670	20	WG702839
4-Bromofluorobenzene				103.0	71-126			WG702839
Dibromofluoromethane				99.10	78.3-121			WG702839
Toluene-d8				106.0	88.5-111			WG702839
a,a,a-Trifluorotoluene				107.0	85-114			WG702839
1,1,1,2-Tetrachloroethane	mg/l	0.0238	0.0231	95.0	74.2-124	3.10	20	WG703279

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Cary, NC 27512

Quality Assurance Report
Level II

L679288

January 29, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1-Trichloroethane	mg/l	0.0249	0.0244	100.	73.2-123	2.10	20	WG703279
1,1,2,2-Tetrachloroethane	mg/l	0.0222	0.0215	89.0	70.7-122	3.21	20	WG703279
1,1,2-Trichloroethane	mg/l	0.0230	0.0222	92.0	77.7-118	3.68	20	WG703279
1,1,2-Trichlorotrifluoroethane	mg/l	0.0266	0.0262	106.	67.2-143	1.73	20	WG703279
1,1-Dichloroethane	mg/l	0.0262	0.0256	105.	70.7-126	2.32	20	WG703279
1,1-Dichloroethene	mg/l	0.0260	0.0254	104.	67.8-129	2.31	20	WG703279
1,1-Dichloropropene	mg/l	0.0276	0.0268	110.	73.1-125	3.19	20	WG703279
1,2,3-Trichlorobenzene	mg/l	0.0243	0.0236	97.0	64.9-135	3.15	20	WG703279
1,2,3-Trichloropropane	mg/l	0.0229	0.0226	91.0	71.8-121	1.07	20	WG703279
1,2,3-Trimethylbenzene	mg/l	0.0211	0.0202	84.0	72.3-116	4.41	20	WG703279
1,2,4-Trichlorobenzene	mg/l	0.0267	0.0253	107.	69.7-136	5.51	20	WG703279
1,2,4-Trimethylbenzene	mg/l	0.0254	0.0234	101.	75-123	8.16	20	WG703279
1,2-Dibromo-3-Chloropropane	mg/l	0.0200	0.0207	80.0	65.4-128	3.17	20	WG703279
1,2-Dibromoethane	mg/l	0.0240	0.0231	96.0	76.6-121	3.44	20	WG703279
1,2-Dichlorobenzene	mg/l	0.0251	0.0239	100.	78.4-117	4.96	20	WG703279
1,2-Dichloroethane	mg/l	0.0238	0.0238	95.0	68.8-124	0.0300	20	WG703279
1,2-Dichloropropane	mg/l	0.0251	0.0243	100.	76.5-119	3.55	20	WG703279
1,3,5-Trimethylbenzene	mg/l	0.0262	0.0238	105.	75.6-124	9.33	20	WG703279
1,3-Dichlorobenzene	mg/l	0.0259	0.0241	104.	70.8-128	7.17	20	WG703279
1,3-Dichloropropane	mg/l	0.0245	0.0237	98.0	77.4-117	3.33	20	WG703279
1,4-Dichlorobenzene	mg/l	0.0244	0.0236	98.0	78.8-115	3.72	20	WG703279
2,2-Dichloropropane	mg/l	0.0248	0.0239	99.0	62.4-133	3.59	20	WG703279
2-Butanone (MEK)	mg/l	0.122	0.124	97.0	55-149	1.86	20	WG703279
2-Chloroethyl vinyl ether	mg/l	0.111	0.111	89.0	43.8-150	0.390	20	WG703279
2-Chlorotoluene	mg/l	0.0252	0.0238	101.	74.7-122	5.50	20	WG703279
4-Chlorotoluene	mg/l	0.0261	0.0240	104.	77.5-120	8.41	20	WG703279
4-Methyl-2-pentanone (MIBK)	mg/l	0.118	0.119	94.0	70.5-133	0.500	20	WG703279
Acetone	mg/l	0.0967	0.105	77.0	35.6-163	8.40	23.9	WG703279
Acrolein	mg/l	0.123	0.126	99.0	10-190	2.38	28.1	WG703279
Acrylonitrile	mg/l	0.114	0.119	92.0	55.2-130	3.77	20	WG703279
Benzene	mg/l	0.0258	0.0255	103.	74.8-121	1.22	20	WG703279
Bromobenzene	mg/l	0.0248	0.0236	99.0	77.5-116	4.96	20	WG703279
Bromodichloromethane	mg/l	0.0207	0.0204	83.0	75.1-116	1.27	20	WG703279
Bromoform	mg/l	0.0215	0.0210	86.0	67.5-130	2.25	20	WG703279
Bromomethane	mg/l	0.0227	0.0219	91.0	49.9-162	3.53	20	WG703279
Carbon tetrachloride	mg/l	0.0241	0.0236	96.0	70.2-123	1.90	20	WG703279
Chlorobenzene	mg/l	0.0256	0.0240	102.	78.1-119	6.48	20	WG703279
Chlorodibromomethane	mg/l	0.0224	0.0215	90.0	74-121	3.92	20	WG703279
Chloroethane	mg/l	0.0237	0.0231	95.0	61.7-135	2.51	20	WG703279
Chloroform	mg/l	0.0253	0.0248	101.	76-121	2.21	20	WG703279
Chloromethane	mg/l	0.0226	0.0223	90.0	61.5-129	1.31	20	WG703279
cis-1,2-Dichloroethene	mg/l	0.0252	0.0251	101.	76-119	0.370	20	WG703279
cis-1,3-Dichloropropene	mg/l	0.0242	0.0234	97.0	78.2-120	3.14	20	WG703279
Di-isopropyl ether	mg/l	0.0251	0.0248	100.	65.6-132	1.10	20	WG703279
Dibromomethane	mg/l	0.0228	0.0231	91.0	79.5-118	1.52	20	WG703279
Dichlorodifluoromethane	mg/l	0.0213	0.0208	85.0	54.8-135	2.23	20	WG703279
Ethylbenzene	mg/l	0.0263	0.0248	105.	78.8-122	5.82	20	WG703279
Hexachloro-1,3-butadiene	mg/l	0.0256	0.0235	102.	64.7-129	8.17	20	WG703279
Isopropylbenzene	mg/l	0.0286	0.0259	114.	78.6-132	9.63	20	WG703279
Methyl tert-butyl ether	mg/l	0.0223	0.0221	89.0	71.2-126	0.620	20	WG703279
Methylene Chloride	mg/l	0.0242	0.0239	97.0	70.3-120	1.14	20	WG703279
n-Butylbenzene	mg/l	0.0275	0.0251	110.	76.2-126	9.33	20	WG703279
n-Propylbenzene	mg/l	0.0266	0.0243	106.	78.2-122	9.27	20	WG703279
Naphthalene	mg/l	0.0228	0.0225	91.0	68.4-128	1.15	20	WG703279
p-Isopropyltoluene	mg/l	0.0275	0.0247	110.	74-131	10.6	20	WG703279
sec-Butylbenzene	mg/l	0.0270	0.0242	108.	74.4-127	10.9	20	WG703279
Styrene	mg/l	0.0263	0.0246	105.	80.4-126	6.87	20	WG703279
tert-Butylbenzene	mg/l	0.0277	0.0248	111.	75.3-126	11.0	20	WG703279
Tetrachloroethene	mg/l	0.0251	0.0236	100.	72.6-126	6.19	20	WG703279

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Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Toluene	mg/l	0.0247	0.0241	99.0	79.7-116	2.38	20	WG703279
trans-1,2-Dichloroethene	mg/l	0.0255	0.0248	102.	72.6-121	2.58	20	WG703279
trans-1,3-Dichloropropene	mg/l	0.0219	0.0225	88.0	74.3-123	2.39	20	WG703279
Trichloroethene	mg/l	0.0243	0.0235	97.0	77.7-118	3.36	20	WG703279
Trichlorofluoromethane	mg/l	0.0244	0.0236	97.0	63.5-135	3.14	20	WG703279
Vinyl chloride	mg/l	0.0244	0.0242	98.0	65.9-128	0.720	20	WG703279
Xylenes, Total	mg/l	0.0793	0.0725	106.	78.7-121	9.04	20	WG703279
4-Bromofluorobenzene				96.30	71-126			WG703279
Dibromofluoromethane				95.00	78.3-121			WG703279
Toluene-d8				96.40	88.5-111			WG703279
a,a,a-Trifluorotoluene				96.50	85-114			WG703279

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/kg	0.265	0.00679	.25	100.	80-120	L679224-01	WG702733
Mercury	mg/l	0.00259	0.0000487	.003	85.0	80-120	L679335-01	WG702882
Mercury	mg/kg	0.315	0.0575	.25	100.	80-120	L679288-11	WG702792
1,1,1,2-Tetrachloroethane	mg/kg	0.0216	0.0	.025	86.0	64-128	L679288-05	WG702854
1,1,1-Trichloroethane	mg/kg	0.0230	0.0	.025	92.0	58.7-134	L679288-05	WG702854
1,1,2,2-Tetrachloroethane	mg/kg	0.0194	0.0	.025	77.0	56-132	L679288-05	WG702854
1,1,2-Trichloroethane	mg/kg	0.0219	0.0	.025	88.0	66.3-125	L679288-05	WG702854
1,1-Dichloroethane	mg/kg	0.0234	0.0	.025	93.0	58.5-132	L679288-05	WG702854
1,1-Dichloroethene	mg/kg	0.0233	0.0	.025	93.0	51.1-140	L679288-05	WG702854
1,1-Dichloropropene	mg/kg	0.0243	0.0	.025	97.0	57.3-136	L679288-05	WG702854
1,2,3-Trichlorobenzene	mg/kg	0.0174	0.0	.025	70.0	59.1-138	L679288-05	WG702854
1,2,3-Trichloropropane	mg/kg	0.0209	0.0	.025	84.0	61.4-128	L679288-05	WG702854
1,2,4-Trichlorobenzene	mg/kg	0.0196	0.0	.025	78.0	63.6-143	L679288-05	WG702854
1,2,4-Trimethylbenzene	mg/kg	0.0215	0.0	.025	86.0	57.4-137	L679288-05	WG702854
1,2-Dibromo-3-Chloropropane	mg/kg	0.0196	0.0	.025	78.0	57.3-136	L679288-05	WG702854
1,2-Dibromoethane	mg/kg	0.0225	0.0	.025	90.0	67.1-125	L679288-05	WG702854
1,2-Dichlorobenzene	mg/kg	0.0218	0.0	.025	87.0	68.2-123	L679288-05	WG702854
1,2-Dichloroethane	mg/kg	0.0219	0.0	.025	88.0	60-126	L679288-05	WG702854
1,2-Dichloropropane	mg/kg	0.0226	0.0	.025	90.0	64.2-123	L679288-05	WG702854
1,3,5-Trimethylbenzene	mg/kg	0.0225	0.0	.025	90.0	63.6-132	L679288-05	WG702854
1,3-Dichlorobenzene	mg/kg	0.0216	0.0	.025	86.0	63.1-131	L679288-05	WG702854
1,3-Dichloropropane	mg/kg	0.0236	0.0	.025	94.0	67.9-121	L679288-05	WG702854
1,4-Dichlorobenzene	mg/kg	0.0222	0.0	.025	89.0	68.6-123	L679288-05	WG702854
2,2-Dichloropropane	mg/kg	0.0237	0.0	.025	95.0	50.5-144	L679288-05	WG702854
2-Butanone (MEK)	mg/kg	0.121	0.0	.125	96.0	22.4-138	L679288-05	WG702854
2-Chloroethyl vinyl ether	mg/kg	0.112	0.0	.125	90.0	10-155	L679288-05	WG702854
2-Chlorotoluene	mg/kg	0.0216	0.0	.025	86.0	63.6-128	L679288-05	WG702854
4-Chlorotoluene	mg/kg	0.0225	0.0	.025	90.0	65.7-127	L679288-05	WG702854
4-Methyl-2-pentanone (MIBK)	mg/kg	0.108	0.0	.125	87.0	60.8-140	L679288-05	WG702854
Acetone	mg/kg	0.100	0.00203	.125	78.0	10-130	L679288-05	WG702854
Acrylonitrile	mg/kg	0.102	0.0	.125	82.0	49.4-133	L679288-05	WG702854
Benzene	mg/kg	0.0231	0.0	.025	92.0	54.3-133	L679288-05	WG702854
Bromobenzene	mg/kg	0.0217	0.0	.025	87.0	63.9-124	L679288-05	WG702854
Bromodichloromethane	mg/kg	0.0188	0.0	.025	75.0	63.9-121	L679288-05	WG702854
Bromoform	mg/kg	0.0192	0.0	.025	77.0	59.5-134	L679288-05	WG702854
Bromomethane	mg/kg	0.0189	0.0	.025	76.0	41.7-155	L679288-05	WG702854
Carbon tetrachloride	mg/kg	0.0224	0.0	.025	90.0	55.7-134	L679288-05	WG702854
Chlorobenzene	mg/kg	0.0233	0.0	.025	93.0	67-125	L679288-05	WG702854

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Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Chlorodibromomethane	mg/kg	0.0207	0.0	.025	83.0	64.3-125	L679288-05	WG702854
Chloroethane	mg/kg	0.0211	0.0	.025	84.0	51.5-136	L679288-05	WG702854
Chloroform	mg/kg	0.0226	0.0	.025	91.0	63-129	L679288-05	WG702854
Chloromethane	mg/kg	0.0209	0.0	.025	84.0	42.4-135	L679288-05	WG702854
cis-1,2-Dichloroethene	mg/kg	0.0230	0.0	.025	92.0	59.2-129	L679288-05	WG702854
cis-1,3-Dichloropropene	mg/kg	0.0224	0.0	.025	90.0	66.4-125	L679288-05	WG702854
Di-isopropyl ether	mg/kg	0.0224	0.0	.025	90.0	56.9-136	L679288-05	WG702854
Dibromomethane	mg/kg	0.0203	0.0	.025	81.0	68.2-124	L679288-05	WG702854
Dichlorodifluoromethane	mg/kg	0.0245	0.0	.025	98.0	40.6-144	L679288-05	WG702854
Ethylbenzene	mg/kg	0.0233	0.0	.025	93.0	61.4-133	L679288-05	WG702854
Hexachloro-1,3-butadiene	mg/kg	0.0198	0.0	.025	79.0	55.1-136	L679288-05	WG702854
Isopropylbenzene	mg/kg	0.0249	0.0	.025	100.	66.8-141	L679288-05	WG702854
Methyl tert-butyl ether	mg/kg	0.0198	0.0	.025	79.0	57.7-134	L679288-05	WG702854
Methylene Chloride	mg/kg	0.0209	0.0	.025	84.0	58.1-122	L679288-05	WG702854
n-Butylbenzene	mg/kg	0.0241	0.0	.025	96.0	62.7-140	L679288-05	WG702854
n-Propylbenzene	mg/kg	0.0229	0.0	.025	92.0	10-176	L679288-05	WG702854
Naphthalene	mg/kg	0.0170	0.0	.025	68.0	58-135	L679288-05	WG702854
p-Isopropyltoluene	mg/kg	0.0231	0.0	.025	92.0	63.2-139	L679288-05	WG702854
sec-Butylbenzene	mg/kg	0.0229	0.0	.025	92.0	62.2-136	L679288-05	WG702854
Styrene	mg/kg	0.0232	0.0	.025	93.0	66.8-133	L679288-05	WG702854
tert-Butylbenzene	mg/kg	0.0240	0.0	.025	96.0	63.3-134	L679288-05	WG702854
Tetrachloroethene	mg/kg	0.0234	0.0	.025	94.0	53-139	L679288-05	WG702854
Toluene	mg/kg	0.0221	0.0	.025	89.0	61.4-130	L679288-05	WG702854
trans-1,2-Dichloroethene	mg/kg	0.0224	0.0	.025	89.0	56.5-129	L679288-05	WG702854
trans-1,3-Dichloropropene	mg/kg	0.0213	0.0	.025	85.0	64.1-128	L679288-05	WG702854
Trichloroethene	mg/kg	0.0216	0.0	.025	86.0	44.1-149	L679288-05	WG702854
Trichlorofluoromethane	mg/kg	0.0219	0.0	.025	88.0	49.6-145	L679288-05	WG702854
Vinyl chloride	mg/kg	0.0223	0.0	.025	89.0	47.8-137	L679288-05	WG702854
Xylenes, Total	mg/kg	0.0690	0.0	.075	92.0	63.3-131	L679288-05	WG702854
4-Bromofluorobenzene					93.60	71-126		WG702854
Dibromofluoromethane					94.50	78.3-121		WG702854
Toluene-d8					96.70	88.5-111		WG702854
a,a,a-Trifluorotoluene					93.30	85-114		WG702854
1,2,4-Trichlorobenzene	mg/kg	0.225	0.0	.333	68.0	36.5-114	L678919-03	WG702939
2,4,6-Trichlorophenol	mg/kg	0.258	0.0	.333	78.0	33.8-133	L678919-03	WG702939
2,4-Dichlorophenol	mg/kg	0.268	0.0	.333	80.0	34.8-134	L678919-03	WG702939
2,4-Dimethylphenol	mg/kg	0.312	0.0	.333	94.0	12.3-149	L678919-03	WG702939
2,4-Dinitrophenol	mg/kg	0.236	0.0	.333	71.0	10-121	L678919-03	WG702939
2,4-Dinitrotoluene	mg/kg	0.298	0.0	.333	89.0	27.8-147	L678919-03	WG702939
2,6-Dinitrotoluene	mg/kg	0.277	0.0	.333	83.0	36.5-137	L678919-03	WG702939
2-Chloronaphthalene	mg/kg	0.224	0.0	.333	67.0	37.5-123	L678919-03	WG702939
2-Chlorophenol	mg/kg	0.232	0.0	.333	70.0	33.2-121	L678919-03	WG702939
2-Nitrophenol	mg/kg	0.282	0.0	.333	85.0	29.5-144	L678919-03	WG702939
3,3-Dichlorobenzidine	mg/kg	0.217	0.0	.333	65.0	10-129	L678919-03	WG702939
4,6-Dinitro-2-methylphenol	mg/kg	0.327	0.0	.333	98.0	10-144	L678919-03	WG702939
4-Bromophenyl-phenylether	mg/kg	0.259	0.0	.333	78.0	39-130	L678919-03	WG702939
4-Chloro-3-methylphenol	mg/kg	0.301	0.0	.333	90.0	27-154	L678919-03	WG702939
4-Chlorophenyl-phenylether	mg/kg	0.223	0.0	.333	67.0	37.9-123	L678919-03	WG702939
4-Nitrophenol	mg/kg	0.260	0.0	.333	78.0	20-133	L678919-03	WG702939
Acenaphthene	mg/kg	0.238	0.0	.333	72.0	32.2-134	L678919-03	WG702939
Acenaphthylene	mg/kg	0.236	0.0	.333	71.0	38.7-129	L678919-03	WG702939
Anthracene	mg/kg	0.263	0.0	.333	79.0	32.3-137	L678919-03	WG702939
Benzidine	mg/kg	0.00153	0.0	.333	0.460	0-49.9	L678919-03	WG702939
Benzo(a)anthracene	mg/kg	0.223	0.0	.333	67.0	33.3-124	L678919-03	WG702939
Benzo(a)pyrene	mg/kg	0.215	0.0	.333	64.0	28.2-128	L678919-03	WG702939
Benzo(b)fluoranthene	mg/kg	0.229	0.0	.333	69.0	23.3-133	L678919-03	WG702939
Benzo(g,h,i)perylene	mg/kg	0.238	0.0	.333	71.0	10-127	L678919-03	WG702939

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Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzo(k)fluoranthene	mg/kg	0.231	0.0	.333	69.0	31-129	L678919-03	WG702939
Benzylbutyl phthalate	mg/kg	0.312	0.0	.333	94.0	33.4-128	L678919-03	WG702939
Bis(2-chlorethoxy)methane	mg/kg	0.244	0.0	.333	73.0	35-132	L678919-03	WG702939
Bis(2-chloroethyl)ether	mg/kg	0.191	0.0	.333	58.0	28.8-128	L678919-03	WG702939
Bis(2-chloroisopropyl)ether	mg/kg	0.246	0.0	.333	74.0	31.8-118	L678919-03	WG702939
Bis(2-ethylhexyl)phthalate	mg/kg	0.275	0.0	.333	83.0	21.8-141	L678919-03	WG702939
Chrysene	mg/kg	0.238	0.0	.333	71.0	36.3-129	L678919-03	WG702939
Di-n-butyl phthalate	mg/kg	0.322	0.0	.333	97.0	32.2-133	L678919-03	WG702939
Di-n-octyl phthalate	mg/kg	0.276	0.0	.333	83.0	28.5-128	L678919-03	WG702939
Dibenz(a,h)anthracene	mg/kg	0.247	0.0	.333	74.0	10.5-128	L678919-03	WG702939
Diethyl phthalate	mg/kg	0.285	0.0	.333	86.0	39.4-136	L678919-03	WG702939
Dimethyl phthalate	mg/kg	0.266	0.0	.333	80.0	35.8-137	L678919-03	WG702939
Fluoranthene	mg/kg	0.245	0.0	.333	74.0	27.9-138	L678919-03	WG702939
Fluorene	mg/kg	0.241	0.0	.333	72.0	34-133	L678919-03	WG702939
Hexachloro-1,3-butadiene	mg/kg	0.264	0.0	.333	79.0	36.5-125	L678919-03	WG702939
Hexachlorobenzene	mg/kg	0.274	0.0	.333	82.0	34.4-116	L678919-03	WG702939
Hexachlorocyclopentadiene	mg/kg	0.210	0.0	.333	63.0	10-124	L678919-03	WG702939
Hexachloroethane	mg/kg	0.246	0.0	.333	74.0	11.3-143	L678919-03	WG702939
Indeno(1,2,3-cd)pyrene	mg/kg	0.248	0.0	.333	74.0	10-128	L678919-03	WG702939
Isophorone	mg/kg	0.289	0.0	.333	87.0	25.7-116	L678919-03	WG702939
n-Nitrosodi-n-propylamine	mg/kg	0.249	0.0	.333	75.0	33-134	L678919-03	WG702939
n-Nitrosodimethylamine	mg/kg	0.207	0.0	.333	62.0	19.2-127	L678919-03	WG702939
n-Nitrosodiphenylamine	mg/kg	0.296	0.0	.333	89.0	26.8-133	L678919-03	WG702939
Naphthalene	mg/kg	0.217	0.0	.333	65.0	36.4-121	L678919-03	WG702939
Nitrobenzene	mg/kg	0.255	0.0	.333	77.0	30.9-134	L678919-03	WG702939
Pentachlorophenol	mg/kg	0.324	0.0	.333	97.0	10-139	L678919-03	WG702939
Phenanthrene	mg/kg	0.251	0.0	.333	76.0	30.8-137	L678919-03	WG702939
Phenol	mg/kg	0.234	0.0	.333	70.0	25.1-130	L678919-03	WG702939
Pyrene	mg/kg	0.229	0.0	.333	69.0	24.1-130	L678919-03	WG702939
2,4,6-Tribromophenol					96.50	21.6-142		WG702939
2-Fluorobiphenyl					59.10	34.9-129		WG702939
2-Fluorophenol					58.20	21.1-116		WG702939
Nitrobenzene-d5					68.00	21.9-129		WG702939
Phenol-d5					65.10	26.3-121		WG702939
p-Terphenyl-d14					53.20	21.5-128		WG702939
1,1,1,2-Tetrachloroethane	mg/l	0.0244	0.0	.025	98.0	64-128	L679341-01	WG702839
1,1,1-Trichloroethane	mg/l	0.0235	0.0	.025	94.0	58.7-134	L679341-01	WG702839
1,1,2,2-Tetrachloroethane	mg/l	0.0229	0.0	.025	92.0	56-132	L679341-01	WG702839
1,1,2-Trichloroethane	mg/l	0.0245	0.0	.025	98.0	66.3-125	L679341-01	WG702839
1,1,2-Trichlorotrifluoroethane	mg/l	0.0230	0.0	.025	92.0	54.8-154	L679341-01	WG702839
1,1-Dichloroethane	mg/l	0.0234	0.0	.025	94.0	58.5-132	L679341-01	WG702839
1,1-Dichloroethene	mg/l	0.0220	0.0	.025	88.0	51.1-140	L679341-01	WG702839
1,1-Dichloropropene	mg/l	0.0230	0.0	.025	92.0	57.3-136	L679341-01	WG702839
1,2,3-Trichlorobenzene	mg/l	0.0249	0.0	.025	100.	59.1-138	L679341-01	WG702839
1,2,3-Trichloropropane	mg/l	0.0235	0.0	.025	94.0	61.4-128	L679341-01	WG702839
1,2,3-Trimethylbenzene	mg/l	0.0205	0.0	.025	82.0	61.3-122	L679341-01	WG702839
1,2,4-Trichlorobenzene	mg/l	0.0267	0.0	.025	110.	63.6-143	L679341-01	WG702839
1,2,4-Trimethylbenzene	mg/l	0.0239	0.0	.025	96.0	57.4-137	L679341-01	WG702839
1,2-Dibromo-3-Chloropropane	mg/l	0.0247	0.0	.025	99.0	57.3-136	L679341-01	WG702839
1,2-Dibromoethane	mg/l	0.0243	0.0	.025	97.0	67.1-125	L679341-01	WG702839
1,2-Dichlorobenzene	mg/l	0.0244	0.0	.025	98.0	68.2-123	L679341-01	WG702839
1,2-Dichloroethane	mg/l	0.0227	0.0	.025	91.0	60-126	L679341-01	WG702839
1,2-Dichloropropane	mg/l	0.0232	0.0	.025	93.0	64.2-123	L679341-01	WG702839
1,3,5-Trimethylbenzene	mg/l	0.0240	0.0	.025	96.0	63.6-132	L679341-01	WG702839
1,3-Dichlorobenzene	mg/l	0.0238	0.0	.025	95.0	63.1-131	L679341-01	WG702839
1,3-Dichloropropane	mg/l	0.0229	0.0	.025	92.0	67.9-121	L679341-01	WG702839
1,4-Dichlorobenzene	mg/l	0.0242	0.0	.025	97.0	68.6-123	L679341-01	WG702839

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January 29, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
2,2-Dichloropropane	mg/l	0.0250	0.0	.025	100.	50.5-144	L679341-01	WG702839
2-Butanone (MEK)	mg/l	0.116	0.0	.125	93.0	22.4-138	L679341-01	WG702839
2-Chloroethyl vinyl ether	mg/l	0.0328	0.0	.125	26.0	10-155	L679341-01	WG702839
2-Chlorotoluene	mg/l	0.0233	0.0	.025	93.0	63.6-128	L679341-01	WG702839
4-Chlorotoluene	mg/l	0.0238	0.0	.025	95.0	65.7-127	L679341-01	WG702839
4-Methyl-2-pentanone (MIBK)	mg/l	0.122	0.0	.125	98.0	60.8-140	L679341-01	WG702839
Acetone	mg/l	0.113	0.00506	.125	86.0	10-130	L679341-01	WG702839
Acrolein	mg/l	0.126	0.0	.125	100.	10-200	L679341-01	WG702839
Acrylonitrile	mg/l	0.121	0.0	.125	97.0	49.4-133	L679341-01	WG702839
Benzene	mg/l	0.0226	0.0	.025	90.0	54.3-133	L679341-01	WG702839
Bromobenzene	mg/l	0.0226	0.0	.025	90.0	63.9-124	L679341-01	WG702839
Bromodichloromethane	mg/l	0.0234	0.0	.025	94.0	63.9-121	L679341-01	WG702839
Bromoform	mg/l	0.0252	0.0	.025	100.	59.5-134	L679341-01	WG702839
Bromomethane	mg/l	0.0245	0.0	.025	98.0	41.7-155	L679341-01	WG702839
Carbon tetrachloride	mg/l	0.0233	0.0	.025	93.0	55.7-134	L679341-01	WG702839
Chlorobenzene	mg/l	0.0245	0.0	.025	98.0	67-125	L679341-01	WG702839
Chlorodibromomethane	mg/l	0.0239	0.0	.025	96.0	64.3-125	L679341-01	WG702839
Chloroethane	mg/l	0.0213	0.0	.025	85.0	51.5-136	L679341-01	WG702839
Chloroform	mg/l	0.0227	0.0	.025	91.0	63-129	L679341-01	WG702839
Chloromethane	mg/l	0.0202	0.0	.025	81.0	42.4-135	L679341-01	WG702839
cis-1,2-Dichloroethene	mg/l	0.0228	0.0	.025	91.0	59.2-129	L679341-01	WG702839
cis-1,3-Dichloropropene	mg/l	0.0239	0.0	.025	96.0	66.4-125	L679341-01	WG702839
Di-isopropyl ether	mg/l	0.0227	0.0	.025	91.0	56.9-136	L679341-01	WG702839
Dibromomethane	mg/l	0.0239	0.0	.025	96.0	68.2-124	L679341-01	WG702839
Dichlorodifluoromethane	mg/l	0.0223	0.0	.025	89.0	40.6-144	L679341-01	WG702839
Ethylbenzene	mg/l	0.0244	0.0	.025	98.0	61.4-133	L679341-01	WG702839
Hexachloro-1,3-butadiene	mg/l	0.0231	0.0	.025	92.0	55.1-136	L679341-01	WG702839
Isopropylbenzene	mg/l	0.0267	0.0	.025	110.	66.8-141	L679341-01	WG702839
Methyl tert-butyl ether	mg/l	0.0225	0.0	.025	90.0	57.7-134	L679341-01	WG702839
Methylene Chloride	mg/l	0.0206	0.0	.025	82.0	58.1-122	L679341-01	WG702839
n-Butylbenzene	mg/l	0.0253	0.0	.025	100.	62.7-140	L679341-01	WG702839
n-Propylbenzene	mg/l	0.0236	0.0	.025	95.0	65.9-131	L679341-01	WG702839
Naphthalene	mg/l	0.0242	0.0	.025	97.0	58-135	L679341-01	WG702839
p-Isopropyltoluene	mg/l	0.0250	0.0	.025	100.	63.2-139	L679341-01	WG702839
sec-Butylbenzene	mg/l	0.0240	0.0	.025	96.0	62.2-136	L679341-01	WG702839
Styrene	mg/l	0.0260	0.0	.025	100.	66.8-133	L679341-01	WG702839
tert-Butylbenzene	mg/l	0.0245	0.0	.025	98.0	63.3-134	L679341-01	WG702839
Tetrachloroethene	mg/l	0.0236	0.0	.025	94.0	53-139	L679341-01	WG702839
Toluene	mg/l	0.0232	0.0	.025	93.0	61.4-130	L679341-01	WG702839
trans-1,2-Dichloroethene	mg/l	0.0222	0.0	.025	89.0	56.5-129	L679341-01	WG702839
trans-1,3-Dichloropropene	mg/l	0.0246	0.0	.025	98.0	64.1-128	L679341-01	WG702839
Trichloroethene	mg/l	0.0231	0.0	.025	92.0	44.1-149	L679341-01	WG702839
Trichlorofluoromethane	mg/l	0.0239	0.0	.025	96.0	49.6-145	L679341-01	WG702839
Vinyl chloride	mg/l	0.0218	0.0	.025	87.0	47.8-137	L679341-01	WG702839
Xylenes, Total	mg/l	0.0729	0.0	.075	97.0	63.3-131	L679341-01	WG702839
4-Bromofluorobenzene					100.0	71-126		WG702839
Dibromofluoromethane					101.0	78.3-121		WG702839
Toluene-d8					104.0	88.5-111		WG702839
a,a,a-Trifluorotoluene					103.0	85-114		WG702839
Antimony	mg/l	0.0470	0.000440	.05	93.0	75-125	L679288-04	WG702820
Arsenic	mg/l	0.0474	0.000960	.05	93.0	75-125	L679288-04	WG702820
Lead	mg/l	0.0485	0.000200	.05	97.0	75-125	L679288-04	WG702820
Thallium	mg/l	0.0489	-0.000180	.05	98.0	75-125	L679288-04	WG702820
Beryllium	mg/l	1.09	0.000183	1	110.	75-125	L679230-02	WG702798
Cadmium	mg/l	1.09	0.00104	1	110.	75-125	L679230-02	WG702798

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Quality Assurance Report
Level II

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Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Chromium	mg/l	1.09	0.00521	1	110.	75-125	L679230-02	WG702798
Copper	mg/l	1.09	0.00135	1	110.	75-125	L679230-02	WG702798
Nickel	mg/l	0.998	0.0103	1	99.0	75-125	L679230-02	WG702798
Selenium	mg/l	1.08	-0.00775	1	110.	75-125	L679230-02	WG702798
Silver	mg/l	0.0397	0.000613	1	4.00*	75-125	L679230-02	WG702798
Zinc	mg/l	1.12	0.0154	1	110.	75-125	L679230-02	WG702798
1,1,1,2-Tetrachloroethane	mg/l	0.0223	0.0	.025	89.0	64-128	L679341-08	WG703279
1,1,1-Trichloroethane	mg/l	0.0238	0.0	.025	95.0	58.7-134	L679341-08	WG703279
1,1,2,2-Tetrachloroethane	mg/l	0.0215	0.0	.025	86.0	56-132	L679341-08	WG703279
1,1,2-Trichloroethane	mg/l	0.0229	0.0	.025	92.0	66.3-125	L679341-08	WG703279
1,1,2-Trichlorotrifluoroethane	mg/l	0.0267	0.0	.025	110.	54.8-154	L679341-08	WG703279
1,1-Dichloroethane	mg/l	0.0243	0.0	.025	97.0	58.5-132	L679341-08	WG703279
1,1-Dichloroethene	mg/l	0.0247	0.0	.025	99.0	51.1-140	L679341-08	WG703279
1,1-Dichloropropene	mg/l	0.0259	0.0	.025	100.	57.3-136	L679341-08	WG703279
1,2,3-Trichlorobenzene	mg/l	0.0232	0.0	.025	93.0	59.1-138	L679341-08	WG703279
1,2,3-Trichloropropane	mg/l	0.0225	0.0	.025	90.0	61.4-128	L679341-08	WG703279
1,2,3-Trimethylbenzene	mg/l	0.0202	0.0	.025	81.0	61.3-122	L679341-08	WG703279
1,2,4-Trichlorobenzene	mg/l	0.0251	0.0	.025	100.	63.6-143	L679341-08	WG703279
1,2,4-Trimethylbenzene	mg/l	0.0233	0.0	.025	93.0	57.4-137	L679341-08	WG703279
1,2-Dibromo-3-Chloropropane	mg/l	0.0206	0.0	.025	82.0	57.3-136	L679341-08	WG703279
1,2-Dibromoethane	mg/l	0.0240	0.0	.025	96.0	67.1-125	L679341-08	WG703279
1,2-Dichlorobenzene	mg/l	0.0237	0.0	.025	95.0	68.2-123	L679341-08	WG703279
1,2-Dichloroethane	mg/l	0.0234	0.0	.025	94.0	60-126	L679341-08	WG703279
1,2-Dichloropropane	mg/l	0.0237	0.0	.025	95.0	64.2-123	L679341-08	WG703279
1,3,5-Trimethylbenzene	mg/l	0.0239	0.0	.025	96.0	63.6-132	L679341-08	WG703279
1,3-Dichlorobenzene	mg/l	0.0245	0.0	.025	98.0	63.1-131	L679341-08	WG703279
1,3-Dichloropropane	mg/l	0.0244	0.0	.025	98.0	67.9-121	L679341-08	WG703279
1,4-Dichlorobenzene	mg/l	0.0240	0.0	.025	96.0	68.6-123	L679341-08	WG703279
2,2-Dichloropropane	mg/l	0.0236	0.0	.025	94.0	50.5-144	L679341-08	WG703279
2-Butanone (MEK)	mg/l	0.113	0.0	.125	90.0	22.4-138	L679341-08	WG703279
2-Chloroethyl vinyl ether	mg/l	0.00352	0.0	.125	2.80*	10-155	L679341-08	WG703279
2-Chlorotoluene	mg/l	0.0234	0.0	.025	94.0	63.6-128	L679341-08	WG703279
4-Chlorotoluene	mg/l	0.0246	0.0	.025	98.0	65.7-127	L679341-08	WG703279
4-Methyl-2-pentanone (MIBK)	mg/l	0.120	0.0	.125	96.0	60.8-140	L679341-08	WG703279
Acetone	mg/l	0.0785	0.00302	.125	60.0	10-130	L679341-08	WG703279
Acrolein	mg/l	0.262	0.0	.125	210.*	10-200	L679341-08	WG703279
Acrylonitrile	mg/l	0.115	0.0	.125	92.0	49.4-133	L679341-08	WG703279
Benzene	mg/l	0.0245	0.0	.025	98.0	54.3-133	L679341-08	WG703279
Bromobenzene	mg/l	0.0233	0.0	.025	93.0	63.9-124	L679341-08	WG703279
Bromodichloromethane	mg/l	0.0204	0.0	.025	82.0	63.9-121	L679341-08	WG703279
Bromoform	mg/l	0.0214	0.0	.025	86.0	59.5-134	L679341-08	WG703279
Bromomethane	mg/l	0.0206	0.0	.025	82.0	41.7-155	L679341-08	WG703279
Carbon tetrachloride	mg/l	0.0233	0.0	.025	93.0	55.7-134	L679341-08	WG703279
Chlorobenzene	mg/l	0.0244	0.0	.025	98.0	67-125	L679341-08	WG703279
Chlorodibromomethane	mg/l	0.0220	0.0	.025	88.0	64.3-125	L679341-08	WG703279
Chloroethane	mg/l	0.0220	0.0	.025	88.0	51.5-136	L679341-08	WG703279
Chloroform	mg/l	0.0240	0.0	.025	96.0	63-129	L679341-08	WG703279
Chloromethane	mg/l	0.0203	0.0	.025	81.0	42.4-135	L679341-08	WG703279
cis-1,2-Dichloroethene	mg/l	0.0239	0.0	.025	96.0	59.2-129	L679341-08	WG703279
cis-1,3-Dichloropropene	mg/l	0.0238	0.0	.025	95.0	66.4-125	L679341-08	WG703279
Di-isopropyl ether	mg/l	0.0234	0.0	.025	94.0	56.9-136	L679341-08	WG703279
Dibromomethane	mg/l	0.0226	0.0	.025	90.0	68.2-124	L679341-08	WG703279
Dichlorodifluoromethane	mg/l	0.0210	0.0	.025	84.0	40.6-144	L679341-08	WG703279
Ethylbenzene	mg/l	0.0244	0.0	.025	98.0	61.4-133	L679341-08	WG703279
Hexachloro-1,3-butadiene	mg/l	0.0247	0.0	.025	99.0	55.1-136	L679341-08	WG703279
Isopropylbenzene	mg/l	0.0262	0.0	.025	100.	66.8-141	L679341-08	WG703279
Methyl tert-butyl ether	mg/l	0.0210	0.0	.025	84.0	57.7-134	L679341-08	WG703279

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Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
		Matrix Spike						
Methylene Chloride	mg/l	0.0227	0.0	.025	91.0	58.1-122	L679341-08	WG703279
n-Butylbenzene	mg/l	0.0260	0.0	.025	100.	62.7-140	L679341-08	WG703279
n-Propylbenzene	mg/l	0.0246	0.0	.025	99.0	65.9-131	L679341-08	WG703279
Naphthalene	mg/l	0.0215	0.0	.025	86.0	58-135	L679341-08	WG703279
p-Isopropyltoluene	mg/l	0.0252	0.0	.025	100.	63.2-139	L679341-08	WG703279
sec-Butylbenzene	mg/l	0.0251	0.0	.025	100.	62.2-136	L679341-08	WG703279
Styrene	mg/l	0.0246	0.0	.025	98.0	66.8-133	L679341-08	WG703279
tert-Butylbenzene	mg/l	0.0256	0.0	.025	100.	63.3-134	L679341-08	WG703279
Tetrachloroethene	mg/l	0.0242	0.0	.025	97.0	53-139	L679341-08	WG703279
Toluene	mg/l	0.0240	0.0	.025	96.0	61.4-130	L679341-08	WG703279
trans-1,2-Dichloroethene	mg/l	0.0233	0.0	.025	93.0	56.5-129	L679341-08	WG703279
trans-1,3-Dichloropropene	mg/l	0.0229	0.0	.025	92.0	64.1-128	L679341-08	WG703279
Trichloroethene	mg/l	0.0235	0.0	.025	94.0	44.1-149	L679341-08	WG703279
Trichlorofluoromethane	mg/l	0.0233	0.0	.025	93.0	49.6-145	L679341-08	WG703279
Vinyl chloride	mg/l	0.0229	0.0	.025	92.0	47.8-137	L679341-08	WG703279
Xylenes, Total	mg/l	0.0730	0.0	.075	97.0	63.3-131	L679341-08	WG703279
4-Bromofluorobenzene					93.90	71-126		WG703279
Dibromofluoromethane					92.90	78.3-121		WG703279
Toluene-d8					98.40	88.5-111		WG703279
a,a,a-Trifluorotoluene					96.20	85-114		WG703279
PCB 1016	mg/kg	0.115	0.0	.167	69.0	23.5-134	L678898-02	WG702937
PCB 1260	mg/kg	0.108	0.0	.167	65.0	16.1-139	L678898-02	WG702937
Decachlorobiphenyl					76.00	10-145		WG702937
Tetrachloro-m-xylene					90.20	21.1-148		WG702937
Beryllium	mg/l	1.05	-0.000026	1	100.	75-125	L679230-02	WG702798
Cadmium	mg/l	1.04	0.000863	1	100.	75-125	L679230-02	WG702798
Chromium	mg/l	1.05	0.00547	1	100.	75-125	L679230-02	WG702798
Copper	mg/l	1.06	0.000600	1	110.	75-125	L679230-02	WG702798
Nickel	mg/l	0.966	0.00832	1	96.0	75-125	L679230-02	WG702798
Selenium	mg/l	1.05	-0.00236	1	100.	75-125	L679230-02	WG702798
Silver	mg/l	0.0353	-0.00163	1	4.00*	75-125	L679230-02	WG702798
Zinc	mg/l	1.08	0.0166	1	110.	75-125	L679230-02	WG702798
Arsenic	mg/kg	55.9	23.9	10	64.0*	75-125	L679288-01	WG703709
Cadmium	mg/kg	60.0	2.29	10	120.	75-125	L679288-01	WG703709
Chromium	mg/kg	185.	147.	10	76.0	75-125	L679288-01	WG703709
Copper	mg/kg	187.	131.	10	110.	75-125	L679288-01	WG703709
Lead	mg/kg	110.	55.5	10	110.	75-125	L679288-01	WG703709
Nickel	mg/kg	85.4	30.5	10	110.	75-125	L679288-01	WG703709
Selenium	mg/kg	14.7	-4.68	10	29.0*	75-125	L679288-01	WG703709
Silver	mg/kg	59.8	1.86	10	120.	75-125	L679288-01	WG703709
Thallium	mg/kg	51.8	-5.58	10	100.	75-125	L679288-01	WG703709
Zinc	mg/kg	81.6	12.2	10	140.*	75-125	L679288-01	WG703709
Beryllium	mg/kg	51.2	1.10	50	100.	75-125	L679288-01	WG703709
Antimony	mg/kg	10.1	0.758	50	19.0*	75-125	L679288-01	WG703709

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
		Matrix Spike Duplicate							
Mercury	mg/kg	0.244	0.265	94.9	80-120	8.00	20	L679224-01	WG702733
Mercury	mg/l	0.00249	0.00259	81.4	80-120	4.00	20	L679335-01	WG702882

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January 29, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/kg	0.328	0.315	108.	80-120	4.00	20	L679288-11	WG702792
1,1,1,2-Tetrachloroethane	mg/kg	0.0228	0.0216	91.2	64-128	5.34	20	L679288-05	WG702854
1,1,1-Trichloroethane	mg/kg	0.0242	0.0230	96.8	58.7-134	4.94	20	L679288-05	WG702854
1,1,2,2-Tetrachloroethane	mg/kg	0.0192	0.0194	76.6	56-132	1.02	22.2	L679288-05	WG702854
1,1,2-Trichloroethane	mg/kg	0.0225	0.0219	90.1	66.3-125	2.86	20	L679288-05	WG702854
1,1-Dichloroethane	mg/kg	0.0245	0.0234	98.0	58.5-132	4.77	20	L679288-05	WG702854
1,1-Dichloroethene	mg/kg	0.0247	0.0233	99.0	51.1-140	6.10	20.2	L679288-05	WG702854
1,1-Dichloropropene	mg/kg	0.0254	0.0243	102.	57.3-136	4.50	20	L679288-05	WG702854
1,2,3-Trichlorobenzene	mg/kg	0.0152	0.0174	60.9	59.1-138	13.2	23.7	L679288-05	WG702854
1,2,3-Trichloropropane	mg/kg	0.0207	0.0209	82.6	61.4-128	1.16	22.4	L679288-05	WG702854
1,2,4-Trichlorobenzene	mg/kg	0.0177	0.0196	70.8	63.6-143	10.4	21.9	L679288-05	WG702854
1,2,4-Trimethylbenzene	mg/kg	0.0220	0.0215	88.2	57.4-137	2.34	20	L679288-05	WG702854
1,2-Dibromo-3-Chloropropane	mg/kg	0.0200	0.0196	80.0	57.3-136	1.88	27	L679288-05	WG702854
1,2-Dibromoethane	mg/kg	0.0231	0.0225	92.3	67.1-125	2.59	20	L679288-05	WG702854
1,2-Dichlorobenzene	mg/kg	0.0221	0.0218	88.5	68.2-123	1.61	20	L679288-05	WG702854
1,2-Dichloroethane	mg/kg	0.0220	0.0219	87.9	60-126	0.540	20	L679288-05	WG702854
1,2-Dichloropropane	mg/kg	0.0233	0.0226	93.4	64.2-123	3.42	20	L679288-05	WG702854
1,3,5-Trimethylbenzene	mg/kg	0.0228	0.0225	91.3	63.6-132	1.51	20.5	L679288-05	WG702854
1,3-Dichlorobenzene	mg/kg	0.0207	0.0216	82.8	63.1-131	4.13	20	L679288-05	WG702854
1,3-Dichloropropane	mg/kg	0.0237	0.0236	94.9	67.9-121	0.460	20	L679288-05	WG702854
1,4-Dichlorobenzene	mg/kg	0.0226	0.0222	90.5	68.6-123	1.86	20	L679288-05	WG702854
2,2-Dichloropropane	mg/kg	0.0253	0.0237	101.	50.5-144	6.28	21.9	L679288-05	WG702854
2-Butanone (MEK)	mg/kg	0.120	0.121	95.7	22.4-138	0.790	27	L679288-05	WG702854
2-Chloroethyl vinyl ether	mg/kg	0.113	0.112	90.3	10-155	0.650	40	L679288-05	WG702854
2-Chlorotoluene	mg/kg	0.0224	0.0216	89.4	63.6-128	3.68	20	L679288-05	WG702854
4-Chlorotoluene	mg/kg	0.0224	0.0225	89.7	65.7-127	0.370	20	L679288-05	WG702854
4-Methyl-2-pentanone (MIBK)	mg/kg	0.110	0.108	88.1	60.8-140	1.55	25.1	L679288-05	WG702854
Acetone	mg/kg	0.0983	0.100	77.0	10-130	1.71	27.9	L679288-05	WG702854
Acrylonitrile	mg/kg	0.100	0.102	80.1	49.4-133	2.05	25.3	L679288-05	WG702854
Benzene	mg/kg	0.0239	0.0231	95.7	54.3-133	3.49	20	L679288-05	WG702854
Bromobenzene	mg/kg	0.0217	0.0217	86.8	63.9-124	0.120	20	L679288-05	WG702854
Bromodichloromethane	mg/kg	0.0191	0.0188	76.4	63.9-121	1.66	20	L679288-05	WG702854
Bromoform	mg/kg	0.0183	0.0192	73.2	59.5-134	4.78	20.8	L679288-05	WG702854
Bromomethane	mg/kg	0.0201	0.0189	80.3	41.7-155	6.13	20.5	L679288-05	WG702854
Carbon tetrachloride	mg/kg	0.0231	0.0224	92.3	55.7-134	2.86	20.3	L679288-05	WG702854
Chlorobenzene	mg/kg	0.0238	0.0233	95.0	67-125	1.73	20	L679288-05	WG702854
Chlorodibromomethane	mg/kg	0.0201	0.0207	80.5	64.3-125	2.79	20	L679288-05	WG702854
Chloroethane	mg/kg	0.0221	0.0211	88.2	51.5-136	4.67	20.8	L679288-05	WG702854
Chloroform	mg/kg	0.0235	0.0226	94.2	63-129	3.90	20	L679288-05	WG702854
Chloromethane	mg/kg	0.0223	0.0209	89.1	42.4-135	6.57	20	L679288-05	WG702854
cis-1,2-Dichloroethene	mg/kg	0.0232	0.0230	92.7	59.2-129	0.890	20	L679288-05	WG702854
cis-1,3-Dichloropropene	mg/kg	0.0224	0.0224	89.5	66.4-125	0.280	20	L679288-05	WG702854
Di-isopropyl ether	mg/kg	0.0234	0.0224	93.8	56.9-136	4.68	20	L679288-05	WG702854
Dibromomethane	mg/kg	0.0209	0.0203	83.8	68.2-124	2.95	20	L679288-05	WG702854
Dichlorodifluoromethane	mg/kg	0.0259	0.0245	104.	40.6-144	5.58	20.2	L679288-05	WG702854
Ethylbenzene	mg/kg	0.0252	0.0233	101.	61.4-133	7.60	20	L679288-05	WG702854
Hexachloro-1,3-butadiene	mg/kg	0.0169	0.0198	67.6	55.1-136	15.7	23.6	L679288-05	WG702854
Isopropylbenzene	mg/kg	0.0262	0.0249	105.	66.8-141	4.88	20	L679288-05	WG702854
Methyl tert-butyl ether	mg/kg	0.0204	0.0198	81.4	57.7-134	2.86	20	L679288-05	WG702854
Methylene Chloride	mg/kg	0.0218	0.0209	87.0	58.1-122	4.00	20	L679288-05	WG702854
n-Butylbenzene	mg/kg	0.0245	0.0241	98.0	62.7-140	1.88	20	L679288-05	WG702854
n-Propylbenzene	mg/kg	0.0236	0.0229	94.3	10-176	2.88	26.6	L679288-05	WG702854
Naphthalene	mg/kg	0.0158	0.0170	63.2	58-135	7.47	25.5	L679288-05	WG702854
p-Isopropyltoluene	mg/kg	0.0230	0.0231	92.0	63.2-139	0.510	20.4	L679288-05	WG702854
sec-Butylbenzene	mg/kg	0.0227	0.0229	91.0	62.2-136	0.550	20.3	L679288-05	WG702854
Styrene	mg/kg	0.0239	0.0232	95.7	66.8-133	3.16	20	L679288-05	WG702854

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tert-Butylbenzene	mg/kg	0.0246	0.0240	98.5	63.3-134	2.46	20.3	L679288-05	WG702854
Tetrachloroethene	mg/kg	0.0242	0.0234	97.0	53-139	3.48	20	L679288-05	WG702854
Toluene	mg/kg	0.0233	0.0221	93.3	61.4-130	5.19	20	L679288-05	WG702854
trans-1,2-Dichloroethene	mg/kg	0.0234	0.0224	93.4	56.5-129	4.42	20	L679288-05	WG702854
trans-1,3-Dichloropropene	mg/kg	0.0218	0.0213	87.3	64.1-128	2.38	20	L679288-05	WG702854
Trichloroethene	mg/kg	0.0227	0.0216	90.9	44.1-149	4.91	20	L679288-05	WG702854
Trichlorofluoromethane	mg/kg	0.0236	0.0219	94.5	49.6-145	7.38	21.2	L679288-05	WG702854
Vinyl chloride	mg/kg	0.0238	0.0223	95.4	47.8-137	6.81	20	L679288-05	WG702854
Xylenes, Total	mg/kg	0.0728	0.0690	97.0	63.3-131	5.36	20	L679288-05	WG702854
4-Bromofluorobenzene				88.20	71-126				WG702854
Dibromofluoromethane				90.90	78.3-121				WG702854
Toluene-d8				96.40	88.5-111				WG702854
a,a,a-Trifluorotoluene				95.00	85-114				WG702854
1,2,4-Trichlorobenzene	mg/kg	0.238	0.225	71.6	36.5-114	5.95	28.4	L678919-03	WG702939
2,4,6-Trichlorophenol	mg/kg	0.270	0.258	81.1	33.8-133	4.56	28.1	L678919-03	WG702939
2,4-Dichlorophenol	mg/kg	0.286	0.268	85.9	34.8-134	6.48	27.3	L678919-03	WG702939
2,4-Dimethylphenol	mg/kg	0.314	0.312	94.3	12.3-149	0.770	32.3	L678919-03	WG702939
2,4-Dinitrophenol	mg/kg	0.245	0.236	73.6	10-121	3.72	39.4	L678919-03	WG702939
2,4-Dinitrotoluene	mg/kg	0.316	0.298	94.9	27.8-147	5.91	29.7	L678919-03	WG702939
2,6-Dinitrotoluene	mg/kg	0.300	0.277	90.1	36.5-137	7.98	29.7	L678919-03	WG702939
2-Chloronaphthalene	mg/kg	0.238	0.224	71.5	37.5-123	5.88	26.5	L678919-03	WG702939
2-Chlorophenol	mg/kg	0.241	0.232	72.3	33.2-121	3.47	29.3	L678919-03	WG702939
2-Nitrophenol	mg/kg	0.300	0.282	90.2	29.5-144	6.37	29.9	L678919-03	WG702939
3,3-Dichlorobenzidine	mg/kg	0.222	0.217	66.5	10-129	1.92	40	L678919-03	WG702939
4,6-Dinitro-2-methylphenol	mg/kg	0.329	0.327	98.8	10-144	0.590	32.7	L678919-03	WG702939
4-Bromophenyl-phenylether	mg/kg	0.263	0.259	79.1	39-130	1.75	26	L678919-03	WG702939
4-Chloro-3-methylphenol	mg/kg	0.308	0.301	92.6	27-154	2.46	26.6	L678919-03	WG702939
4-Chlorophenyl-phenylether	mg/kg	0.234	0.223	70.4	37.9-123	5.17	25.9	L678919-03	WG702939
4-Nitrophenol	mg/kg	0.272	0.260	81.6	20-133	4.38	30.2	L678919-03	WG702939
Acenaphthene	mg/kg	0.253	0.238	76.0	32.2-134	6.07	27.3	L678919-03	WG702939
Acenaphthylene	mg/kg	0.250	0.236	75.0	38.7-129	5.69	25.9	L678919-03	WG702939
Anthracene	mg/kg	0.273	0.263	81.8	32.3-137	3.54	28.4	L678919-03	WG702939
Benzidine	mg/kg	0.000092	0.00153	0.0280	0-49.9	177.*	40	L678919-03	WG702939
Benzo(a)anthracene	mg/kg	0.241	0.223	72.4	33.3-124	7.76	29	L678919-03	WG702939
Benzo(a)pyrene	mg/kg	0.227	0.215	68.1	28.2-128	5.48	28.4	L678919-03	WG702939
Benzo(b)fluoranthene	mg/kg	0.237	0.229	71.2	23.3-133	3.54	30.3	L678919-03	WG702939
Benzo(g,h,i)perylene	mg/kg	0.245	0.238	73.6	10-127	3.05	31.9	L678919-03	WG702939
Benzo(k)fluoranthene	mg/kg	0.246	0.231	73.8	31-129	6.19	26.7	L678919-03	WG702939
Benzylbutyl phthalate	mg/kg	0.334	0.312	100.	33.4-128	6.89	28.5	L678919-03	WG702939
Bis(2-chlorethoxy)methane	mg/kg	0.252	0.244	75.5	35-132	2.89	26.1	L678919-03	WG702939
Bis(2-chloroethyl)ether	mg/kg	0.206	0.191	61.7	28.8-128	7.17	33.6	L678919-03	WG702939
Bis(2-chloroisopropyl)ether	mg/kg	0.257	0.246	77.1	31.8-118	4.39	31.7	L678919-03	WG702939
Bis(2-ethylhexyl)phthalate	mg/kg	0.295	0.275	88.6	21.8-141	7.00	35.2	L678919-03	WG702939
Chrysene	mg/kg	0.247	0.238	74.2	36.3-129	3.92	28	L678919-03	WG702939
Di-n-butyl phthalate	mg/kg	0.322	0.322	96.6	32.2-133	0.0100	25.9	L678919-03	WG702939
Di-n-octyl phthalate	mg/kg	0.296	0.276	88.9	28.5-128	6.84	32.5	L678919-03	WG702939
Dibenz(a,h)anthracene	mg/kg	0.255	0.247	76.5	10.5-128	3.22	29.5	L678919-03	WG702939
Diethyl phthalate	mg/kg	0.304	0.285	91.3	39.4-136	6.38	25.5	L678919-03	WG702939
Dimethyl phthalate	mg/kg	0.295	0.266	88.5	35.8-137	10.4	25.4	L678919-03	WG702939
Fluoranthene	mg/kg	0.252	0.245	75.7	27.9-138	2.81	26.9	L678919-03	WG702939
Fluorene	mg/kg	0.266	0.241	80.0	34-133	9.83	27.1	L678919-03	WG702939
Hexachloro-1,3-butadiene	mg/kg	0.286	0.264	85.9	36.5-125	8.07	29.7	L678919-03	WG702939
Hexachlorobenzene	mg/kg	0.288	0.274	86.6	34.4-116	5.25	25.4	L678919-03	WG702939
Hexachlorocyclopentadiene	mg/kg	0.229	0.210	68.8	10-124	8.74	37.5	L678919-03	WG702939
Hexachloroethane	mg/kg	0.268	0.246	80.6	11.3-143	8.63	31.9	L678919-03	WG702939
Indeno(1,2,3-cd)pyrene	mg/kg	0.254	0.248	76.2	10-128	2.17	31.5	L678919-03	WG702939
Isophorone	mg/kg	0.310	0.289	93.0	25.7-116	6.99	27.7	L678919-03	WG702939

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Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	MSD	Matrix Spike Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
n-Nitrosodi-n-propylamine	mg/kg	0.256	0.249	77.0	33-134	2.77	28.2	L678919-03	WG702939
n-Nitrosodimethylamine	mg/kg	0.214	0.207	64.4	19.2-127	3.73	32	L678919-03	WG702939
n-Nitrosodiphenylamine	mg/kg	0.297	0.296	89.3	26.8-133	0.440	25.9	L678919-03	WG702939
Naphthalene	mg/kg	0.234	0.217	70.2	36.4-121	7.17	27.2	L678919-03	WG702939
Nitrobenzene	mg/kg	0.265	0.255	79.5	30.9-134	3.73	27.8	L678919-03	WG702939
Pentachlorophenol	mg/kg	0.307	0.324	92.1	10-139	5.39	28.3	L678919-03	WG702939
Phenanthrene	mg/kg	0.251	0.251	75.4	30.8-137	0.0100	26.5	L678919-03	WG702939
Phenol	mg/kg	0.243	0.234	72.9	25.1-130	3.57	29.6	L678919-03	WG702939
Pyrene	mg/kg	0.241	0.229	72.4	24.1-130	5.40	29.9	L678919-03	WG702939
2,4,6-Tribromophenol				104.0	21.6-142				WG702939
2-Fluorobiphenyl				66.80	34.9-129				WG702939
2-Fluorophenol				65.10	21.1-116				WG702939
Nitrobenzene-d5				73.60	21.9-129				WG702939
Phenol-d5				71.50	26.3-121				WG702939
p-Terphenyl-d14				58.30	21.5-128				WG702939
1,1,1,2-Tetrachloroethane	mg/l	0.0253	0.0244	101.	64-128	3.88	20	L679341-01	WG702839
1,1,1-Trichloroethane	mg/l	0.0238	0.0235	95.1	58.7-134	1.13	20	L679341-01	WG702839
1,1,2,2-Tetrachloroethane	mg/l	0.0238	0.0229	95.1	56-132	3.75	22.2	L679341-01	WG702839
1,1,2-Trichloroethane	mg/l	0.0245	0.0245	97.9	66.3-125	0.0100	20	L679341-01	WG702839
1,1,2-Trichlorotrifluoroethane	mg/l	0.0242	0.0230	96.9	54.8-154	5.13	22.5	L679341-01	WG702839
1,1-Dichloroethane	mg/l	0.0240	0.0234	96.0	58.5-132	2.45	20	L679341-01	WG702839
1,1-Dichloroethene	mg/l	0.0230	0.0220	92.0	51.1-140	4.47	20.2	L679341-01	WG702839
1,1-Dichloropropene	mg/l	0.0235	0.0230	94.1	57.3-136	2.24	20	L679341-01	WG702839
1,2,3-Trichlorobenzene	mg/l	0.0253	0.0249	101.	59.1-138	1.79	23.7	L679341-01	WG702839
1,2,3-Trichloropropane	mg/l	0.0245	0.0235	98.0	61.4-128	4.40	22.4	L679341-01	WG702839
1,2,3-Trimethylbenzene	mg/l	0.0209	0.0205	83.7	61.3-122	2.24	20	L679341-01	WG702839
1,2,4-Trichlorobenzene	mg/l	0.0273	0.0267	109.	63.6-143	2.43	21.9	L679341-01	WG702839
1,2,4-Trimethylbenzene	mg/l	0.0246	0.0239	98.3	57.4-137	2.59	20	L679341-01	WG702839
1,2-Dibromo-3-Chloropropane	mg/l	0.0243	0.0247	97.4	57.3-136	1.50	27	L679341-01	WG702839
1,2-Dibromoethane	mg/l	0.0250	0.0243	100.	67.1-125	2.77	20	L679341-01	WG702839
1,2-Dichlorobenzene	mg/l	0.0247	0.0244	98.8	68.2-123	1.01	20	L679341-01	WG702839
1,2-Dichloroethane	mg/l	0.0232	0.0227	92.8	60-126	2.12	20	L679341-01	WG702839
1,2-Dichloropropane	mg/l	0.0236	0.0232	94.2	64.2-123	1.53	20	L679341-01	WG702839
1,3,5-Trimethylbenzene	mg/l	0.0251	0.0240	100.	63.6-132	4.44	20.5	L679341-01	WG702839
1,3-Dichlorobenzene	mg/l	0.0249	0.0238	99.8	63.1-131	4.76	20	L679341-01	WG702839
1,3-Dichloropropane	mg/l	0.0236	0.0229	94.4	67.9-121	2.89	20	L679341-01	WG702839
1,4-Dichlorobenzene	mg/l	0.0240	0.0242	95.9	68.6-123	1.04	20	L679341-01	WG702839
2,2-Dichloropropane	mg/l	0.0247	0.0250	98.6	50.5-144	1.27	21.9	L679341-01	WG702839
2-Butanone (MEK)	mg/l	0.116	0.116	92.7	22.4-138	0.150	27	L679341-01	WG702839
2-Chloroethyl vinyl ether	mg/l	0.0119	0.0328	9.49*	10-155	93.7*	20	L679341-01	WG702839
2-Chlorotoluene	mg/l	0.0247	0.0233	98.8	63.6-128	5.61	20	L679341-01	WG702839
4-Chlorotoluene	mg/l	0.0249	0.0238	99.7	65.7-127	4.56	20	L679341-01	WG702839
4-Methyl-2-pentanone (MIBK)	mg/l	0.127	0.122	102.	60.8-140	3.78	25.1	L679341-01	WG702839
Acetone	mg/l	0.113	0.113	86.2	10-130	0.0900	27.9	L679341-01	WG702839
Acrolein	mg/l	0.123	0.126	98.4	10-200	2.35	27.7	L679341-01	WG702839
Acrylonitrile	mg/l	0.123	0.121	98.3	49.4-133	1.47	25.3	L679341-01	WG702839
Benzene	mg/l	0.0228	0.0226	91.3	54.3-133	1.03	20	L679341-01	WG702839
Bromobenzene	mg/l	0.0238	0.0226	95.0	63.9-124	5.02	20	L679341-01	WG702839
Bromodichloromethane	mg/l	0.0236	0.0234	94.4	63.9-121	0.770	20	L679341-01	WG702839
Bromoform	mg/l	0.0259	0.0252	104.	59.5-134	2.88	20.5	L679341-01	WG702839
Bromomethane	mg/l	0.0269	0.0245	107.	41.7-155	9.14	21.9	L679341-01	WG702839
Carbon tetrachloride	mg/l	0.0239	0.0233	95.4	55.7-134	2.43	20	L679341-01	WG702839
Chlorobenzene	mg/l	0.0250	0.0245	100.	67-125	2.16	20	L679341-01	WG702839
Chlorodibromomethane	mg/l	0.0243	0.0239	97.1	64.3-125	1.50	20.8	L679341-01	WG702839
Chloroethane	mg/l	0.0216	0.0213	86.2	51.5-136	1.38	40	L679341-01	WG702839
Chloroform	mg/l	0.0237	0.0227	94.9	63-129	4.23	20	L679341-01	WG702839
Chloromethane	mg/l	0.0210	0.0202	84.1	42.4-135	3.80	20	L679341-01	WG702839

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Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
cis-1,2-Dichloroethene	mg/l	0.0236	0.0228	94.4	59.2-129	3.60	20	L679341-01	WG702839
cis-1,3-Dichloropropene	mg/l	0.0240	0.0239	96.0	66.4-125	0.250	20	L679341-01	WG702839
Di-isopropyl ether	mg/l	0.0235	0.0227	94.0	56.9-136	3.58	20	L679341-01	WG702839
Dibromomethane	mg/l	0.0246	0.0239	98.3	68.2-124	2.62	20	L679341-01	WG702839
Dichlorodifluoromethane	mg/l	0.0232	0.0223	92.9	40.6-144	3.95	20.2	L679341-01	WG702839
Ethylbenzene	mg/l	0.0248	0.0244	99.1	61.4-133	1.55	20	L679341-01	WG702839
Hexachloro-1,3-butadiene	mg/l	0.0237	0.0231	94.8	55.1-136	2.51	23.6	L679341-01	WG702839
Isopropylbenzene	mg/l	0.0272	0.0267	109.	66.8-141	1.81	20	L679341-01	WG702839
Methyl tert-butyl ether	mg/l	0.0233	0.0225	93.3	57.7-134	3.58	20	L679341-01	WG702839
Methylene Chloride	mg/l	0.0216	0.0206	86.2	58.1-122	4.48	20	L679341-01	WG702839
n-Butylbenzene	mg/l	0.0257	0.0253	103.	62.7-140	1.52	20.3	L679341-01	WG702839
n-Propylbenzene	mg/l	0.0250	0.0236	100.	65.9-131	5.62	20	L679341-01	WG702839
Naphthalene	mg/l	0.0248	0.0242	99.0	58-135	2.47	25.5	L679341-01	WG702839
p-Isopropyltoluene	mg/l	0.0260	0.0250	104.	63.2-139	3.88	20.4	L679341-01	WG702839
sec-Butylbenzene	mg/l	0.0252	0.0240	101.	62.2-136	4.58	20.3	L679341-01	WG702839
Styrene	mg/l	0.0266	0.0260	106.	66.8-133	2.20	20	L679341-01	WG702839
tert-Butylbenzene	mg/l	0.0253	0.0245	101.	63.3-134	3.20	21	L679341-01	WG702839
Tetrachloroethene	mg/l	0.0242	0.0236	96.8	53-139	2.64	20	L679341-01	WG702839
Toluene	mg/l	0.0240	0.0232	96.1	61.4-130	3.27	20	L679341-01	WG702839
trans-1,2-Dichloroethene	mg/l	0.0231	0.0222	92.4	56.5-129	3.81	20	L679341-01	WG702839
trans-1,3-Dichloropropene	mg/l	0.0249	0.0246	99.6	64.1-128	1.15	20	L679341-01	WG702839
Trichloroethene	mg/l	0.0239	0.0231	95.4	44.1-149	3.16	20	L679341-01	WG702839
Trichlorofluoromethane	mg/l	0.0239	0.0239	95.5	49.6-145	0.160	21.2	L679341-01	WG702839
Vinyl chloride	mg/l	0.0227	0.0218	90.6	47.8-137	4.08	20	L679341-01	WG702839
Xylenes, Total	mg/l	0.0749	0.0729	99.9	63.3-131	2.72	20	L679341-01	WG702839
4-Bromofluorobenzene				102.0	71-126				WG702839
Dibromofluoromethane				103.0	78.3-121				WG702839
Toluene-d8				106.0	88.5-111				WG702839
a,a,a-Trifluorotoluene				104.0	85-114				WG702839
Antimony	mg/l	0.0465	0.0470	92.2	75-125	1.00	20	L679288-04	WG702820
Arsenic	mg/l	0.0464	0.0474	90.9	75-125	2.00	20	L679288-04	WG702820
Lead	mg/l	0.0473	0.0485	94.1	75-125	3.00	20	L679288-04	WG702820
Thallium	mg/l	0.0477	0.0489	95.8	75-125	3.00	20	L679288-04	WG702820
Beryllium	mg/l	1.08	1.09	108.	75-125	0.0	20	L679230-02	WG702798
Cadmium	mg/l	1.07	1.09	107.	75-125	2.00	20	L679230-02	WG702798
Chromium	mg/l	1.08	1.09	108.	75-125	1.00	20	L679230-02	WG702798
Copper	mg/l	1.07	1.09	107.	75-125	2.00	20	L679230-02	WG702798
Nickel	mg/l	0.990	0.998	97.9	75-125	1.00	20	L679230-02	WG702798
Selenium	mg/l	1.07	1.08	108.	75-125	1.00	20	L679230-02	WG702798
Silver	mg/l	0.0441	0.0397	4.35*	75-125	11.0	20	L679230-02	WG702798
Zinc	mg/l	1.10	1.12	108.	75-125	2.00	20	L679230-02	WG702798
1,1,1,2-Tetrachloroethane	mg/l	0.0212	0.0223	84.7	64-128	5.36	20	L679341-08	WG703279
1,1,1-Trichloroethane	mg/l	0.0226	0.0238	90.4	58.7-134	5.21	20	L679341-08	WG703279
1,1,2,2-Tetrachloroethane	mg/l	0.0201	0.0215	80.4	56-132	6.91	22.2	L679341-08	WG703279
1,1,2-Trichloroethane	mg/l	0.0210	0.0229	84.2	66.3-125	8.39	20	L679341-08	WG703279
1,1,2-Trichlorotrifluoroethane	mg/l	0.0249	0.0267	99.6	54.8-154	6.85	22.5	L679341-08	WG703279
1,1-Dichloroethane	mg/l	0.0237	0.0243	94.8	58.5-132	2.64	20	L679341-08	WG703279
1,1-Dichloroethene	mg/l	0.0237	0.0247	94.7	51.1-140	4.30	20.2	L679341-08	WG703279
1,1-Dichloropropene	mg/l	0.0246	0.0259	98.6	57.3-136	5.06	20	L679341-08	WG703279
1,2,3-Trichlorobenzene	mg/l	0.0217	0.0232	87.0	59.1-138	6.62	23.7	L679341-08	WG703279
1,2,3-Trichloropropane	mg/l	0.0212	0.0225	84.9	61.4-128	5.90	22.4	L679341-08	WG703279
1,2,3-Trimethylbenzene	mg/l	0.0189	0.0202	75.6	61.3-122	6.53	20	L679341-08	WG703279
1,2,4-Trichlorobenzene	mg/l	0.0236	0.0251	94.4	63.6-143	6.40	21.9	L679341-08	WG703279

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Level II

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January 29, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,2,4-Trimethylbenzene	mg/l	0.0224	0.0233	89.6	57.4-137	4.06	20	L679341-08	WG703279
1,2-Dibromo-3-Chloropropane	mg/l	0.0188	0.0206	75.3	57.3-136	9.23	27	L679341-08	WG703279
1,2-Dibromoethane	mg/l	0.0219	0.0240	87.6	67.1-125	9.07	20	L679341-08	WG703279
1,2-Dichlorobenzene	mg/l	0.0225	0.0237	90.1	68.2-123	5.25	20	L679341-08	WG703279
1,2-Dichloroethane	mg/l	0.0221	0.0234	88.5	60-126	5.52	20	L679341-08	WG703279
1,2-Dichloropropane	mg/l	0.0227	0.0237	90.7	64.2-123	4.34	20	L679341-08	WG703279
1,3,5-Trimethylbenzene	mg/l	0.0230	0.0239	91.8	63.6-132	3.94	20.5	L679341-08	WG703279
1,3-Dichlorobenzene	mg/l	0.0232	0.0245	92.8	63.1-131	5.40	20	L679341-08	WG703279
1,3-Dichloropropane	mg/l	0.0226	0.0244	90.5	67.9-121	7.55	20	L679341-08	WG703279
1,4-Dichlorobenzene	mg/l	0.0220	0.0240	88.0	68.6-123	8.54	20	L679341-08	WG703279
2,2-Dichloropropane	mg/l	0.0230	0.0236	91.8	50.5-144	2.73	21.9	L679341-08	WG703279
2-Butanone (MEK)	mg/l	0.111	0.113	88.5	22.4-138	2.03	27	L679341-08	WG703279
2-Chloroethyl vinyl ether	mg/l	0.00150	0.00352	1.20*	10-155	80.5*	20	L679341-08	WG703279
2-Chlorotoluene	mg/l	0.0223	0.0234	89.2	63.6-128	4.78	20	L679341-08	WG703279
4-Chlorotoluene	mg/l	0.0232	0.0246	92.8	65.7-127	5.91	20	L679341-08	WG703279
4-Methyl-2-pentanone (MIBK)	mg/l	0.115	0.120	91.9	60.8-140	4.04	25.1	L679341-08	WG703279
Acetone	mg/l	0.0766	0.0785	58.8	10-130	2.50	27.9	L679341-08	WG703279
Acrolein	mg/l	0.251	0.262	200.	10-200	4.37	27.7	L679341-08	WG703279
Acrylonitrile	mg/l	0.111	0.115	89.2	49.4-133	3.39	25.3	L679341-08	WG703279
Benzene	mg/l	0.0233	0.0245	93.1	54.3-133	4.94	20	L679341-08	WG703279
Bromobenzene	mg/l	0.0223	0.0233	89.4	63.9-124	4.23	20	L679341-08	WG703279
Bromodichloromethane	mg/l	0.0190	0.0204	75.9	63.9-121	7.31	20	L679341-08	WG703279
Bromoform	mg/l	0.0195	0.0214	78.2	59.5-134	8.98	20.5	L679341-08	WG703279
Bromomethane	mg/l	0.0194	0.0206	77.6	41.7-155	5.96	21.9	L679341-08	WG703279
Carbon tetrachloride	mg/l	0.0221	0.0233	88.2	55.7-134	5.68	20	L679341-08	WG703279
Chlorobenzene	mg/l	0.0226	0.0244	90.6	67-125	7.30	20	L679341-08	WG703279
Chlorodibromomethane	mg/l	0.0204	0.0220	81.5	64.3-125	7.42	20.8	L679341-08	WG703279
Chloroethane	mg/l	0.0210	0.0220	83.8	51.5-136	4.98	40	L679341-08	WG703279
Chloroform	mg/l	0.0229	0.0240	91.5	63-129	4.70	20	L679341-08	WG703279
Chloromethane	mg/l	0.0194	0.0203	77.5	42.4-135	4.60	20	L679341-08	WG703279
cis-1,2-Dichloroethene	mg/l	0.0227	0.0239	90.9	59.2-129	5.14	20	L679341-08	WG703279
cis-1,3-Dichloropropene	mg/l	0.0222	0.0238	88.8	66.4-125	6.88	20	L679341-08	WG703279
Di-isopropyl ether	mg/l	0.0230	0.0234	92.1	56.9-136	1.65	20	L679341-08	WG703279
Dibromomethane	mg/l	0.0213	0.0226	85.0	68.2-124	6.03	20	L679341-08	WG703279
Dichlorodifluoromethane	mg/l	0.0204	0.0210	81.5	40.6-144	2.89	20.2	L679341-08	WG703279
Ethylbenzene	mg/l	0.0236	0.0244	94.5	61.4-133	3.43	20	L679341-08	WG703279
Hexachloro-1,3-butadiene	mg/l	0.0235	0.0247	93.9	55.1-136	4.98	23.6	L679341-08	WG703279
Isopropylbenzene	mg/l	0.0252	0.0262	101.	66.8-141	3.65	20	L679341-08	WG703279
Methyl tert-butyl ether	mg/l	0.0205	0.0210	82.1	57.7-134	2.06	20	L679341-08	WG703279
Methylene Chloride	mg/l	0.0215	0.0227	86.2	58.1-122	5.25	20	L679341-08	WG703279
n-Butylbenzene	mg/l	0.0245	0.0260	98.0	62.7-140	6.02	20.3	L679341-08	WG703279
n-Propylbenzene	mg/l	0.0236	0.0246	94.4	65.9-131	4.33	20	L679341-08	WG703279
Naphthalene	mg/l	0.0205	0.0215	81.8	58-135	5.16	25.5	L679341-08	WG703279
p-Isopropyltoluene	mg/l	0.0243	0.0252	97.4	63.2-139	3.36	20.4	L679341-08	WG703279
sec-Butylbenzene	mg/l	0.0240	0.0251	96.1	62.2-136	4.48	20.3	L679341-08	WG703279
Styrene	mg/l	0.0233	0.0246	93.1	66.8-133	5.33	20	L679341-08	WG703279
tert-Butylbenzene	mg/l	0.0246	0.0256	98.3	63.3-134	4.10	21	L679341-08	WG703279
Tetrachloroethene	mg/l	0.0222	0.0242	88.9	53-139	8.63	20	L679341-08	WG703279
Toluene	mg/l	0.0225	0.0240	90.0	61.4-130	6.28	20	L679341-08	WG703279
trans-1,2-Dichloroethene	mg/l	0.0227	0.0233	90.8	56.5-129	2.68	20	L679341-08	WG703279
trans-1,3-Dichloropropene	mg/l	0.0211	0.0229	84.5	64.1-128	8.24	20	L679341-08	WG703279
Trichloroethene	mg/l	0.0219	0.0235	87.6	44.1-149	7.00	20	L679341-08	WG703279
Trichlorofluoromethane	mg/l	0.0222	0.0233	88.6	49.6-145	4.92	21.2	L679341-08	WG703279
Vinyl chloride	mg/l	0.0220	0.0229	87.8	47.8-137	4.17	20	L679341-08	WG703279
Xylenes, Total	mg/l	0.0691	0.0730	92.1	63.3-131	5.62	20	L679341-08	WG703279
4-Bromofluorobenzene				94.10	71-126				WG703279
Dibromofluoromethane				94.70	78.3-121				WG703279
Toluene-d8				97.50	88.5-111				WG703279
a,a,a-Trifluorotoluene				97.30	85-114				WG703279

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L679288

January 29, 2014

Analyte	Units	Matrix Spike MSD	Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
PCB 1016	mg/kg	0.127	0.115	75.9	23.5-134	9.89	25.8	L678898-02	WG702937
PCB 1260	mg/kg	0.128	0.108	76.7	16.1-139	16.6	25.9	L678898-02	WG702937
Decachlorobiphenyl				82.60	10-145				WG702937
Tetrachloro-m-xylene				96.30	21.1-148				WG702937
Beryllium	mg/l	1.06	1.05	106.	75-125	1.00	20	L679230-02	WG702798
Cadmium	mg/l	1.05	1.04	104.	75-125	0.0	20	L679230-02	WG702798
Chromium	mg/l	1.05	1.05	104.	75-125	0.0	20	L679230-02	WG702798
Copper	mg/l	1.06	1.06	106.	75-125	0.0	20	L679230-02	WG702798
Nickel	mg/l	0.966	0.966	95.8	75-125	0.0	20	L679230-02	WG702798
Selenium	mg/l	1.05	1.05	105.	75-125	0.0	20	L679230-02	WG702798
Silver	mg/l	0.0349	0.0353	3.66*	75-125	1.00	20	L679230-02	WG702798
Zinc	mg/l	1.08	1.08	106.	75-125	0.0	20	L679230-02	WG702798
Arsenic	mg/kg	45.8	55.9	43.7*	75-125	20.0	20	L679288-01	WG703709
Cadmium	mg/kg	56.0	60.0	107.	75-125	7.00	20	L679288-01	WG703709
Chromium	mg/kg	174.	185.	55.4*	75-125	6.00	20	L679288-01	WG703709
Copper	mg/kg	194.	187.	125.	75-125	4.00	20	L679288-01	WG703709
Lead	mg/kg	131.	110.	151.*	75-125	18.0	20	L679288-01	WG703709
Nickel	mg/kg	82.4	85.4	104.	75-125	4.00	20	L679288-01	WG703709
Selenium	mg/kg	9.70	14.7	28.8*	75-125	41.0*	20	L679288-01	WG703709
Silver	mg/kg	55.7	59.8	108.	75-125	7.00	20	L679288-01	WG703709
Thallium	mg/kg	47.2	51.8	106.	75-125	9.00	20	L679288-01	WG703709
Zinc	mg/kg	71.8	81.6	119.	75-125	13.0	20	L679288-01	WG703709
Beryllium	mg/kg	50.2	51.2	98.2	75-125	2.00	20	L679288-01	WG703709
Antimony	mg/kg	9.86	10.1	18.2*	75-125	3.00	20	L679288-01	WG703709

Post Spike

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L679288

January 29, 2014

Post Spike

Serial Dilution

* Performance of this Analyte is outside of established criteria.
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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L679288

January 29, 2014

Batch number /Run number / Sample number cross reference

WG702817: R2878680: L679288-01 02 03 05 06 07 08 10 11
WG702620: R2878820 R2878828: L679288-04
WG702733: R2878971 R2879109: L679288-01 02 03 05 06 07
WG702882: R2879105: L679288-04
WG702792: R2879107: L679288-08 10 11
WG702854: R2879260: L679288-01 02 03 05 06 07 08 10 11
WG702937: R2879313 R2879943 R2880065: L679288-10 11
WG702939: R2879341: L679288-01 02 03 05 06 07 08 10 11
WG702839: R2879438: L679288-04
WG702820: R2879486: L679288-04
WG702798: R2879700 R2880121: L679288-04
WG703279: R2879849: L679288-09
WG703709: R2880573 R2880630: L679288-01 02 03 05 06 07 08 10 11

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L679288

January 29, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____ Same Day 200%
____ Next Day 100%
____ Two Day 50%
____ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
1-SB-A (9.5-10.5')	G	SS	9.5-10.5'	1/20/14	1000	6	X	X	X									01
1-SB-B (4-5')	↓	↓	4-5'	↓	1045	↓	X	X	X									02
1-SB-C (5.5-6')	↓	↓	5.5-6'		1105		X	X	X									03
EB-5	N/A	W	N/A		1115	5	X	X	X									04
1-SB-D (4-5')	G	SS	4-5'		1135		X	X	X									05
1-SB-E (~~3-4'~~)	↓	↓	3-4'		1200		X	X	X									06
1-SB-F (11-12')	↓	↓	11-12'	↓	1345	↓	X	X	X									07
1-SB-G (7-8')	↓		7-8'	1/21/14	0900	6	X	X	X									08
Trip Blank	N/A	W	N/A	→	→	2	X											09

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other _____ MT

Remarks: No TICs on EB or TB

pH _____ Temp _____
Flow _____ Other _____

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Daphne M Jones	1/21/14	12:30	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/21/14	17:20	[signature]

Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☑ SW

Temp: 3.6 °C Bottles Received: 63

Date: 1-22-14 Time: 0930

Hold #

Condition: (lab use only) JW

COC Seal Intact: ___Y ___N ___NA

pH Checked: <2 NCF: X

Chain of Custody Page 1 of 2

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1679288
T 1205
Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Daphne Jones

Site/Facility ID #

P.O. #

Collected by (signature): Daphne M Jones

Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____ Same Day 200%
____ Next Day 100%
____ Two Day 50%
____ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

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YOUR LAB OF CHOICE
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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1679288
Table #
Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH	Rem./Contaminant	Sample # (lab only)
5-SB-F(4-5')	G	SS	4-5'	1/20/14	1440	7	X	X	X		X						10
5-HA-G(3.5-4')	L	↓	3.5	↓	1540	↓	X	X	X		X						11

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SW
Daphne M Jones	1/21/14	12:30	[illegible]	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.6 °C Bottles Received: 10
Relinquished by : (Signature)	Date: 1/22/14	Time: 17:20	Received for lab by: (Signature) [illegible]	Date: 1-22-14 Time: 0930

Condition: (lab use only) SW

COC Seal Intact: ___Y ___N ___NA

pH Checked: <2

NCF: X

ESC

L·A·B S·C·I·E·N·C·E·S

NON-CONFORMANCE FORM

Login No.: L69288

Date: 1-22-14

Evaluated by: MARK TREXLER

Client: DUNDUNNC

Non-Conformance (check applicable items)

- ☐ Parameter(s) past holding time
- ☐ Improper temperature
- ☐ Improper container type
- ☐ Improper preservation
- ☐ Container lid not intact
- ☑ Login Clarification Needed
- ☐ Chain of custody is incomplete
- ☐ Chain of Custody is missing (see below)
- ☐ Broken container(s) (See below)
- ☐ Broken container: sufficient sample volume remains for analysis requested (See below)

If no COC: Received by_____
Date:_____ Time:_____
Temp:____ Cont. Rec____ pH:____
☐ Fedex ☐ UPS ☐SWA ☐ Other____
Tracking #_____

- ☐ Insufficient packing material around container
- ☐ Insufficient packing material inside cooler
- ☐ Improper handling by carrier (FedEx / UPS / Courier
- ☐ Sample was frozen

Comments: FOR SAMPLE IDs ON PG. 2 OF COC, RECEIVED 7 CONTAINERS EACH WITH CUSTOMER LABELS WITH 4-SB-F (4-5') AND 4-SB-G (3.5-4') INSTEAD OF SAMPLE IDs LISTED ON COC.

Login Instructions: **TSR Initials:** JEW

Client informed by (call) / email / fax / voice mail date: 1/22/14 time: 1025
Client contact: Daphne Jones

Log by COC IDs.

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-A 9.5-10.5 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-01

Date Collected: 1/20/2014

Lab File ID: 0124_16

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-A 9.5-10.5 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-01

Date Collected: 1/20/2014

Lab File ID: 0124_17

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.06	0.147	83.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-B 4-5 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-02

Date Collected: 1/20/2014

Lab File ID: 0124_17

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-B 4-5 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-02

Date Collected: 1/20/2014

Lab File ID: 0124_18

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 4

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000060-33-3	9,12-Octadecadienoic acid (Z,Z)-	8.77	0.035	95.00	J
002492-22-0	cis-2,6-Dimethyl-2,6-octadiene	11.60	0.063	68.00	J
038147-00-1	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(	7.83	0.021	64.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.43	0.078	59.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-C 5.5-6 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-03

Date Collected: 1/20/2014

Lab File ID: 0124_18

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-C 5.5-6 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-03

Date Collected: 1/20/2014

Lab File ID: 0124_19

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.06	0.151	83.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-D 4-5 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-05

Date Collected: 1/20/2014

Lab File ID: 0124_10

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-D 4-5 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-05

Date Collected: 1/20/2014

Lab File ID: 0124_20

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
038147-00-1	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(	9.69	0.030	59.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-E 3-4 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-06

Date Collected: 1/20/2014

Lab File ID: 0124_19

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-E 3-4 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-06

Date Collected: 1/20/2014

Lab File ID: 0124_24

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 6

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000084-65-1	9,10-Anthracenedione	8.58	0.022	96.00	J
002039-76-1	3-Acetylphenanthrene	9.38	0.028	96.00	J
001576-67-6	Phenanthrene, 3,6-dimethyl-	8.78	0.050	95.00	J
000483-65-8	Phenanthrene, 1-methyl-7-(1-methyl	9.25	0.037	74.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.06	0.146	72.00	J
002381-21-7	Pyrene, 1-methyl-	9.22	0.022	64.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-F 11-12 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-07

Date Collected: 1/20/2014

Lab File ID: 0124_20

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-F 11-12 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-07

Date Collected: 1/20/2014

Lab File ID: 0124_21

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.06	0.152	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-G 7-8 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-08

Date Collected: 1/21/2014

Lab File ID: 0124_21

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 1-SB-G 7-8 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-08

Date Collected: 1/21/2014

Lab File ID: 0124_22

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.06	0.155	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-F 4-5 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-10

Date Collected: 1/20/2014

Lab File ID: 0124_22

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-F 4-5 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-10

Date Collected: 1/20/2014

Lab File ID: 0124_23

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.06	0.160	83.00	J

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-F 4-5 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-10

Date Collected: 1/20/2014

Lab File ID: 0124_20

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-G 3.5-4 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-11

Date Collected: 1/20/2014

Lab File ID: 0124_23

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-G 3.5-4 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-11

Date Collected: 1/20/2014

Lab File ID: 0124_28

Date Analyzed: 1/24/2014

Dilution Factor: 20.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 16

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000832-64-4	Phenanthrene, 4-methyl-	8.40	2.30	96.00	J
003674-66-6	Phenanthrene, 2,5-dimethyl-	8.78	2.12	96.00	J
000243-17-4	11H-Benzo[b]fluorene	9.42	0.498	94.00	J
001705-84-6	Triphenylene, 2-methyl-	10.84	1.22	94.00	J
003674-69-9	Phenanthrene, 4,5-dimethyl-	8.67	1.71	93.00	J
000207-08-9	Benzo[k]fluoranthene	12.42	1.04	93.00	J
000610-48-0	Anthracene, 1-methyl-	8.38	0.868	91.00	J
001576-67-6	Phenanthrene, 3,6-dimethyl-	8.74	0.534	90.00	J
002381-21-7	Pyrene, 1-methyl-	9.22	0.761	90.00	J
001576-69-8	Phenanthrene, 2,7-dimethyl-	8.76	0.625	86.00	J

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-G 3.5-4 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-11

Date Collected: 1/20/2014

Lab File ID: 0124_28

Date Analyzed: 1/24/2014

Dilution Factor: 20.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 16

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
007396-38-5	Phenanthrene, 2,4,5,7-tetramethyl-	9.25	4.14	83.00	J
000243-17-4	11H-Benzo[b]fluorene	9.32	0.606	83.00	J
000053-70-3	Dibenz[a,h]anthracene	14.22	0.483	83.00	J
003674-66-6	Phenanthrene, 2,5-dimethyl-	8.70	0.539	68.00	J
000000-00-0	Naphthalene, 6-ethyl-1,2,3,4-tetra	8.65	1.21	64.00	J
001740-19-8	1-Phenanthrenecarboxylic acid, 1,2	9.97	0.921	60.00	J

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-G 3.5-4 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L679288-11

Date Collected: 1/20/2014

Lab File ID: 0124_21

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Divider
Page

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Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Friday January 24, 2014

Report Number: L678615
Samples Received: 01/17/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678615-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 07:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	86.1	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.078	0.0014	0.023	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/23/14	1
Arsenic	6.6	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.43	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.27	0.035	0.29	mg/kg	J	6010C	01/22/14	1
Chromium	11.	0.070	0.58	mg/kg		6010C	01/22/14	1
Copper	20.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	140	0.095	0.29	mg/kg		6010C	01/23/14	1
Nickel	3.9	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	0.68	0.37	1.2	mg/kg	J	6010C	01/23/14	1
Silver	0.21	0.14	0.58	mg/kg	J	6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	70.	0.30	1.7	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	0.022	0.010	0.058	mg/kg	J	8260B	01/18/14	1
Acrylonitrile	U	0.0018	0.012	mg/kg		8260B	01/18/14	1
Benzene	U	0.00027	0.0012	mg/kg		8260B	01/18/14	1
Bromobenzene	U	0.00028	0.0012	mg/kg		8260B	01/18/14	1
Bromodichloromethane	U	0.00025	0.0012	mg/kg		8260B	01/18/14	1
Bromoform	U	0.00042	0.0012	mg/kg		8260B	01/18/14	1
Bromomethane	U	0.0013	0.0058	mg/kg		8260B	01/18/14	1
n-Butylbenzene	U	0.00026	0.0012	mg/kg		8260B	01/18/14	1
sec-Butylbenzene	U	0.00020	0.0012	mg/kg		8260B	01/18/14	1
tert-Butylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/18/14	1
Carbon tetrachloride	U	0.00033	0.0012	mg/kg		8260B	01/18/14	1
Chlorobenzene	U	0.00021	0.0012	mg/kg		8260B	01/18/14	1
Chlorodibromomethane	U	0.00037	0.0012	mg/kg		8260B	01/18/14	1
Chloroethane	U	0.00095	0.0058	mg/kg		8260B	01/18/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.058	mg/kg		8260B	01/18/14	1
Chloroform	U	0.00023	0.0058	mg/kg		8260B	01/18/14	1
Chloromethane	U	0.00038	0.0029	mg/kg		8260B	01/18/14	1
2-Chlorotoluene	U	0.00030	0.0012	mg/kg		8260B	01/18/14	1
4-Chlorotoluene	U	0.00024	0.0012	mg/kg		8260B	01/18/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0058	mg/kg		8260B	01/18/14	1
1,2-Dibromoethane	U	0.00034	0.0012	mg/kg		8260B	01/18/14	1
Dibromomethane	U	0.00038	0.0012	mg/kg		8260B	01/18/14	1
1,2-Dichlorobenzene	U	0.00030	0.0012	mg/kg		8260B	01/18/14	1
1,3-Dichlorobenzene	U	0.00024	0.0012	mg/kg		8260B	01/18/14	1
1,4-Dichlorobenzene	U	0.00023	0.0012	mg/kg		8260B	01/18/14	1

Results listed are dry weight basis.
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678615-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 07:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0058	mg/kg		8260B	01/18/14	1
1,1-Dichloroethane	U	0.00020	0.0012	mg/kg		8260B	01/18/14	1
1,2-Dichloroethane	U	0.00026	0.0012	mg/kg		8260B	01/18/14	1
1,1-Dichloroethene	U	0.00030	0.0012	mg/kg		8260B	01/18/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0012	mg/kg		8260B	01/18/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0012	mg/kg		8260B	01/18/14	1
1,2-Dichloropropane	U	0.00036	0.0012	mg/kg		8260B	01/18/14	1
1,1-Dichloropropene	U	0.00032	0.0012	mg/kg		8260B	01/18/14	1
1,3-Dichloropropane	U	0.00021	0.0012	mg/kg		8260B	01/18/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0012	mg/kg		8260B	01/18/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0012	mg/kg		8260B	01/18/14	1
2,2-Dichloropropane	U	0.00028	0.0012	mg/kg		8260B	01/18/14	1
Di-isopropyl ether	U	0.00025	0.0012	mg/kg		8260B	01/18/14	1
Ethylbenzene	U	0.00030	0.0012	mg/kg		8260B	01/18/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0012	mg/kg		8260B	01/18/14	1
Isopropylbenzene	U	0.00024	0.0012	mg/kg		8260B	01/18/14	1
p-Isopropyltoluene	U	0.00020	0.0012	mg/kg		8260B	01/18/14	1
2-Butanone (MEK)	U	0.0047	0.012	mg/kg		8260B	01/18/14	1
Methylene Chloride	U	0.0010	0.0058	mg/kg		8260B	01/18/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.012	mg/kg		8260B	01/18/14	1
Methyl tert-butyl ether	U	0.00021	0.0012	mg/kg		8260B	01/18/14	1
Naphthalene	U	0.0010	0.0058	mg/kg		8260B	01/18/14	1
n-Propylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/18/14	1
Styrene	U	0.00023	0.0012	mg/kg		8260B	01/18/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0012	mg/kg		8260B	01/18/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0012	mg/kg		8260B	01/18/14	1
Tetrachloroethene	U	0.00028	0.0012	mg/kg		8260B	01/18/14	1
Toluene	U	0.00043	0.0058	mg/kg		8260B	01/18/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0012	mg/kg		8260B	01/18/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0012	mg/kg		8260B	01/18/14	1
1,1,1-Trichloroethane	U	0.00029	0.0012	mg/kg		8260B	01/18/14	1
1,1,2-Trichloroethane	U	0.00028	0.0012	mg/kg		8260B	01/18/14	1
Trichloroethene	U	0.00028	0.0012	mg/kg		8260B	01/18/14	1
Trichlorofluoromethane	U	0.00038	0.0058	mg/kg		8260B	01/18/14	1
1,2,3-Trichloropropane	U	0.00074	0.0029	mg/kg		8260B	01/18/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/18/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0012	mg/kg		8260B	01/18/14	1
Vinyl chloride	U	0.00029	0.0012	mg/kg		8260B	01/18/14	1
Xylenes, Total	U	0.00070	0.0035	mg/kg		8260B	01/18/14	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	01/18/14	1
Dibromofluoromethane	112.			% Rec.		8260B	01/18/14	1
a,a,a-Trifluorotoluene	103.			% Rec.		8260B	01/18/14	1

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PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678615-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 07:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	99.5			% Rec.		8260B	01/18/14	1
Pesticides								
Aldrin	U	0.0014	0.023	mg/kg		8081A	01/20/14	1
Alpha BHC	U	0.0014	0.023	mg/kg		8081A	01/20/14	1
Beta BHC	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Delta BHC	U	0.0014	0.023	mg/kg		8081A	01/20/14	1
Gamma BHC	U	0.0014	0.023	mg/kg		8081A	01/20/14	1
Chlordane	U	0.039	0.23	mg/kg		8081A	01/20/14	1
4,4-DDD	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
4,4-DDE	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
4,4-DDT	U	0.0020	0.023	mg/kg		8081A	01/20/14	1
Dieldrin	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
Endosulfan I	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
Endosulfan II	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Endosulfan sulfate	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
Endrin	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Endrin aldehyde	U	0.0013	0.023	mg/kg		8081A	01/20/14	1
Endrin ketone	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Hexachlorobenzene	U	0.0018	0.023	mg/kg		8081A	01/20/14	1
Heptachlor	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
Heptachlor epoxide	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Methoxychlor	U	0.0018	0.023	mg/kg		8081A	01/20/14	1
Toxaphene	U	0.036	0.46	mg/kg		8081A	01/20/14	1
Pesticide Surrogates								
Decachlorobiphenyl	32.4			% Rec.		8081A	01/20/14	1
Tetrachloro-m-xylene	51.0			% Rec.		8081A	01/20/14	1
Organophosphorus Pesticides								
Azinphos-Methyl	U	0.011	0.12	mg/kg		8141	01/24/14	1
Bolstar (Sulprofos)	U	0.013	0.12	mg/kg		8141	01/24/14	1
Chlorpyrifos	U	0.013	0.12	mg/kg		8141	01/24/14	1
Coumaphos	U	0.010	0.12	mg/kg		8141	01/24/14	1
Demeton,-O and -S	U	0.0065	0.081	mg/kg		8141	01/24/14	1
Diazinon	U	0.026	0.12	mg/kg		8141	01/24/14	1
Dichlorvos	U	0.0091	0.12	mg/kg		8141	01/24/14	1
Dimethoate	U	0.022	0.12	mg/kg		8141	01/24/14	1
Disulfoton	U	0.012	0.12	mg/kg		8141	01/24/14	1
EPN	U	0.021	0.12	mg/kg		8141	01/24/14	1
Ethoprop	U	0.010	0.12	mg/kg		8141	01/24/14	1
Ethyl Parathion	U	0.019	0.12	mg/kg		8141	01/24/14	1
Fensulfothion	U	0.013	0.12	mg/kg		8141	01/24/14	1
Fenthion	U	0.013	0.12	mg/kg		8141	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678615-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 07:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Malathion	U	0.021	0.12	mg/kg		8141	01/24/14	1
Merphos	U	0.012	0.12	mg/kg		8141	01/24/14	1
Methyl parathion	U	0.012	0.12	mg/kg		8141	01/24/14	1
Mevinphos	U	0.012	0.12	mg/kg		8141	01/24/14	1
Naled	U	0.019	0.12	mg/kg		8141	01/24/14	1
Phorate	U	0.011	0.12	mg/kg		8141	01/24/14	1
Ronnel	U	0.012	0.12	mg/kg		8141	01/24/14	1
Stirophos	U	0.014	0.12	mg/kg		8141	01/24/14	1
Sulfotep	U	0.018	0.12	mg/kg		8141	01/24/14	1
TEPP	U	0.031	0.12	mg/kg		8141	01/24/14	1
Tokuthion (Prothothiofos)	U	0.011	0.12	mg/kg		8141	01/24/14	1
Trichloronate	U	0.012	0.12	mg/kg		8141	01/24/14	1
Surrogate Recovery								
Tributyl Phosphate	72.7			% Rec.		8141	01/24/14	1
Triphenyl Phosphate	76.8			% Rec.		8141	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.038	mg/kg		8270D	01/22/14	1
Acenaphthylene	U	0.0067	0.038	mg/kg		8270D	01/22/14	1
Anthracene	U	0.0063	0.038	mg/kg		8270D	01/22/14	1
Benzidine	U	0.064	0.39	mg/kg		8270D	01/22/14	1
Benzo(a)anthracene	U	0.0043	0.038	mg/kg		8270D	01/22/14	1
Benzo(b)fluoranthene	U	0.0070	0.038	mg/kg		8270D	01/22/14	1
Benzo(k)fluoranthene	U	0.0058	0.038	mg/kg		8270D	01/22/14	1
Benzo(g,h,i)perylene	U	0.0072	0.038	mg/kg		8270D	01/22/14	1
Benzo(a)pyrene	U	0.0055	0.038	mg/kg		8270D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.39	mg/kg		8270D	01/22/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.39	mg/kg		8270D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.39	mg/kg		8270D	01/22/14	1
4-Bromophenyl-phenylether	U	0.011	0.39	mg/kg		8270D	01/22/14	1
2-Chloronaphthalene	U	0.0064	0.038	mg/kg		8270D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.39	mg/kg		8270D	01/22/14	1
Chrysene	U	0.0056	0.038	mg/kg		8270D	01/22/14	1
Dibenz(a,h)anthracene	U	0.0082	0.038	mg/kg		8270D	01/22/14	1
3,3-Dichlorobenzidine	U	0.079	0.39	mg/kg		8270D	01/22/14	1
2,4-Dinitrotoluene	U	0.0061	0.39	mg/kg		8270D	01/22/14	1
2,6-Dinitrotoluene	U	0.0074	0.39	mg/kg		8270D	01/22/14	1
Fluoranthene	U	0.0050	0.038	mg/kg		8270D	01/22/14	1
Fluorene	U	0.0068	0.038	mg/kg		8270D	01/22/14	1
Hexachlorobenzene	U	0.0086	0.39	mg/kg		8270D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.010	0.39	mg/kg		8270D	01/22/14	1
Hexachlorocyclopentadiene	U	0.059	0.39	mg/kg	J	8270D	01/22/14	1
Hexachloroethane	U	0.013	0.39	mg/kg		8270D	01/22/14	1

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January 24,2014

ESC Sample # : L678615-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 07:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Indeno(1,2,3-cd)pyrene	U	0.0077	0.038	mg/kg		8270D	01/22/14	1
Isophorone	U	0.0052	0.39	mg/kg		8270D	01/22/14	1
Naphthalene	U	0.0089	0.038	mg/kg		8270D	01/22/14	1
Nitrobenzene	U	0.0070	0.39	mg/kg		8270D	01/22/14	1
n-Nitrosodimethylamine	U	0.065	0.39	mg/kg		8270D	01/22/14	1
n-Nitrosodiphenylamine	U	0.0059	0.39	mg/kg		8270D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.39	mg/kg		8270D	01/22/14	1
Phenanthrene	U	0.0053	0.038	mg/kg		8270D	01/22/14	1
Benzylbutyl phthalate	U	0.010	0.39	mg/kg		8270D	01/22/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.39	mg/kg		8270D	01/22/14	1
Di-n-butyl phthalate	U	0.011	0.39	mg/kg		8270D	01/22/14	1
Diethyl phthalate	U	0.0069	0.39	mg/kg		8270D	01/22/14	1
Dimethyl phthalate	U	0.0054	0.39	mg/kg		8270D	01/22/14	1
Di-n-octyl phthalate	U	0.0091	0.39	mg/kg		8270D	01/22/14	1
Pyrene	U	0.012	0.038	mg/kg		8270D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.39	mg/kg		8270D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.39	mg/kg		8270D	01/22/14	1
2-Chlorophenol	U	0.0083	0.39	mg/kg		8270D	01/22/14	1
2,4-Dichlorophenol	U	0.0075	0.39	mg/kg		8270D	01/22/14	1
2,4-Dimethylphenol	U	0.047	0.39	mg/kg		8270D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.39	mg/kg		8270D	01/22/14	1
2,4-Dinitrophenol	U	0.098	0.39	mg/kg		8270D	01/22/14	1
2-Nitrophenol	U	0.013	0.39	mg/kg		8270D	01/22/14	1
4-Nitrophenol	U	0.052	0.39	mg/kg		8270D	01/22/14	1
Pentachlorophenol	U	0.048	0.39	mg/kg		8270D	01/22/14	1
Phenol	U	0.0070	0.39	mg/kg		8270D	01/22/14	1
2,4,6-Trichlorophenol	U	0.0078	0.39	mg/kg		8270D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	70.2			% Rec.		8270D	01/22/14	1
Phenol-d5	72.8			% Rec.		8270D	01/22/14	1
Nitrobenzene-d5	68.0			% Rec.		8270D	01/22/14	1
2-Fluorobiphenyl	74.4			% Rec.		8270D	01/22/14	1
2,4,6-Tribromophenol	91.8			% Rec.		8270D	01/22/14	1
p-Terphenyl-d14	55.0			% Rec.		8270D	01/22/14	1

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678615-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 08:21

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	87.9	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.092	0.0014	0.023	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.1	mg/kg		6010C	01/23/14	1
Arsenic	9.2	0.32	1.1	mg/kg		6010C	01/22/14	1
Beryllium	0.52	0.035	0.11	mg/kg		6010C	01/22/14	1
Cadmium	0.39	0.035	0.28	mg/kg		6010C	01/22/14	1
Chromium	15.	0.070	0.57	mg/kg		6010C	01/22/14	1
Copper	22.	0.26	1.1	mg/kg		6010C	01/22/14	1
Lead	62.	0.095	0.28	mg/kg		6010C	01/23/14	1
Nickel	4.7	0.24	1.1	mg/kg		6010C	01/22/14	1
Selenium	1.1	0.37	1.1	mg/kg	J	6010C	01/23/14	1
Silver	0.20	0.14	0.57	mg/kg	J	6010C	01/22/14	1
Thallium	U	0.32	1.1	mg/kg		6010C	01/22/14	1
Zinc	81.	0.30	1.7	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	0.023	0.010	0.057	mg/kg	J	8260B	01/18/14	1
Acrylonitrile	U	0.0018	0.011	mg/kg		8260B	01/18/14	1
Benzene	U	0.00027	0.0011	mg/kg		8260B	01/18/14	1
Bromobenzene	U	0.00028	0.0011	mg/kg		8260B	01/18/14	1
Bromodichloromethane	U	0.00025	0.0011	mg/kg		8260B	01/18/14	1
Bromoform	U	0.00042	0.0011	mg/kg		8260B	01/18/14	1
Bromomethane	U	0.0013	0.0057	mg/kg		8260B	01/18/14	1
n-Butylbenzene	U	0.00026	0.0011	mg/kg		8260B	01/18/14	1
sec-Butylbenzene	U	0.00020	0.0011	mg/kg		8260B	01/18/14	1
tert-Butylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/18/14	1
Carbon tetrachloride	U	0.00033	0.0011	mg/kg		8260B	01/18/14	1
Chlorobenzene	U	0.00021	0.0011	mg/kg		8260B	01/18/14	1
Chlorodibromomethane	U	0.00037	0.0011	mg/kg		8260B	01/18/14	1
Chloroethane	U	0.00095	0.0057	mg/kg		8260B	01/18/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.057	mg/kg		8260B	01/18/14	1
Chloroform	U	0.00023	0.0057	mg/kg		8260B	01/18/14	1
Chloromethane	U	0.00038	0.0028	mg/kg		8260B	01/18/14	1
2-Chlorotoluene	U	0.00030	0.0011	mg/kg		8260B	01/18/14	1
4-Chlorotoluene	U	0.00024	0.0011	mg/kg		8260B	01/18/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0057	mg/kg		8260B	01/18/14	1
1,2-Dibromoethane	U	0.00034	0.0011	mg/kg		8260B	01/18/14	1
Dibromomethane	U	0.00038	0.0011	mg/kg		8260B	01/18/14	1
1,2-Dichlorobenzene	U	0.00030	0.0011	mg/kg		8260B	01/18/14	1
1,3-Dichlorobenzene	U	0.00024	0.0011	mg/kg		8260B	01/18/14	1
1,4-Dichlorobenzene	U	0.00023	0.0011	mg/kg		8260B	01/18/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678615-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 08:21

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0057	mg/kg		8260B	01/18/14	1
1,1-Dichloroethane	U	0.00020	0.0011	mg/kg		8260B	01/18/14	1
1,2-Dichloroethane	U	0.00026	0.0011	mg/kg		8260B	01/18/14	1
1,1-Dichloroethene	U	0.00030	0.0011	mg/kg		8260B	01/18/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0011	mg/kg		8260B	01/18/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0011	mg/kg		8260B	01/18/14	1
1,2-Dichloropropane	U	0.00036	0.0011	mg/kg		8260B	01/18/14	1
1,1-Dichloropropene	U	0.00032	0.0011	mg/kg		8260B	01/18/14	1
1,3-Dichloropropane	U	0.00021	0.0011	mg/kg		8260B	01/18/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0011	mg/kg		8260B	01/18/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0011	mg/kg		8260B	01/18/14	1
2,2-Dichloropropane	U	0.00028	0.0011	mg/kg		8260B	01/18/14	1
Di-isopropyl ether	U	0.00025	0.0011	mg/kg		8260B	01/18/14	1
Ethylbenzene	U	0.00030	0.0011	mg/kg		8260B	01/18/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0011	mg/kg		8260B	01/18/14	1
Isopropylbenzene	U	0.00024	0.0011	mg/kg		8260B	01/18/14	1
p-Isopropyltoluene	U	0.00020	0.0011	mg/kg		8260B	01/18/14	1
2-Butanone (MEK)	U	0.0047	0.011	mg/kg		8260B	01/18/14	1
Methylene Chloride	U	0.0010	0.0057	mg/kg		8260B	01/18/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.011	mg/kg		8260B	01/18/14	1
Methyl tert-butyl ether	U	0.00021	0.0011	mg/kg		8260B	01/18/14	1
Naphthalene	U	0.0010	0.0057	mg/kg		8260B	01/18/14	1
n-Propylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/18/14	1
Styrene	U	0.00023	0.0011	mg/kg		8260B	01/18/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0011	mg/kg		8260B	01/18/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0011	mg/kg		8260B	01/18/14	1
Tetrachloroethene	U	0.00028	0.0011	mg/kg		8260B	01/18/14	1
Toluene	U	0.00043	0.0057	mg/kg		8260B	01/18/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0011	mg/kg		8260B	01/18/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0011	mg/kg		8260B	01/18/14	1
1,1,1-Trichloroethane	U	0.00029	0.0011	mg/kg		8260B	01/18/14	1
1,1,2-Trichloroethane	U	0.00028	0.0011	mg/kg		8260B	01/18/14	1
Trichloroethene	U	0.00028	0.0011	mg/kg		8260B	01/18/14	1
Trichlorofluoromethane	U	0.00038	0.0057	mg/kg		8260B	01/18/14	1
1,2,3-Trichloropropane	U	0.00074	0.0028	mg/kg		8260B	01/18/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/18/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0011	mg/kg		8260B	01/18/14	1
Vinyl chloride	U	0.00029	0.0011	mg/kg		8260B	01/18/14	1
Xylenes, Total	U	0.00070	0.0034	mg/kg		8260B	01/18/14	1
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260B	01/18/14	1
Dibromofluoromethane	108.			% Rec.		8260B	01/18/14	1
a,a,a-Trifluorotoluene	100.			% Rec.		8260B	01/18/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678615-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 08:21

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	100.			% Rec.		8260B	01/18/14	1
Pesticides								
Aldrin	U	0.0014	0.023	mg/kg		8081A	01/20/14	1
Alpha BHC	U	0.0014	0.023	mg/kg		8081A	01/20/14	1
Beta BHC	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Delta BHC	U	0.0014	0.023	mg/kg		8081A	01/20/14	1
Gamma BHC	U	0.0014	0.023	mg/kg		8081A	01/20/14	1
Chlordane	U	0.039	0.23	mg/kg		8081A	01/20/14	1
4,4-DDD	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
4,4-DDE	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
4,4-DDT	U	0.0020	0.023	mg/kg		8081A	01/20/14	1
Dieldrin	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
Endosulfan I	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
Endosulfan II	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Endosulfan sulfate	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
Endrin	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Endrin aldehyde	U	0.0013	0.023	mg/kg		8081A	01/20/14	1
Endrin ketone	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Hexachlorobenzene	U	0.0018	0.023	mg/kg		8081A	01/20/14	1
Heptachlor	U	0.0015	0.023	mg/kg		8081A	01/20/14	1
Heptachlor epoxide	U	0.0016	0.023	mg/kg		8081A	01/20/14	1
Methoxychlor	U	0.0018	0.023	mg/kg		8081A	01/20/14	1
Toxaphene	U	0.036	0.46	mg/kg		8081A	01/20/14	1
Pesticide Surrogates								
Decachlorobiphenyl	54.3			% Rec.		8081A	01/20/14	1
Tetrachloro-m-xylene	68.9			% Rec.		8081A	01/20/14	1
Organophosphorus Pesticides								
Azinphos-Methyl	U	0.011	0.11	mg/kg		8141	01/24/14	1
Bolstar (Sulprofos)	U	0.013	0.11	mg/kg		8141	01/24/14	1
Chlorpyrifos	U	0.013	0.11	mg/kg		8141	01/24/14	1
Coumaphos	U	0.010	0.11	mg/kg		8141	01/24/14	1
Demeton,-O and -S	U	0.0065	0.080	mg/kg		8141	01/24/14	1
Diazinon	U	0.026	0.11	mg/kg		8141	01/24/14	1
Dichlorvos	U	0.0091	0.11	mg/kg		8141	01/24/14	1
Dimethoate	U	0.022	0.11	mg/kg		8141	01/24/14	1
Disulfoton	U	0.012	0.11	mg/kg		8141	01/24/14	1
EPN	U	0.021	0.11	mg/kg		8141	01/24/14	1
Ethoprop	U	0.010	0.11	mg/kg		8141	01/24/14	1
Ethyl Parathion	U	0.019	0.11	mg/kg		8141	01/24/14	1
Fensulfothion	U	0.013	0.11	mg/kg		8141	01/24/14	1
Fenthion	U	0.013	0.11	mg/kg		8141	01/24/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678615-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 08:21

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Malathion	U	0.021	0.11	mg/kg		8141	01/24/14	1
Merphos	U	0.012	0.11	mg/kg		8141	01/24/14	1
Methyl parathion	U	0.012	0.11	mg/kg		8141	01/24/14	1
Mevinphos	U	0.012	0.11	mg/kg		8141	01/24/14	1
Naled	U	0.019	0.11	mg/kg		8141	01/24/14	1
Phorate	U	0.011	0.11	mg/kg		8141	01/24/14	1
Ronnel	U	0.012	0.11	mg/kg		8141	01/24/14	1
Stirophos	U	0.014	0.11	mg/kg		8141	01/24/14	1
Sulfotep	U	0.018	0.11	mg/kg		8141	01/24/14	1
TEPP	U	0.031	0.11	mg/kg		8141	01/24/14	1
Tokuthion (Prothothiofos)	U	0.011	0.11	mg/kg		8141	01/24/14	1
Trichloronate	U	0.012	0.11	mg/kg		8141	01/24/14	1
Surrogate Recovery								
Tributyl Phosphate	77.5			% Rec.		8141	01/24/14	1
Triphenyl Phosphate	80.5			% Rec.		8141	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.038	mg/kg		8270D	01/22/14	1
Acenaphthylene	U	0.0067	0.038	mg/kg		8270D	01/22/14	1
Anthracene	U	0.0063	0.038	mg/kg		8270D	01/22/14	1
Benzidine	U	0.064	0.38	mg/kg		8270D	01/22/14	1
Benzo(a)anthracene	U	0.0043	0.038	mg/kg		8270D	01/22/14	1
Benzo(b)fluoranthene	U	0.0070	0.038	mg/kg		8270D	01/22/14	1
Benzo(k)fluoranthene	U	0.0058	0.038	mg/kg		8270D	01/22/14	1
Benzo(g,h,i)perylene	U	0.0072	0.038	mg/kg		8270D	01/22/14	1
Benzo(a)pyrene	U	0.0055	0.038	mg/kg		8270D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.38	mg/kg		8270D	01/22/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.38	mg/kg		8270D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.38	mg/kg		8270D	01/22/14	1
4-Bromophenyl-phenylether	U	0.011	0.38	mg/kg		8270D	01/22/14	1
2-Chloronaphthalene	U	0.0064	0.038	mg/kg		8270D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.38	mg/kg		8270D	01/22/14	1
Chrysene	U	0.0056	0.038	mg/kg		8270D	01/22/14	1
Dibenz(a,h)anthracene	U	0.0082	0.038	mg/kg		8270D	01/22/14	1
3,3-Dichlorobenzidine	U	0.079	0.38	mg/kg		8270D	01/22/14	1
2,4-Dinitrotoluene	U	0.0061	0.38	mg/kg		8270D	01/22/14	1
2,6-Dinitrotoluene	U	0.0074	0.38	mg/kg		8270D	01/22/14	1
Fluoranthene	U	0.0050	0.038	mg/kg		8270D	01/22/14	1
Fluorene	U	0.0068	0.038	mg/kg		8270D	01/22/14	1
Hexachlorobenzene	U	0.0086	0.38	mg/kg		8270D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.010	0.38	mg/kg		8270D	01/22/14	1
Hexachlorocyclopentadiene	U	0.059	0.38	mg/kg	J	8270D	01/22/14	1
Hexachloroethane	U	0.013	0.38	mg/kg		8270D	01/22/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678615-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 08:21

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Indeno(1,2,3-cd)pyrene	U	0.0077	0.038	mg/kg		8270D	01/22/14	1
Isophorone	U	0.0052	0.38	mg/kg		8270D	01/22/14	1
Naphthalene	U	0.0089	0.038	mg/kg		8270D	01/22/14	1
Nitrobenzene	U	0.0070	0.38	mg/kg		8270D	01/22/14	1
n-Nitrosodimethylamine	U	0.065	0.38	mg/kg		8270D	01/22/14	1
n-Nitrosodiphenylamine	U	0.0059	0.38	mg/kg		8270D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.38	mg/kg		8270D	01/22/14	1
Phenanthrene	U	0.0053	0.038	mg/kg		8270D	01/22/14	1
Benzylbutyl phthalate	U	0.010	0.38	mg/kg		8270D	01/22/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.38	mg/kg		8270D	01/22/14	1
Di-n-butyl phthalate	U	0.011	0.38	mg/kg		8270D	01/22/14	1
Diethyl phthalate	U	0.0069	0.38	mg/kg		8270D	01/22/14	1
Dimethyl phthalate	U	0.0054	0.38	mg/kg		8270D	01/22/14	1
Di-n-octyl phthalate	U	0.0091	0.38	mg/kg		8270D	01/22/14	1
Pyrene	U	0.012	0.038	mg/kg		8270D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.38	mg/kg		8270D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.38	mg/kg		8270D	01/22/14	1
2-Chlorophenol	U	0.0083	0.38	mg/kg		8270D	01/22/14	1
2,4-Dichlorophenol	U	0.0075	0.38	mg/kg		8270D	01/22/14	1
2,4-Dimethylphenol	U	0.047	0.38	mg/kg		8270D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.38	mg/kg		8270D	01/22/14	1
2,4-Dinitrophenol	U	0.098	0.38	mg/kg		8270D	01/22/14	1
2-Nitrophenol	U	0.013	0.38	mg/kg		8270D	01/22/14	1
4-Nitrophenol	U	0.052	0.38	mg/kg		8270D	01/22/14	1
Pentachlorophenol	U	0.048	0.38	mg/kg		8270D	01/22/14	1
Phenol	U	0.0070	0.38	mg/kg		8270D	01/22/14	1
2,4,6-Trichlorophenol	U	0.0078	0.38	mg/kg		8270D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	68.9			% Rec.		8270D	01/22/14	1
Phenol-d5	72.3			% Rec.		8270D	01/22/14	1
Nitrobenzene-d5	66.6			% Rec.		8270D	01/22/14	1
2-Fluorobiphenyl	73.2			% Rec.		8270D	01/22/14	1
2,4,6-Tribromophenol	88.6			% Rec.		8270D	01/22/14	1
p-Terphenyl-d14	56.0			% Rec.		8270D	01/22/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678615-03

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/18/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/18/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/18/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/18/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/18/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/18/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/18/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/18/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/18/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/18/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/18/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/18/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/18/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/18/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/18/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/18/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/18/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/18/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/18/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/18/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/18/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/18/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/18/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/18/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/18/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/18/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/18/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/18/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/18/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/18/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/18/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/18/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/18/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/18/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/18/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/18/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/18/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/18/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/18/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/18/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/18/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/18/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 01/24/14 16:44 Printed: 01/24/14 16:44

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Mt. Juliet, TN 37122
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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678615-03

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/18/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/18/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/18/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/18/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/18/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/18/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/18/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/18/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/18/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/18/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	01/18/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/18/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/18/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/18/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/18/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/18/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/18/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/18/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/18/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/18/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/18/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	01/18/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/18/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/18/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/18/14	1
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260B	01/18/14	1
Dibromofluoromethane	108.			% Rec.		8260B	01/18/14	1
4-Bromofluorobenzene	103.			% Rec.		8260B	01/18/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Reported: 01/24/14 16:44 Printed: 01/24/14 16:44

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678615-01	WG702394	SAMP	Hexachlorocyclopentadiene	R2878290	J
	WG702041	SAMP	Acetone	R2877584	J
	WG702129	SAMP	Cadmium	R2878609	J
	WG702129	SAMP	Selenium	R2878933	J
	WG702129	SAMP	Silver	R2878609	J
L678615-02	WG702394	SAMP	Hexachlorocyclopentadiene	R2878290	J
	WG702041	SAMP	Acetone	R2877584	J
	WG702129	SAMP	Selenium	R2878933	J
	WG702129	SAMP	Silver	R2878609	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/24/14 at 16:44:54

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678615-01 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 16:44

Sample: L678615-02 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 16:44

Sample: L678615-03 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 16:44

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Cary, NC 27512

Quality Assurance Report
Level II

L678615

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG702085	01/18/14 08:54
Mercury	< .02	mg/kg			WG702044	01/18/14 18:57
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG702099	01/18/14 16:34
1,1,1-Trichloroethane	< .001	mg/l			WG702099	01/18/14 16:34
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG702099	01/18/14 16:34
1,1,2-Trichloroethane	< .001	mg/l			WG702099	01/18/14 16:34
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG702099	01/18/14 16:34
1,1-Dichloroethane	< .001	mg/l			WG702099	01/18/14 16:34
1,1-Dichloroethene	< .001	mg/l			WG702099	01/18/14 16:34
1,1-Dichloropropene	< .001	mg/l			WG702099	01/18/14 16:34
1,2,3-Trichlorobenzene	< .001	mg/l			WG702099	01/18/14 16:34
1,2,3-Trichloropropane	< .001	mg/l			WG702099	01/18/14 16:34
1,2,3-Trimethylbenzene	< .001	mg/l			WG702099	01/18/14 16:34
1,2,4-Trichlorobenzene	< .001	mg/l			WG702099	01/18/14 16:34
1,2,4-Trimethylbenzene	< .001	mg/l			WG702099	01/18/14 16:34
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG702099	01/18/14 16:34
1,2-Dibromoethane	< .001	mg/l			WG702099	01/18/14 16:34
1,2-Dichlorobenzene	< .001	mg/l			WG702099	01/18/14 16:34
1,2-Dichloroethane	< .001	mg/l			WG702099	01/18/14 16:34
1,2-Dichloropropane	< .001	mg/l			WG702099	01/18/14 16:34
1,3,5-Trimethylbenzene	< .001	mg/l			WG702099	01/18/14 16:34
1,3-Dichlorobenzene	< .001	mg/l			WG702099	01/18/14 16:34
1,3-Dichloropropane	< .001	mg/l			WG702099	01/18/14 16:34
1,4-Dichlorobenzene	< .001	mg/l			WG702099	01/18/14 16:34
2,2-Dichloropropane	< .001	mg/l			WG702099	01/18/14 16:34
2-Butanone (MEK)	< .01	mg/l			WG702099	01/18/14 16:34
2-Chloroethyl vinyl ether	< .05	mg/l			WG702099	01/18/14 16:34
2-Chlorotoluene	< .001	mg/l			WG702099	01/18/14 16:34
4-Chlorotoluene	< .001	mg/l			WG702099	01/18/14 16:34
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG702099	01/18/14 16:34
Acetone	< .05	mg/l			WG702099	01/18/14 16:34
Acrolein	< .025	mg/l			WG702099	01/18/14 16:34
Acrylonitrile	< .01	mg/l			WG702099	01/18/14 16:34
Benzene	< .001	mg/l			WG702099	01/18/14 16:34
Bromobenzene	< .001	mg/l			WG702099	01/18/14 16:34
Bromodichloromethane	< .001	mg/l			WG702099	01/18/14 16:34
Bromoform	< .001	mg/l			WG702099	01/18/14 16:34
Bromomethane	< .005	mg/l			WG702099	01/18/14 16:34
Carbon tetrachloride	< .001	mg/l			WG702099	01/18/14 16:34
Chlorobenzene	< .001	mg/l			WG702099	01/18/14 16:34
Chlorodibromomethane	< .001	mg/l			WG702099	01/18/14 16:34
Chloroethane	< .005	mg/l			WG702099	01/18/14 16:34
Chloroform	< .005	mg/l			WG702099	01/18/14 16:34
Chloromethane	< .0025	mg/l			WG702099	01/18/14 16:34
cis-1,2-Dichloroethene	< .001	mg/l			WG702099	01/18/14 16:34
cis-1,3-Dichloropropene	< .001	mg/l			WG702099	01/18/14 16:34
Di-isopropyl ether	< .001	mg/l			WG702099	01/18/14 16:34
Dibromomethane	< .001	mg/l			WG702099	01/18/14 16:34
Dichlorodifluoromethane	< .005	mg/l			WG702099	01/18/14 16:34
Ethylbenzene	< .001	mg/l			WG702099	01/18/14 16:34
Hexachloro-1,3-butadiene	< .001	mg/l			WG702099	01/18/14 16:34
Isopropylbenzene	< .001	mg/l			WG702099	01/18/14 16:34
Methyl tert-butyl ether	< .001	mg/l			WG702099	01/18/14 16:34
Methylene Chloride	< .005	mg/l			WG702099	01/18/14 16:34
n-Butylbenzene	< .001	mg/l			WG702099	01/18/14 16:34

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Daphne Jones; Matt Flinchum
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Cary, NC 27512

Quality Assurance Report
Level II

L678615

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
n-Propylbenzene	< .001	mg/l			WG702099	01/18/14 16:34
Naphthalene	< .005	mg/l			WG702099	01/18/14 16:34
p-Isopropyltoluene	< .001	mg/l			WG702099	01/18/14 16:34
sec-Butylbenzene	< .001	mg/l			WG702099	01/18/14 16:34
Styrene	< .001	mg/l			WG702099	01/18/14 16:34
tert-Butylbenzene	< .001	mg/l			WG702099	01/18/14 16:34
Tetrachloroethene	< .001	mg/l			WG702099	01/18/14 16:34
Toluene	< .005	mg/l			WG702099	01/18/14 16:34
trans-1,2-Dichloroethene	< .001	mg/l			WG702099	01/18/14 16:34
trans-1,3-Dichloropropene	< .001	mg/l			WG702099	01/18/14 16:34
Trichloroethene	< .001	mg/l			WG702099	01/18/14 16:34
Trichlorofluoromethane	< .005	mg/l			WG702099	01/18/14 16:34
Vinyl chloride	< .001	mg/l			WG702099	01/18/14 16:34
Xylenes, Total	< .003	mg/l			WG702099	01/18/14 16:34
4-Bromofluorobenzene		% Rec.	106.0	71-126	WG702099	01/18/14 16:34
Dibromofluoromethane		% Rec.	109.0	78.3-121	WG702099	01/18/14 16:34
Toluene-d8		% Rec.	106.0	88.5-111	WG702099	01/18/14 16:34
a,a,a-Trifluorotoluene		% Rec.	107.0	85-114	WG702099	01/18/14 16:34
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1,1-Trichloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1,2-Trichloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1-Dichloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1-Dichloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
1,1-Dichloropropene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2,3-Trichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2,3-Trichloropropane	< .0025	mg/kg			WG702041	01/18/14 12:20
1,2,4-Trichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2,4-Trimethylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG702041	01/18/14 12:20
1,2-Dibromoethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,2-Dichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2-Dichloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,2-Dichloropropane	< .001	mg/kg			WG702041	01/18/14 12:20
1,3,5-Trimethylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,3-Dichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,3-Dichloropropane	< .001	mg/kg			WG702041	01/18/14 12:20
1,4-Dichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
2,2-Dichloropropane	< .001	mg/kg			WG702041	01/18/14 12:20
2-Butanone (MEK)	< .01	mg/kg			WG702041	01/18/14 12:20
2-Chloroethyl vinyl ether	< .05	mg/kg			WG702041	01/18/14 12:20
2-Chlorotoluene	< .001	mg/kg			WG702041	01/18/14 12:20
4-Chlorotoluene	< .001	mg/kg			WG702041	01/18/14 12:20
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG702041	01/18/14 12:20
Acetone	< .05	mg/kg			WG702041	01/18/14 12:20
Acrylonitrile	< .01	mg/kg			WG702041	01/18/14 12:20
Benzene	< .001	mg/kg			WG702041	01/18/14 12:20
Bromobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Bromodichloromethane	< .001	mg/kg			WG702041	01/18/14 12:20
Bromoform	< .001	mg/kg			WG702041	01/18/14 12:20
Bromomethane	< .005	mg/kg			WG702041	01/18/14 12:20
Carbon tetrachloride	< .001	mg/kg			WG702041	01/18/14 12:20
Chlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Chlorodibromomethane	< .001	mg/kg			WG702041	01/18/14 12:20
Chloroethane	< .005	mg/kg			WG702041	01/18/14 12:20
Chloroform	< .005	mg/kg			WG702041	01/18/14 12:20
Chloromethane	< .0025	mg/kg			WG702041	01/18/14 12:20

* Performance of this Analyte is outside of established criteria.
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Quality Assurance Report
Level II

L678615

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
cis-1,2-Dichloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
cis-1,3-Dichloropropene	< .001	mg/kg			WG702041	01/18/14 12:20
Di-isopropyl ether	< .001	mg/kg			WG702041	01/18/14 12:20
Dibromomethane	< .001	mg/kg			WG702041	01/18/14 12:20
Dichlorodifluoromethane	< .005	mg/kg			WG702041	01/18/14 12:20
Ethylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Hexachloro-1,3-butadiene	< .001	mg/kg			WG702041	01/18/14 12:20
Isopropylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Methyl tert-butyl ether	< .001	mg/kg			WG702041	01/18/14 12:20
Methylene Chloride	< .005	mg/kg			WG702041	01/18/14 12:20
n-Butylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
n-Propylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Naphthalene	< .005	mg/kg			WG702041	01/18/14 12:20
p-Isopropyltoluene	< .001	mg/kg			WG702041	01/18/14 12:20
sec-Butylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Styrene	< .001	mg/kg			WG702041	01/18/14 12:20
tert-Butylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Tetrachloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
Toluene	< .005	mg/kg			WG702041	01/18/14 12:20
trans-1,2-Dichloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
trans-1,3-Dichloropropene	< .001	mg/kg			WG702041	01/18/14 12:20
Trichloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
Trichlorofluoromethane	< .005	mg/kg			WG702041	01/18/14 12:20
Vinyl chloride	< .001	mg/kg			WG702041	01/18/14 12:20
Xylenes, Total	< .003	mg/kg			WG702041	01/18/14 12:20
4-Bromofluorobenzene		% Rec.	102.0	71-126	WG702041	01/18/14 12:20
Dibromofluoromethane		% Rec.	100.0	78.3-121	WG702041	01/18/14 12:20
Toluene-d8		% Rec.	108.0	88.5-111	WG702041	01/18/14 12:20
a,a,a-Trifluorotoluene		% Rec.	105.0	85-114	WG702041	01/18/14 12:20
4,4-DDD	< .02	mg/kg			WG701964	01/20/14 11:38
4,4-DDE	< .02	mg/kg			WG701964	01/20/14 11:38
4,4-DDT	< .02	mg/kg			WG701964	01/20/14 11:38
Aldrin	< .02	mg/kg			WG701964	01/20/14 11:38
Alpha BHC	< .02	mg/kg			WG701964	01/20/14 11:38
Beta BHC	< .02	mg/kg			WG701964	01/20/14 11:38
Chlordane	< .2	mg/kg			WG701964	01/20/14 11:38
Delta BHC	< .02	mg/kg			WG701964	01/20/14 11:38
Dieldrin	< .02	mg/kg			WG701964	01/20/14 11:38
Endosulfan I	< .02	mg/kg			WG701964	01/20/14 11:38
Endosulfan II	< .02	mg/kg			WG701964	01/20/14 11:38
Endosulfan sulfate	< .02	mg/kg			WG701964	01/20/14 11:38
Endrin	< .02	mg/kg			WG701964	01/20/14 11:38
Endrin aldehyde	< .02	mg/kg			WG701964	01/20/14 11:38
Endrin ketone	< .02	mg/kg			WG701964	01/20/14 11:38
Gamma BHC	< .02	mg/kg			WG701964	01/20/14 11:38
Heptachlor	< .02	mg/kg			WG701964	01/20/14 11:38
Heptachlor epoxide	< .02	mg/kg			WG701964	01/20/14 11:38
Hexachlorobenzene	< .02	mg/kg			WG701964	01/20/14 11:38
Methoxychlor	< .02	mg/kg			WG701964	01/20/14 11:38
Toxaphene	< .4	mg/kg			WG701964	01/20/14 11:38
Decachlorobiphenyl		% Rec.	97.20	10-145	WG701964	01/20/14 11:38
Tetrachloro-m-xylene		% Rec.	106.0	21.1-148	WG701964	01/20/14 11:38
1,2,4-Trichlorobenzene	< .333	mg/kg			WG702394	01/22/14 03:04
2,4,6-Trichlorophenol	< .333	mg/kg			WG702394	01/22/14 03:04
2,4-Dichlorophenol	< .333	mg/kg			WG702394	01/22/14 03:04

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Quality Assurance Report
Level II

L678615

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
2,4-Dimethylphenol	< .333	mg/kg			WG702394	01/22/14 03:04
2,4-Dinitrophenol	< .333	mg/kg			WG702394	01/22/14 03:04
2,4-Dinitrotoluene	< .333	mg/kg			WG702394	01/22/14 03:04
2,6-Dinitrotoluene	< .333	mg/kg			WG702394	01/22/14 03:04
2-Chloronaphthalene	< .033	mg/kg			WG702394	01/22/14 03:04
2-Chlorophenol	< .333	mg/kg			WG702394	01/22/14 03:04
2-Nitrophenol	< .333	mg/kg			WG702394	01/22/14 03:04
3,3-Dichlorobenzidine	< .333	mg/kg			WG702394	01/22/14 03:04
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG702394	01/22/14 03:04
4-Bromophenyl-phenylether	< .333	mg/kg			WG702394	01/22/14 03:04
4-Chloro-3-methylphenol	< .333	mg/kg			WG702394	01/22/14 03:04
4-Chlorophenyl-phenylether	< .333	mg/kg			WG702394	01/22/14 03:04
4-Nitrophenol	< .333	mg/kg			WG702394	01/22/14 03:04
Acenaphthene	< .033	mg/kg			WG702394	01/22/14 03:04
Acenaphthylene	< .033	mg/kg			WG702394	01/22/14 03:04
Anthracene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzidine	< .333	mg/kg			WG702394	01/22/14 03:04
Benzo(a)anthracene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzo(a)pyrene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzo(b)fluoranthene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzo(g,h,i)perylene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzo(k)fluoranthene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzylbutyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG702394	01/22/14 03:04
Bis(2-chloroethyl)ether	< .333	mg/kg			WG702394	01/22/14 03:04
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG702394	01/22/14 03:04
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Chrysene	< .033	mg/kg			WG702394	01/22/14 03:04
Di-n-butyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Di-n-octyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Dibenz(a,h)anthracene	< .033	mg/kg			WG702394	01/22/14 03:04
Diethyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Dimethyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Fluoranthene	< .033	mg/kg			WG702394	01/22/14 03:04
Fluorene	< .033	mg/kg			WG702394	01/22/14 03:04
Hexachloro-1,3-butadiene	< .333	mg/kg			WG702394	01/22/14 03:04
Hexachlorobenzene	< .333	mg/kg			WG702394	01/22/14 03:04
Hexachlorocyclopentadiene	< .333	mg/kg			WG702394	01/22/14 03:04
Hexachloroethane	< .333	mg/kg			WG702394	01/22/14 03:04
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG702394	01/22/14 03:04
Isophorone	< .333	mg/kg			WG702394	01/22/14 03:04
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG702394	01/22/14 03:04
n-Nitrosodimethylamine	< .333	mg/kg			WG702394	01/22/14 03:04
n-Nitrosodiphenylamine	< .333	mg/kg			WG702394	01/22/14 03:04
Naphthalene	< .033	mg/kg			WG702394	01/22/14 03:04
Nitrobenzene	< .333	mg/kg			WG702394	01/22/14 03:04
Pentachlorophenol	< .333	mg/kg			WG702394	01/22/14 03:04
Phenanthrene	< .033	mg/kg			WG702394	01/22/14 03:04
Phenol	< .333	mg/kg			WG702394	01/22/14 03:04
Pyrene	< .033	mg/kg			WG702394	01/22/14 03:04
2,4,6-Tribromophenol		% Rec.	85.00	21.6-142	WG702394	01/22/14 03:04
2-Fluorobiphenyl		% Rec.	78.00	34.9-129	WG702394	01/22/14 03:04
2-Fluorophenol		% Rec.	67.80	21.1-116	WG702394	01/22/14 03:04
Nitrobenzene-d5		% Rec.	67.20	21.9-129	WG702394	01/22/14 03:04
Phenol-d5		% Rec.	72.90	26.3-121	WG702394	01/22/14 03:04
p-Terphenyl-d14		% Rec.	72.60	21.5-128	WG702394	01/22/14 03:04
Antimony	< 1	mg/kg			WG702129	01/22/14 14:49

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Quality Assurance Report
Level II

L678615

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Arsenic	< 1	mg/kg			WG702129	01/22/14 14:49
Beryllium	< .1	mg/kg			WG702129	01/22/14 14:49
Cadmium	< .25	mg/kg			WG702129	01/22/14 14:49
Chromium	< .5	mg/kg			WG702129	01/22/14 14:49
Copper	< 1	mg/kg			WG702129	01/22/14 14:49
Lead	< .25	mg/kg			WG702129	01/22/14 14:49
Nickel	< 1	mg/kg			WG702129	01/22/14 14:49
Silver	< .5	mg/kg			WG702129	01/22/14 14:49
Thallium	< 1	mg/kg			WG702129	01/22/14 14:49
Zinc	< 1.5	mg/kg			WG702129	01/22/14 14:49
Selenium	< 1	mg/kg			WG702129	01/23/14 10:16
Azinphos-Methyl	< .1	mg/kg			WG702063	01/23/14 21:45
Bolstar (Sulprofos)	< .1	mg/kg			WG702063	01/23/14 21:45
Chlorpyrifos	< .1	mg/kg			WG702063	01/23/14 21:45
Coumaphos	< .1	mg/kg			WG702063	01/23/14 21:45
Demeton,-O and -S	< .07	mg/kg			WG702063	01/23/14 21:45
Diazinon	< .1	mg/kg			WG702063	01/23/14 21:45
Dichlorvos	< .1	mg/kg			WG702063	01/23/14 21:45
Dimethoate	< .1	mg/kg			WG702063	01/23/14 21:45
Disulfoton	< .1	mg/kg			WG702063	01/23/14 21:45
EPN	< .1	mg/kg			WG702063	01/23/14 21:45
Ethoprop	< .1	mg/kg			WG702063	01/23/14 21:45
Ethyl Parathion	< .1	mg/kg			WG702063	01/23/14 21:45
Fensulfothion	< .1	mg/kg			WG702063	01/23/14 21:45
Fenthion	< .1	mg/kg			WG702063	01/23/14 21:45
Malathion	< .1	mg/kg			WG702063	01/23/14 21:45
Merphos	< .1	mg/kg			WG702063	01/23/14 21:45
Methyl parathion	< .1	mg/kg			WG702063	01/23/14 21:45
Mevinphos	< .1	mg/kg			WG702063	01/23/14 21:45
Naled	< .1	mg/kg			WG702063	01/23/14 21:45
Phorate	< .1	mg/kg			WG702063	01/23/14 21:45
Ronnel	< .1	mg/kg			WG702063	01/23/14 21:45
Stirophos	< .1	mg/kg			WG702063	01/23/14 21:45
Sulfotep	< .1	mg/kg			WG702063	01/23/14 21:45
TEPP	< .1	mg/kg			WG702063	01/23/14 21:45
Tokuthion (Prothothiofos)	< .1	mg/kg			WG702063	01/23/14 21:45
Trichloronate	< .1	mg/kg			WG702063	01/23/14 21:45
Tributyl Phosphate		% Rec.	81.50	26.9-135	WG702063	01/23/14 21:45
Triphenyl Phosphate		% Rec.	88.50	40-121	WG702063	01/23/14 21:45

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	83.7	87.9	4.95	5	L678615-02	WG702085
Mercury	mg/kg	0.0330	0.0330	1.00	20	L678607-05	WG702044
Antimony	mg/kg	0.0	-1.72	49.0*	20	L678618-01	WG702129
Arsenic	mg/kg	5.80	8.21	34.0*	20	L678618-01	WG702129
Beryllium	mg/kg	0.0	0.0926	18.0	20	L678618-01	WG702129
Cadmium	mg/kg	0.680	0.877	26.0*	20	L678618-01	WG702129
Chromium	mg/kg	3.40	4.15	19.0	20	L678618-01	WG702129
Copper	mg/kg	37.0	37.4	2.00	20	L678618-01	WG702129
Lead	mg/kg	3.10	3.32	6.00	20	L678618-01	WG702129
Nickel	mg/kg	1.40	1.50	4.00	20	L678618-01	WG702129

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Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	Result	Duplicate (Duplicate)	RPD	Limit	Ref Samp	Batch
Silver	mg/kg	0.0	0.0786	104.*	20	L678618-01	WG702129
Thallium	mg/kg	0.0	-0.534	759.*	20	L678618-01	WG702129
Zinc	mg/kg	130.	132.	3.00	20	L678618-01	WG702129
Selenium	mg/kg	1.10	1.20	9.00	20	L678618-01	WG702129

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	49.9	99.8	85-115	WG702085
Mercury	mg/kg	12.4	15.0	121.	71.6-128	WG702044
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0249	99.7	74.2-124	WG702099
1,1,1-Trichloroethane	mg/l	.025	0.0242	96.8	73.2-123	WG702099
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0230	92.1	70.7-122	WG702099
1,1,2-Trichloroethane	mg/l	.025	0.0243	97.4	77.7-118	WG702099
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0240	96.1	67.2-143	WG702099
1,1-Dichloroethane	mg/l	.025	0.0234	93.6	70.7-126	WG702099
1,1-Dichloroethene	mg/l	.025	0.0241	96.5	67.8-129	WG702099
1,1-Dichloropropene	mg/l	.025	0.0231	92.5	73.1-125	WG702099
1,2,3-Trichlorobenzene	mg/l	.025	0.0227	90.8	64.9-135	WG702099
1,2,3-Trichloropropane	mg/l	.025	0.0230	91.9	71.8-121	WG702099
1,2,3-Trimethylbenzene	mg/l	.025	0.0202	80.8	72.3-116	WG702099
1,2,4-Trichlorobenzene	mg/l	.025	0.0231	92.2	69.7-136	WG702099
1,2,4-Trimethylbenzene	mg/l	.025	0.0246	98.3	75-123	WG702099
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0216	86.3	65.4-128	WG702099
1,2-Dibromoethane	mg/l	.025	0.0236	94.4	76.6-121	WG702099
1,2-Dichlorobenzene	mg/l	.025	0.0236	94.3	78.4-117	WG702099
1,2-Dichloroethane	mg/l	.025	0.0246	98.5	68.8-124	WG702099
1,2-Dichloropropane	mg/l	.025	0.0238	95.2	76.5-119	WG702099
1,3,5-Trimethylbenzene	mg/l	.025	0.0246	98.4	75.6-124	WG702099
1,3-Dichlorobenzene	mg/l	.025	0.0258	103.	70.8-128	WG702099
1,3-Dichloropropane	mg/l	.025	0.0235	94.2	77.4-117	WG702099
1,4-Dichlorobenzene	mg/l	.025	0.0233	93.1	78.8-115	WG702099
2,2-Dichloropropane	mg/l	.025	0.0221	88.2	62.4-133	WG702099
2-Butanone (MEK)	mg/l	.125	0.0896	71.7	55-149	WG702099
2-Chloroethyl vinyl ether	mg/l	.125	0.141	112.	43.8-150	WG702099
2-Chlorotoluene	mg/l	.025	0.0248	99.0	74.7-122	WG702099
4-Chlorotoluene	mg/l	.025	0.0243	97.3	77.5-120	WG702099
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.109	87.3	70.5-133	WG702099
Acetone	mg/l	.125	0.0760	60.8	35.6-163	WG702099
Acrolein	mg/l	.125	0.112	89.2	10-190	WG702099
Acrylonitrile	mg/l	.125	0.119	95.2	55.2-130	WG702099
Benzene	mg/l	.025	0.0238	95.2	74.8-121	WG702099
Bromobenzene	mg/l	.025	0.0245	98.2	77.5-116	WG702099
Bromodichloromethane	mg/l	.025	0.0243	97.3	75.1-116	WG702099
Bromoform	mg/l	.025	0.0283	113.	67.5-130	WG702099
Bromomethane	mg/l	.025	0.0335	134.	49.9-162	WG702099
Carbon tetrachloride	mg/l	.025	0.0214	85.7	70.2-123	WG702099
Chlorobenzene	mg/l	.025	0.0249	99.7	78.1-119	WG702099
Chlorodibromomethane	mg/l	.025	0.0252	101.	74-121	WG702099
Chloroethane	mg/l	.025	0.0269	108.	61.7-135	WG702099
Chloroform	mg/l	.025	0.0245	98.0	76-121	WG702099
Chloromethane	mg/l	.025	0.0209	83.5	61.5-129	WG702099
cis-1,2-Dichloroethene	mg/l	.025	0.0247	99.0	76-119	WG702099
cis-1,3-Dichloropropene	mg/l	.025	0.0230	92.2	78.2-120	WG702099
Di-isopropyl ether	mg/l	.025	0.0233	93.2	65.6-132	WG702099

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Quality Assurance Report
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L678615

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Dibromomethane	mg/l	.025	0.0245	98.0	79.5-118	WG702099
Dichlorodifluoromethane	mg/l	.025	0.0240	96.1	54.8-135	WG702099
Ethylbenzene	mg/l	.025	0.0243	97.4	78.8-122	WG702099
Hexachloro-1,3-butadiene	mg/l	.025	0.0201	80.2	64.7-129	WG702099
Isopropylbenzene	mg/l	.025	0.0266	107.	78.6-132	WG702099
Methyl tert-butyl ether	mg/l	.025	0.0245	98.2	71.2-126	WG702099
Methylene Chloride	mg/l	.025	0.0237	94.8	70.3-120	WG702099
n-Butylbenzene	mg/l	.025	0.0214	85.5	76.2-126	WG702099
n-Propylbenzene	mg/l	.025	0.0244	97.7	78.2-122	WG702099
Naphthalene	mg/l	.025	0.0215	85.9	68.4-128	WG702099
p-Isopropyltoluene	mg/l	.025	0.0245	97.9	74-131	WG702099
sec-Butylbenzene	mg/l	.025	0.0241	96.3	74.4-127	WG702099
Styrene	mg/l	.025	0.0264	106.	80.4-126	WG702099
tert-Butylbenzene	mg/l	.025	0.0252	101.	75.3-126	WG702099
Tetrachloroethene	mg/l	.025	0.0247	98.6	72.6-126	WG702099
Toluene	mg/l	.025	0.0230	92.0	79.7-116	WG702099
trans-1,2-Dichloroethene	mg/l	.025	0.0239	95.5	72.6-121	WG702099
trans-1,3-Dichloropropene	mg/l	.025	0.0224	89.6	74.3-123	WG702099
Trichloroethene	mg/l	.025	0.0242	96.8	77.7-118	WG702099
Trichlorofluoromethane	mg/l	.025	0.0287	115.	63.5-135	WG702099
Vinyl chloride	mg/l	.025	0.0234	93.8	65.9-128	WG702099
Xylenes, Total	mg/l	.075	0.0728	97.0	78.7-121	WG702099
4-Bromofluorobenzene				103.0	71-126	WG702099
Dibromofluoromethane				109.0	78.3-121	WG702099
Toluene-d8				105.0	88.5-111	WG702099
a,a,a-Trifluorotoluene				105.0	85-114	WG702099
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0257	103.	72.9-124	WG702041
1,1,1-Trichloroethane	mg/kg	.025	0.0269	108.	73.7-124	WG702041
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0250	100.	69.4-122	WG702041
1,1,2-Trichloroethane	mg/kg	.025	0.0253	101.	79.1-118	WG702041
1,1-Dichloroethane	mg/kg	.025	0.0280	112.	75-124	WG702041
1,1-Dichloroethene	mg/kg	.025	0.0296	118.	70.4-129	WG702041
1,1-Dichloropropene	mg/kg	.025	0.0273	109.	74.9-124	WG702041
1,2,3-Trichlorobenzene	mg/kg	.025	0.0258	103.	69.3-131	WG702041
1,2,3-Trichloropropane	mg/kg	.025	0.0253	101.	71.4-123	WG702041
1,2,4-Trichlorobenzene	mg/kg	.025	0.0276	110.	71.9-137	WG702041
1,2,4-Trimethylbenzene	mg/kg	.025	0.0261	104.	75.5-122	WG702041
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0256	102.	62.8-133	WG702041
1,2-Dibromoethane	mg/kg	.025	0.0252	101.	78.6-120	WG702041
1,2-Dichlorobenzene	mg/kg	.025	0.0260	104.	78.3-118	WG702041
1,2-Dichloroethane	mg/kg	.025	0.0265	106.	70.1-124	WG702041
1,2-Dichloropropane	mg/kg	.025	0.0267	107.	77.9-119	WG702041
1,3,5-Trimethylbenzene	mg/kg	.025	0.0263	105.	75.9-124	WG702041
1,3-Dichlorobenzene	mg/kg	.025	0.0257	103.	72-126	WG702041
1,3-Dichloropropane	mg/kg	.025	0.0251	100.	79.1-117	WG702041
1,4-Dichlorobenzene	mg/kg	.025	0.0257	103.	78.3-117	WG702041
2,2-Dichloropropane	mg/kg	.025	0.0287	115.	61.3-136	WG702041
2-Butanone (MEK)	mg/kg	.125	0.107	85.7	53.7-153	WG702041
2-Chloroethyl vinyl ether	mg/kg	.125	0.140	112.	37.7-157	WG702041
2-Chlorotoluene	mg/kg	.025	0.0244	97.5	75.6-121	WG702041
4-Chlorotoluene	mg/kg	.025	0.0260	104.	77.3-120	WG702041
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.135	108.	70.4-137	WG702041
Acetone	mg/kg	.125	0.0855	68.4	35.1-175	WG702041
Acrylonitrile	mg/kg	.125	0.132	105.	56.4-128	WG702041
Benzene	mg/kg	.025	0.0258	103.	77.1-121	WG702041
Bromobenzene	mg/kg	.025	0.0258	103.	78.2-115	WG702041
Bromodichloromethane	mg/kg	.025	0.0256	103.	74.9-115	WG702041

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Fax (615) 758-5859

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Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Bromoform	mg/kg	.025	0.0256	103.	65.9-132	WG702041
Bromomethane	mg/kg	.025	0.0286	114.	48.7-165	WG702041
Carbon tetrachloride	mg/kg	.025	0.0274	110.	70-124	WG702041
Chlorobenzene	mg/kg	.025	0.0255	102.	79.1-119	WG702041
Chlorodibromomethane	mg/kg	.025	0.0248	99.1	73.5-121	WG702041
Chloroethane	mg/kg	.025	0.0271	108.	66.2-132	WG702041
Chloroform	mg/kg	.025	0.0264	106.	76.7-122	WG702041
Chloromethane	mg/kg	.025	0.0249	99.7	63.4-131	WG702041
cis-1,2-Dichloroethene	mg/kg	.025	0.0264	105.	78.2-119	WG702041
cis-1,3-Dichloropropene	mg/kg	.025	0.0269	108.	79.6-120	WG702041
Di-isopropyl ether	mg/kg	.025	0.0273	109.	70.4-133	WG702041
Dibromomethane	mg/kg	.025	0.0267	107.	79.4-120	WG702041
Dichlorodifluoromethane	mg/kg	.025	0.0263	105.	57.1-137	WG702041
Ethylbenzene	mg/kg	.025	0.0260	104.	79.7-122	WG702041
Hexachloro-1,3-butadiene	mg/kg	.025	0.0244	97.6	68.2-123	WG702041
Isopropylbenzene	mg/kg	.025	0.0278	111.	80-135	WG702041
Methyl tert-butyl ether	mg/kg	.025	0.0257	103.	73-129	WG702041
Methylene Chloride	mg/kg	.025	0.0259	104.	72.6-120	WG702041
n-Butylbenzene	mg/kg	.025	0.0277	111.	77.5-126	WG702041
n-Propylbenzene	mg/kg	.025	0.0263	105.	77.9-123	WG702041
Naphthalene	mg/kg	.025	0.0257	103.	69.8-128	WG702041
p-Isopropyltoluene	mg/kg	.025	0.0271	109.	75.8-129	WG702041
sec-Butylbenzene	mg/kg	.025	0.0264	106.	75.8-126	WG702041
Styrene	mg/kg	.025	0.0265	106.	82.4-126	WG702041
tert-Butylbenzene	mg/kg	.025	0.0260	104.	76.4-126	WG702041
Tetrachloroethene	mg/kg	.025	0.0256	102.	73.9-125	WG702041
Toluene	mg/kg	.025	0.0258	103.	79.7-118	WG702041
trans-1,2-Dichloroethene	mg/kg	.025	0.0264	106.	73.8-122	WG702041
trans-1,3-Dichloropropene	mg/kg	.025	0.0253	101.	75.9-124	WG702041
Trichloroethene	mg/kg	.025	0.0257	103.	77.9-118	WG702041
Trichlorofluoromethane	mg/kg	.025	0.0273	109.	67.7-131	WG702041
Vinyl chloride	mg/kg	.025	0.0263	105.	66.7-130	WG702041
Xylenes, Total	mg/kg	.075	0.0780	104.	78.8-121	WG702041
4-Bromofluorobenzene				104.0	71-126	WG702041
Dibromofluoromethane				103.0	78.3-121	WG702041
Toluene-d8				108.0	88.5-111	WG702041
a,a,a-Trifluorotoluene				105.0	85-114	WG702041
4,4-DDD	mg/kg	.067	0.0640	95.6	70.3-111	WG701964
4,4-DDE	mg/kg	.067	0.0641	95.7	69.9-113	WG701964
4,4-DDT	mg/kg	.067	0.0618	92.3	68.1-111	WG701964
Aldrin	mg/kg	.067	0.0618	92.2	66.9-111	WG701964
Alpha BHC	mg/kg	.067	0.0613	91.5	65.1-111	WG701964
Beta BHC	mg/kg	.067	0.0634	94.6	69.6-112	WG701964
Delta BHC	mg/kg	.067	0.0639	95.3	68.3-114	WG701964
Dieldrin	mg/kg	.067	0.0632	94.4	70.2-112	WG701964
Endosulfan I	mg/kg	.067	0.0631	94.2	69.8-113	WG701964
Endosulfan II	mg/kg	.067	0.0641	95.7	69.2-113	WG701964
Endosulfan sulfate	mg/kg	.067	0.0642	95.8	62-123	WG701964
Endrin	mg/kg	.067	0.0657	98.0	65.9-115	WG701964
Endrin aldehyde	mg/kg	.067	0.0568	84.8	47.6-124	WG701964
Endrin ketone	mg/kg	.067	0.0673	100.	69-120	WG701964
Gamma BHC	mg/kg	.067	0.0639	95.4	68.2-111	WG701964
Heptachlor	mg/kg	.067	0.0624	93.1	65.9-111	WG701964
Heptachlor epoxide	mg/kg	.067	0.0646	96.4	69.7-113	WG701964
Hexachlorobenzene	mg/kg	.067	0.0593	88.5	59.6-113	WG701964
Methoxychlor	mg/kg	.067	0.0663	98.9	66.2-114	WG701964
Decachlorobiphenyl				83.50	10-145	WG701964

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Quality Assurance Report
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L678615

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Tetrachloro-m-xylene				89.10	21.1-148	
1,2,4-Trichlorobenzene	mg/kg	.333	0.229	68.7	39.8-100	WG702394
2,4,6-Trichlorophenol	mg/kg	.333	0.266	79.8	44.4-108	WG702394
2,4-Dichlorophenol	mg/kg	.333	0.247	74.3	46.2-109	WG702394
2,4-Dimethylphenol	mg/kg	.333	0.246	73.8	42.2-110	WG702394
2,4-Dinitrophenol	mg/kg	.333	0.171	51.3	10-105	WG702394
2,4-Dinitrotoluene	mg/kg	.333	0.294	88.3	53-112	WG702394
2,6-Dinitrotoluene	mg/kg	.333	0.302	90.8	51.6-110	WG702394
2-Chloronaphthalene	mg/kg	.333	0.270	81.2	47.1-105	WG702394
2-Chlorophenol	mg/kg	.333	0.257	77.1	40.8-103	WG702394
2-Nitrophenol	mg/kg	.333	0.293	87.9	44.2-113	WG702394
3,3-Dichlorobenzidine	mg/kg	.333	0.203	61.0	21-101	WG702394
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.241	72.3	23.1-119	WG702394
4-Bromophenyl-phenylether	mg/kg	.333	0.268	80.6	51.4-110	WG702394
4-Chloro-3-methylphenol	mg/kg	.333	0.272	81.8	51.1-113	WG702394
4-Chlorophenyl-phenylether	mg/kg	.333	0.262	78.7	48.1-108	WG702394
4-Nitrophenol	mg/kg	.333	0.266	79.9	34.8-109	WG702394
Acenaphthene	mg/kg	.333	0.269	80.8	48.9-107	WG702394
Acenaphthylene	mg/kg	.333	0.274	82.2	49.2-111	WG702394
Anthracene	mg/kg	.333	0.275	82.6	52-112	WG702394
Benzidine	mg/kg	.333	0.00427	1.28	0-48	WG702394
Benzo(a)anthracene	mg/kg	.333	0.259	77.7	52.3-106	WG702394
Benzo(a)pyrene	mg/kg	.333	0.253	76.1	51.9-106	WG702394
Benzo(b)fluoranthene	mg/kg	.333	0.280	84.2	51.3-106	WG702394
Benzo(g,h,i)perylene	mg/kg	.333	0.283	85.1	45.8-108	WG702394
Benzo(k)fluoranthene	mg/kg	.333	0.282	84.6	52.9-107	WG702394
Benzylbutyl phthalate	mg/kg	.333	0.279	83.8	47.5-115	WG702394
Bis(2-chlorethoxy)methane	mg/kg	.333	0.239	71.9	44.9-108	WG702394
Bis(2-chloroethyl)ether	mg/kg	.333	0.241	72.2	32.5-112	WG702394
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.243	73.0	40.4-99	WG702394
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.277	83.2	48.1-116	WG702394
Chrysene	mg/kg	.333	0.271	81.5	54.4-110	WG702394
Di-n-butyl phthalate	mg/kg	.333	0.263	78.9	49.7-113	WG702394
Di-n-octyl phthalate	mg/kg	.333	0.292	87.7	49.6-112	WG702394
Dibenz(a,h)anthracene	mg/kg	.333	0.283	85.1	45.7-111	WG702394
Diethyl phthalate	mg/kg	.333	0.277	83.2	52-112	WG702394
Dimethyl phthalate	mg/kg	.333	0.281	84.5	51.4-108	WG702394
Fluoranthene	mg/kg	.333	0.249	74.7	53.7-110	WG702394
Fluorene	mg/kg	.333	0.267	80.1	51.1-109	WG702394
Hexachloro-1,3-butadiene	mg/kg	.333	0.233	70.1	41.5-112	WG702394
Hexachlorobenzene	mg/kg	.333	0.264	79.1	43.2-104	WG702394
Hexachlorocyclopentadiene	mg/kg	.333	0.184	55.3	13.5-123	WG702394
Hexachloroethane	mg/kg	.333	0.250	75.2	36.2-103	WG702394
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.281	84.4	47.5-109	WG702394
Isophorone	mg/kg	.333	0.270	81.0	28.8-104	WG702394
n-Nitrosodi-n-propylamine	mg/kg	.333	0.239	71.6	43.3-109	WG702394
n-Nitrosodimethylamine	mg/kg	.333	0.216	64.9	18.1-122	WG702394
n-Nitrosodiphenylamine	mg/kg	.333	0.255	76.7	48.8-107	WG702394
Naphthalene	mg/kg	.333	0.241	72.3	43.4-103	WG702394
Nitrobenzene	mg/kg	.333	0.265	79.5	40.7-109	WG702394
Pentachlorophenol	mg/kg	.333	0.229	68.7	16.2-102	WG702394
Phenanthrene	mg/kg	.333	0.287	86.1	51.6-107	WG702394
Phenol	mg/kg	.333	0.256	76.9	41.5-106	WG702394
Pyrene	mg/kg	.333	0.268	80.6	47.1-108	WG702394
2,4,6-Tribromophenol				94.70	21.6-142	WG702394
2-Fluorobiphenyl				80.20	34.9-129	WG702394
2-Fluorophenol				76.20	21.1-116	WG702394
Nitrobenzene-d5				76.00	21.9-129	WG702394
Phenol-d5				76.90	26.3-121	WG702394

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January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
p-Terphenyl-d14				69.40	21.5-128	
Antimony	mg/kg	113	68.1	60.0	0.88-223	WG702129
Arsenic	mg/kg	237	243.	103.	83.1-117	WG702129
Beryllium	mg/kg	93.3	101.	108.	83.3-117	WG702129
Cadmium	mg/kg	191	193.	101.	83.2-117	WG702129
Chromium	mg/kg	128	127.	99.0	81.3-118	WG702129
Copper	mg/kg	123	138.	113.	83.7-116	WG702129
Lead	mg/kg	103	99.3	96.0	83.1-117	WG702129
Nickel	mg/kg	118	125.	106.	82-118	WG702129
Silver	mg/kg	47.3	48.6	103.	66.2-134	WG702129
Thallium	mg/kg	158	146.	92.0	81-119	WG702129
Zinc	mg/kg	183	186.	102.	82-118	WG702129
Selenium	mg/kg	110	115.	105.	78.7-122	WG702129
Azinphos-Methyl	mg/kg	.3335	0.306	91.8	55.4-123	WG702063
Bolstar (Sulprofos)	mg/kg	.3335	0.308	92.5	57.9-120	WG702063
Chlorpyrifos	mg/kg	.3335	0.303	90.7	58.3-118	WG702063
Coumaphos	mg/kg	.3335	0.305	91.4	56.7-119	WG702063
Demeton,-O and -S	mg/kg	.1668	0.148	88.5	57.8-113	WG702063
Diazinon	mg/kg	.3335	0.291	87.4	43.8-134	WG702063
Dichlorvos	mg/kg	.3335	0.294	88.1	34.2-108	WG702063
Dimethoate	mg/kg	.3335	0.239	71.6	37.4-109	WG702063
Disulfoton	mg/kg	.3335	0.301	90.3	59.6-114	WG702063
EPN	mg/kg	.3335	0.320	96.0	50.5-126	WG702063
Ethoprop	mg/kg	.3335	0.305	91.4	58.2-117	WG702063
Ethyl Parathion	mg/kg	.3335	0.304	91.2	51.1-130	WG702063
Fensulfothion	mg/kg	.3335	0.271	81.4	37.8-111	WG702063
Fenthion	mg/kg	.3335	0.292	87.4	59-118	WG702063
Malathion	mg/kg	.3335	0.296	88.8	55-127	WG702063
Merphos	mg/kg	.3335	0.305	91.3	10-156	WG702063
Methyl parathion	mg/kg	.3335	0.315	94.5	57.8-120	WG702063
Mevinphos	mg/kg	.3335	0.307	92.0	44.2-116	WG702063
Naled	mg/kg	.3335	0.299	89.7	10.8-138	WG702063
Phorate	mg/kg	.3335	0.307	92.0	58.1-114	WG702063
Ronnel	mg/kg	.3335	0.295	88.6	59.1-114	WG702063
Stirophos	mg/kg	.3335	0.308	92.5	55.7-119	WG702063
Sulfotep	mg/kg	.3335	0.292	87.6	57.2-121	WG702063
TEPP	mg/kg	.3335	0.196	58.8	0-117	WG702063
Tokuthion (Prothothiofos)	mg/kg	.3335	0.307	92.1	55.6-119	WG702063
Trichloronate	mg/kg	.3335	0.314	94.1	57.4-114	WG702063
Tributyl Phosphate				85.60	26.9-135	WG702063
Triphenyl Phosphate				92.60	40-121	WG702063

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0249	0.0249	100.	74.2-124	0.110	20	WG702099
1,1,1-Trichloroethane	mg/l	0.0240	0.0242	96.0	73.2-123	0.740	20	WG702099
1,1,2,2-Tetrachloroethane	mg/l	0.0231	0.0230	92.0	70.7-122	0.270	20	WG702099
1,1,2-Trichloroethane	mg/l	0.0246	0.0243	98.0	77.7-118	0.990	20	WG702099
1,1,2-Trichlorotrifluoroethane	mg/l	0.0236	0.0240	94.0	67.2-143	1.92	20	WG702099
1,1-Dichloroethane	mg/l	0.0230	0.0234	92.0	70.7-126	1.68	20	WG702099
1,1-Dichloroethene	mg/l	0.0238	0.0241	95.0	67.8-129	1.17	20	WG702099
1,1-Dichloropropene	mg/l	0.0222	0.0231	89.0	73.1-125	4.23	20	WG702099
1,2,3-Trichlorobenzene	mg/l	0.0227	0.0227	91.0	64.9-135	0.210	20	WG702099
1,2,3-Trichloropropane	mg/l	0.0232	0.0230	93.0	71.8-121	1.05	20	WG702099
1,2,3-Trimethylbenzene	mg/l	0.0201	0.0202	80.0	72.3-116	0.360	20	WG702099
1,2,4-Trichlorobenzene	mg/l	0.0223	0.0231	89.0	69.7-136	3.41	20	WG702099

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Quality Assurance Report
Level II

L678615

January 24, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2,4-Trimethylbenzene	mg/l	0.0237	0.0246	95.0	75-123	3.80	20	WG702099
1,2-Dibromo-3-Chloropropane	mg/l	0.0224	0.0216	90.0	65.4-128	3.70	20	WG702099
1,2-Dibromoethane	mg/l	0.0233	0.0236	93.0	76.6-121	1.32	20	WG702099
1,2-Dichlorobenzene	mg/l	0.0243	0.0236	97.0	78.4-117	3.09	20	WG702099
1,2-Dichloroethane	mg/l	0.0254	0.0246	102.	68.8-124	3.18	20	WG702099
1,2-Dichloropropane	mg/l	0.0235	0.0238	94.0	76.5-119	1.39	20	WG702099
1,3,5-Trimethylbenzene	mg/l	0.0241	0.0246	96.0	75.6-124	2.05	20	WG702099
1,3-Dichlorobenzene	mg/l	0.0253	0.0258	101.	70.8-128	1.94	20	WG702099
1,3-Dichloropropane	mg/l	0.0232	0.0235	93.0	77.4-117	1.30	20	WG702099
1,4-Dichlorobenzene	mg/l	0.0231	0.0233	92.0	78.8-115	0.850	20	WG702099
2,2-Dichloropropane	mg/l	0.0220	0.0221	88.0	62.4-133	0.410	20	WG702099
2-Butanone (MEK)	mg/l	0.0956	0.0896	76.0	55-149	6.42	20	WG702099
2-Chloroethyl vinyl ether	mg/l	0.147	0.141	118.	43.8-150	4.77	20	WG702099
2-Chlorotoluene	mg/l	0.0241	0.0248	96.0	74.7-122	2.85	20	WG702099
4-Chlorotoluene	mg/l	0.0237	0.0243	95.0	77.5-120	2.52	20	WG702099
4-Methyl-2-pentanone (MIBK)	mg/l	0.114	0.109	91.0	70.5-133	4.52	20	WG702099
Acetone	mg/l	0.0828	0.0760	66.0	35.6-163	8.59	23.9	WG702099
Acrolein	mg/l	0.117	0.112	93.0	10-190	4.48	28.1	WG702099
Acrylonitrile	mg/l	0.121	0.119	97.0	55.2-130	1.69	20	WG702099
Benzene	mg/l	0.0234	0.0238	94.0	74.8-121	1.57	20	WG702099
Bromobenzene	mg/l	0.0244	0.0245	97.0	77.5-116	0.720	20	WG702099
Bromodichloromethane	mg/l	0.0243	0.0243	97.0	75.1-116	0.0300	20	WG702099
Bromoform	mg/l	0.0279	0.0283	112.	67.5-130	1.50	20	WG702099
Bromomethane	mg/l	0.0343	0.0335	137.	49.9-162	2.39	20	WG702099
Carbon tetrachloride	mg/l	0.0237	0.0214	95.0	70.2-123	9.86	20	WG702099
Chlorobenzene	mg/l	0.0245	0.0249	98.0	78.1-119	1.79	20	WG702099
Chlorodibromomethane	mg/l	0.0249	0.0252	100.	74-121	0.940	20	WG702099
Chloroethane	mg/l	0.0260	0.0269	104.	61.7-135	3.61	20	WG702099
Chloroform	mg/l	0.0241	0.0245	96.0	76-121	1.46	20	WG702099
Chloromethane	mg/l	0.0206	0.0209	82.0	61.5-129	1.42	20	WG702099
cis-1,2-Dichloroethene	mg/l	0.0250	0.0247	100.	76-119	0.910	20	WG702099
cis-1,3-Dichloropropene	mg/l	0.0234	0.0230	94.0	78.2-120	1.68	20	WG702099
Di-isopropyl ether	mg/l	0.0228	0.0233	91.0	65.6-132	1.92	20	WG702099
Dibromomethane	mg/l	0.0249	0.0245	100.	79.5-118	1.78	20	WG702099
Dichlorodifluoromethane	mg/l	0.0228	0.0240	91.0	54.8-135	5.08	20	WG702099
Ethylbenzene	mg/l	0.0237	0.0243	95.0	78.8-122	2.57	20	WG702099
Hexachloro-1,3-butadiene	mg/l	0.0195	0.0201	78.0	64.7-129	2.86	20	WG702099
Isopropylbenzene	mg/l	0.0257	0.0266	103.	78.6-132	3.64	20	WG702099
Methyl tert-butyl ether	mg/l	0.0249	0.0245	100.	71.2-126	1.64	20	WG702099
Methylene Chloride	mg/l	0.0234	0.0237	93.0	70.3-120	1.50	20	WG702099
n-Butylbenzene	mg/l	0.0210	0.0214	84.0	76.2-126	1.70	20	WG702099
n-Propylbenzene	mg/l	0.0236	0.0244	94.0	78.2-122	3.27	20	WG702099
Naphthalene	mg/l	0.0219	0.0215	88.0	68.4-128	2.09	20	WG702099
p-Isopropyltoluene	mg/l	0.0236	0.0245	94.0	74-131	3.59	20	WG702099
sec-Butylbenzene	mg/l	0.0233	0.0241	93.0	74.4-127	3.27	20	WG702099
Styrene	mg/l	0.0257	0.0264	103.	80.4-126	2.75	20	WG702099
tert-Butylbenzene	mg/l	0.0245	0.0252	98.0	75.3-126	3.02	20	WG702099
Tetrachloroethene	mg/l	0.0236	0.0247	94.0	72.6-126	4.28	20	WG702099
Toluene	mg/l	0.0229	0.0230	92.0	79.7-116	0.220	20	WG702099
trans-1,2-Dichloroethene	mg/l	0.0233	0.0239	93.0	72.6-121	2.42	20	WG702099
trans-1,3-Dichloropropene	mg/l	0.0235	0.0224	94.0	74.3-123	4.64	20	WG702099
Trichloroethene	mg/l	0.0244	0.0242	97.0	77.7-118	0.750	20	WG702099
Trichlorofluoromethane	mg/l	0.0286	0.0287	114.	63.5-135	0.320	20	WG702099
Vinyl chloride	mg/l	0.0229	0.0234	92.0	65.9-128	2.19	20	WG702099
Xylenes, Total	mg/l	0.0715	0.0728	95.0	78.7-121	1.84	20	WG702099
4-Bromofluorobenzene				101.0	71-126			WG702099
Dibromofluoromethane				106.0	78.3-121			WG702099
Toluene-d8				107.0	88.5-111			WG702099
a,a,a-Trifluorotoluene				105.0	85-114			WG702099

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/kg	0.0260	0.0257	104.	72.9-124	1.34	20	WG702041
1,1,1-Trichloroethane	mg/kg	0.0262	0.0269	105.	73.7-124	2.59	20	WG702041
1,1,2,2-Tetrachloroethane	mg/kg	0.0251	0.0250	100.	69.4-122	0.460	20	WG702041
1,1,2-Trichloroethane	mg/kg	0.0255	0.0253	102.	79.1-118	0.860	20	WG702041
1,1-Dichloroethane	mg/kg	0.0269	0.0280	107.	75-124	3.98	20	WG702041
1,1-Dichloroethene	mg/kg	0.0286	0.0296	114.	70.4-129	3.52	20	WG702041
1,1-Dichloropropene	mg/kg	0.0262	0.0273	105.	74.9-124	3.96	20	WG702041
1,2,3-Trichlorobenzene	mg/kg	0.0262	0.0258	105.	69.3-131	1.29	20	WG702041
1,2,3-Trichloropropane	mg/kg	0.0256	0.0253	102.	71.4-123	1.40	20	WG702041
1,2,4-Trichlorobenzene	mg/kg	0.0278	0.0276	111.	71.9-137	0.600	20	WG702041
1,2,4-Trimethylbenzene	mg/kg	0.0259	0.0261	103.	75.5-122	0.830	20	WG702041
1,2-Dibromo-3-Chloropropane	mg/kg	0.0260	0.0256	104.	62.8-133	1.54	20	WG702041
1,2-Dibromoethane	mg/kg	0.0253	0.0252	101.	78.6-120	0.320	20	WG702041
1,2-Dichlorobenzene	mg/kg	0.0260	0.0260	104.	78.3-118	0.0700	20	WG702041
1,2-Dichloroethane	mg/kg	0.0259	0.0265	104.	70.1-124	2.35	20	WG702041
1,2-Dichloropropane	mg/kg	0.0260	0.0267	104.	77.9-119	2.63	20	WG702041
1,3,5-Trimethylbenzene	mg/kg	0.0262	0.0263	105.	75.9-124	0.380	20	WG702041
1,3-Dichlorobenzene	mg/kg	0.0258	0.0257	103.	72-126	0.210	20	WG702041
1,3-Dichloropropane	mg/kg	0.0249	0.0251	100.	79.1-117	0.900	20	WG702041
1,4-Dichlorobenzene	mg/kg	0.0256	0.0257	102.	78.3-117	0.410	20	WG702041
2,2-Dichloropropane	mg/kg	0.0281	0.0287	112.	61.3-136	2.08	20	WG702041
2-Butanone (MEK)	mg/kg	0.103	0.107	83.0	53.7-153	3.55	21.2	WG702041
2-Chloroethyl vinyl ether	mg/kg	0.140	0.140	112.	37.7-157	0.210	20	WG702041
2-Chlorotoluene	mg/kg	0.0242	0.0244	97.0	75.6-121	0.840	20	WG702041
4-Chlorotoluene	mg/kg	0.0259	0.0260	104.	77.3-120	0.270	20	WG702041
4-Methyl-2-pentanone (MIBK)	mg/kg	0.137	0.135	109.	70.4-137	1.02	20	WG702041
Acetone	mg/kg	0.0818	0.0855	65.0	35.1-175	4.34	26.1	WG702041
Acrylonitrile	mg/kg	0.129	0.132	103.	56.4-128	1.93	20	WG702041
Benzene	mg/kg	0.0252	0.0258	101.	77.1-121	2.31	20	WG702041
Bromobenzene	mg/kg	0.0260	0.0258	104.	78.2-115	0.670	20	WG702041
Bromodichloromethane	mg/kg	0.0251	0.0256	100.	74.9-115	2.08	20	WG702041
Bromoform	mg/kg	0.0258	0.0256	103.	65.9-132	0.610	20	WG702041
Bromomethane	mg/kg	0.0260	0.0286	104.	48.7-165	9.53	20	WG702041
Carbon tetrachloride	mg/kg	0.0266	0.0274	106.	70-124	3.04	20	WG702041
Chlorobenzene	mg/kg	0.0251	0.0255	100.	79.1-119	1.24	20	WG702041
Chlorodibromomethane	mg/kg	0.0249	0.0248	100.	73.5-121	0.480	20	WG702041
Chloroethane	mg/kg	0.0264	0.0271	105.	66.2-132	2.70	20	WG702041
Chloroform	mg/kg	0.0259	0.0264	104.	76.7-122	1.97	20	WG702041
Chloromethane	mg/kg	0.0244	0.0249	97.0	63.4-131	2.24	20	WG702041
cis-1,2-Dichloroethene	mg/kg	0.0260	0.0264	104.	78.2-119	1.51	20	WG702041
cis-1,3-Dichloropropene	mg/kg	0.0261	0.0269	104.	79.6-120	3.12	20	WG702041
Di-isopropyl ether	mg/kg	0.0264	0.0273	105.	70.4-133	3.65	20	WG702041
Dibromomethane	mg/kg	0.0267	0.0267	107.	79.4-120	0.120	20	WG702041
Dichlorodifluoromethane	mg/kg	0.0253	0.0263	101.	57.1-137	3.88	20	WG702041
Ethylbenzene	mg/kg	0.0261	0.0260	104.	79.7-122	0.660	20	WG702041
Hexachloro-1,3-butadiene	mg/kg	0.0243	0.0244	97.0	68.2-123	0.360	20	WG702041
Isopropylbenzene	mg/kg	0.0273	0.0278	109.	80-135	1.99	20	WG702041
Methyl tert-butyl ether	mg/kg	0.0255	0.0257	102.	73-129	0.490	20	WG702041
Methylene Chloride	mg/kg	0.0249	0.0259	99.0	72.6-120	3.99	20	WG702041
n-Butylbenzene	mg/kg	0.0272	0.0277	109.	77.5-126	1.96	20	WG702041
n-Propylbenzene	mg/kg	0.0262	0.0263	105.	77.9-123	0.630	20	WG702041
Naphthalene	mg/kg	0.0265	0.0257	106.	69.8-128	2.93	20	WG702041
p-Isopropyltoluene	mg/kg	0.0265	0.0271	106.	75.8-129	2.46	20	WG702041
sec-Butylbenzene	mg/kg	0.0264	0.0264	106.	75.8-126	0.0300	20	WG702041
Styrene	mg/kg	0.0272	0.0265	109.	82.4-126	2.69	20	WG702041
tert-Butylbenzene	mg/kg	0.0262	0.0260	105.	76.4-126	0.690	20	WG702041
Tetrachloroethene	mg/kg	0.0253	0.0256	101.	73.9-125	1.35	20	WG702041
Toluene	mg/kg	0.0251	0.0258	100.	79.7-118	2.90	20	WG702041
trans-1,2-Dichloroethene	mg/kg	0.0252	0.0264	101.	73.8-122	4.93	20	WG702041

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Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
trans-1,3-Dichloropropene	mg/kg	0.0251	0.0253	100.	75.9-124	0.530	20	WG702041
Trichloroethene	mg/kg	0.0257	0.0257	103.	77.9-118	0.0100	20	WG702041
Trichlorofluoromethane	mg/kg	0.0268	0.0273	107.	67.7-131	1.85	20	WG702041
Vinyl chloride	mg/kg	0.0254	0.0263	102.	66.7-130	3.36	20	WG702041
Xylenes, Total	mg/kg	0.0778	0.0780	104.	78.8-121	0.300	20	WG702041
4-Bromofluorobenzene				105.0	71-126			WG702041
Dibromofluoromethane				103.0	78.3-121			WG702041
Toluene-d8				107.0	88.5-111			WG702041
a,a,a-Trifluorotoluene				104.0	85-114			WG702041
4,4-DDD	mg/kg	0.0638	0.0640	95.0	70.3-111	0.390	20	WG701964
4,4-DDE	mg/kg	0.0641	0.0641	96.0	69.9-113	0.0900	20	WG701964
4,4-DDT	mg/kg	0.0623	0.0618	93.0	68.1-111	0.770	20	WG701964
Aldrin	mg/kg	0.0620	0.0618	92.0	66.9-111	0.380	20	WG701964
Alpha BHC	mg/kg	0.0621	0.0613	93.0	65.1-111	1.35	20	WG701964
Beta BHC	mg/kg	0.0632	0.0634	94.0	69.6-112	0.350	20	WG701964
Delta BHC	mg/kg	0.0638	0.0639	95.0	68.3-114	0.100	20	WG701964
Dieldrin	mg/kg	0.0633	0.0632	94.0	70.2-112	0.160	20	WG701964
Endosulfan I	mg/kg	0.0634	0.0631	95.0	69.8-113	0.480	20	WG701964
Endosulfan II	mg/kg	0.0638	0.0641	95.0	69.2-113	0.540	20	WG701964
Endosulfan sulfate	mg/kg	0.0638	0.0642	95.0	62-123	0.610	20	WG701964
Endrin	mg/kg	0.0663	0.0657	99.0	65.9-115	0.870	20	WG701964
Endrin aldehyde	mg/kg	0.0557	0.0568	83.0	47.6-124	1.99	20	WG701964
Endrin ketone	mg/kg	0.0664	0.0673	99.0	69-120	1.26	20	WG701964
Gamma BHC	mg/kg	0.0643	0.0639	96.0	68.2-111	0.690	20	WG701964
Heptachlor	mg/kg	0.0621	0.0624	93.0	65.9-111	0.380	20	WG701964
Heptachlor epoxide	mg/kg	0.0647	0.0646	96.0	69.7-113	0.180	20	WG701964
Hexachlorobenzene	mg/kg	0.0602	0.0593	90.0	59.6-113	1.50	20	WG701964
Methoxychlor	mg/kg	0.0666	0.0663	99.0	66.2-114	0.470	20	WG701964
Decachlorobiphenyl				82.80	10-145			WG701964
Tetrachloro-m-xylene				91.10	21.1-148			WG701964
1,2,4-Trichlorobenzene	mg/kg	0.231	0.229	69.0	39.8-100	0.740	20	WG702394
2,4,6-Trichlorophenol	mg/kg	0.267	0.266	80.0	44.4-108	0.540	20	WG702394
2,4-Dichlorophenol	mg/kg	0.255	0.247	76.0	46.2-109	2.94	20	WG702394
2,4-Dimethylphenol	mg/kg	0.246	0.246	74.0	42.2-110	0.180	20	WG702394
2,4-Dinitrophenol	mg/kg	0.171	0.171	51.0	10-105	0.250	36.5	WG702394
2,4-Dinitrotoluene	mg/kg	0.297	0.294	89.0	53-112	1.20	20	WG702394
2,6-Dinitrotoluene	mg/kg	0.301	0.302	90.0	51.6-110	0.290	20	WG702394
2-Chloronaphthalene	mg/kg	0.277	0.270	83.0	47.1-105	2.50	20	WG702394
2-Chlorophenol	mg/kg	0.242	0.257	72.0	40.8-103	6.06	20	WG702394
2-Nitrophenol	mg/kg	0.293	0.293	88.0	44.2-113	0.0700	20.9	WG702394
3,3-Dichlorobenzidine	mg/kg	0.210	0.203	63.0	21-101	3.23	22	WG702394
4,6-Dinitro-2-methylphenol	mg/kg	0.229	0.241	69.0	23.1-119	4.79	23.7	WG702394
4-Bromophenyl-phenylether	mg/kg	0.272	0.268	82.0	51.4-110	1.26	20	WG702394
4-Chloro-3-methylphenol	mg/kg	0.291	0.272	87.0	51.1-113	6.68	20	WG702394
4-Chlorophenyl-phenylether	mg/kg	0.276	0.262	83.0	48.1-108	5.14	20	WG702394
4-Nitrophenol	mg/kg	0.281	0.266	84.0	34.8-109	5.63	20	WG702394
Acenaphthene	mg/kg	0.267	0.269	80.0	48.9-107	0.640	20	WG702394
Acenaphthylene	mg/kg	0.276	0.274	83.0	49.2-111	0.780	20	WG702394
Anthracene	mg/kg	0.285	0.275	86.0	52-112	3.63	20	WG702394
Benzidine	mg/kg	0.00499	0.00427	1.00	0-48	15.5	40	WG702394
Benzo(a)anthracene	mg/kg	0.264	0.259	79.0	52.3-106	2.05	20	WG702394
Benzo(a)pyrene	mg/kg	0.256	0.253	77.0	51.9-106	0.880	20	WG702394
Benzo(b)fluoranthene	mg/kg	0.293	0.280	88.0	51.3-106	4.48	20	WG702394
Benzo(g,h,i)perylene	mg/kg	0.277	0.283	83.0	45.8-108	2.32	20	WG702394
Benzo(k)fluoranthene	mg/kg	0.276	0.282	83.0	52.9-107	2.12	20	WG702394

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January 24, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzylbutyl phthalate	mg/kg	0.284	0.279	85.0	47.5-115	1.90	20	WG702394
Bis(2-chlorethoxy)methane	mg/kg	0.250	0.239	75.0	44.9-108	4.38	20	WG702394
Bis(2-chloroethyl)ether	mg/kg	0.225	0.241	68.0	32.5-112	6.66	26	WG702394
Bis(2-chloroisopropyl)ether	mg/kg	0.237	0.243	71.0	40.4-99	2.72	20.7	WG702394
Bis(2-ethylhexyl)phthalate	mg/kg	0.275	0.277	82.0	48.1-116	0.740	20.5	WG702394
Chrysene	mg/kg	0.269	0.271	81.0	54.4-110	0.800	20	WG702394
Di-n-butyl phthalate	mg/kg	0.257	0.263	77.0	49.7-113	2.22	20	WG702394
Di-n-octyl phthalate	mg/kg	0.290	0.292	87.0	49.6-112	0.880	22	WG702394
Dibenz(a,h)anthracene	mg/kg	0.278	0.283	83.0	45.7-111	1.96	20	WG702394
Diethyl phthalate	mg/kg	0.281	0.277	84.0	52-112	1.35	20	WG702394
Dimethyl phthalate	mg/kg	0.287	0.281	86.0	51.4-108	2.11	20	WG702394
Fluoranthene	mg/kg	0.251	0.249	75.0	53.7-110	0.790	20	WG702394
Fluorene	mg/kg	0.280	0.267	84.0	51.1-109	4.78	20	WG702394
Hexachloro-1,3-butadiene	mg/kg	0.228	0.233	68.0	41.5-112	2.14	20	WG702394
Hexachlorobenzene	mg/kg	0.274	0.264	82.0	43.2-104	4.03	20.1	WG702394
Hexachlorocyclopentadiene	mg/kg	0.185	0.184	56.0	13.5-123	0.640	20.7	WG702394
Hexachloroethane	mg/kg	0.238	0.250	71.0	36.2-103	5.10	22.7	WG702394
Indeno(1,2,3-cd)pyrene	mg/kg	0.278	0.281	83.0	47.5-109	1.29	20	WG702394
Isophorone	mg/kg	0.275	0.270	82.0	28.8-104	1.82	20	WG702394
n-Nitrosodi-n-propylamine	mg/kg	0.243	0.239	73.0	43.3-109	1.70	20	WG702394
n-Nitrosodimethylamine	mg/kg	0.199	0.216	60.0	18.1-122	8.37	23.5	WG702394
n-Nitrosodiphenylamine	mg/kg	0.266	0.255	80.0	48.8-107	3.93	20	WG702394
Naphthalene	mg/kg	0.240	0.241	72.0	43.4-103	0.290	20	WG702394
Nitrobenzene	mg/kg	0.267	0.265	80.0	40.7-109	0.890	21	WG702394
Pentachlorophenol	mg/kg	0.226	0.229	68.0	16.2-102	1.38	22.9	WG702394
Phenanthrene	mg/kg	0.281	0.287	84.0	51.6-107	2.04	20	WG702394
Phenol	mg/kg	0.249	0.256	75.0	41.5-106	2.75	20	WG702394
Pyrene	mg/kg	0.271	0.268	81.0	47.1-108	0.780	20	WG702394
2,4,6-Tribromophenol				93.90	21.6-142			WG702394
2-Fluorobiphenyl				78.10	34.9-129			WG702394
2-Fluorophenol				68.20	21.1-116			WG702394
Nitrobenzene-d5				76.80	21.9-129			WG702394
Phenol-d5				74.80	26.3-121			WG702394
p-Terphenyl-d14				68.50	21.5-128			WG702394
Azinphos-Methyl	mg/kg	0.320	0.306	96.0	55.4-123	4.31	20	WG702063
Bolstar (Sulprofos)	mg/kg	0.334	0.308	100.	57.9-120	7.97	20	WG702063
Chlorpyrifos	mg/kg	0.321	0.303	96.0	58.3-118	5.93	20	WG702063
Coumaphos	mg/kg	0.323	0.305	97.0	56.7-119	5.81	20	WG702063
Demeton,-O and -S	mg/kg	0.153	0.148	92.0	57.8-113	3.46	20	WG702063
Diazinon	mg/kg	0.299	0.291	90.0	43.8-134	2.75	20	WG702063
Dichlorvos	mg/kg	0.288	0.294	86.0	34.2-108	1.92	21.7	WG702063
Dimethoate	mg/kg	0.252	0.239	76.0	37.4-109	5.42	24.7	WG702063
Disulfoton	mg/kg	0.321	0.301	96.0	59.6-114	6.25	20	WG702063
EPN	mg/kg	0.339	0.320	102.	50.5-126	5.55	20	WG702063
Ethoprop	mg/kg	0.318	0.305	95.0	58.2-117	4.15	20	WG702063
Ethyl Parathion	mg/kg	0.322	0.304	97.0	51.1-130	5.83	20	WG702063
Fensulfothion	mg/kg	0.290	0.271	87.0	37.8-111	6.56	20.2	WG702063
Fenthion	mg/kg	0.311	0.292	93.0	59-118	6.33	20	WG702063
Malathion	mg/kg	0.310	0.296	93.0	55-127	4.47	20	WG702063
Merphos	mg/kg	0.326	0.305	98.0	10-156	6.83	20	WG702063
Methyl parathion	mg/kg	0.329	0.315	98.0	57.8-120	4.18	20	WG702063
Mevinphos	mg/kg	0.304	0.307	91.0	44.2-116	0.980	20	WG702063
Naled	mg/kg	0.303	0.299	91.0	10.8-138	1.19	23.5	WG702063
Phorate	mg/kg	0.322	0.307	97.0	58.1-114	4.93	20	WG702063
Ronnel	mg/kg	0.313	0.295	94.0	59.1-114	5.78	20	WG702063
Stirophos	mg/kg	0.323	0.308	97.0	55.7-119	4.69	20	WG702063
Sulfotep	mg/kg	0.308	0.292	92.0	57.2-121	5.31	20	WG702063

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Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
TEPP	mg/kg	0.200	0.196	60.0	0-117	2.08	40	WG702063
Tokuthion (Prothothiofos)	mg/kg	0.329	0.307	98.0	55.6-119	6.76	20	WG702063
Trichloronate	mg/kg	0.326	0.314	98.0	57.4-114	3.85	20	WG702063
Tributyl Phosphate				85.60	26.9-135			WG702063
Triphenyl Phosphate				96.10	40-121			WG702063

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/kg	0.279	0.0330	.25	98.0	80-120	L678607-05	WG702044
1,1,1,2-Tetrachloroethane	mg/l	0.0232	0.0	.025	93.0	64-128	L678579-04	WG702099
1,1,1-Trichloroethane	mg/l	0.0228	0.0	.025	91.0	58.7-134	L678579-04	WG702099
1,1,2,2-Tetrachloroethane	mg/l	0.0207	0.0	.025	83.0	56-132	L678579-04	WG702099
1,1,2-Trichloroethane	mg/l	0.0216	0.0	.025	86.0	66.3-125	L678579-04	WG702099
1,1,2-Trichlorotrifluoroethane	mg/l	0.0211	0.0	.025	84.0	54.8-154	L678579-04	WG702099
1,1-Dichloroethane	mg/l	0.0212	0.0	.025	85.0	58.5-132	L678579-04	WG702099
1,1-Dichloroethene	mg/l	0.0203	0.0	.025	81.0	51.1-140	L678579-04	WG702099
1,1-Dichloropropene	mg/l	0.0216	0.0	.025	86.0	57.3-136	L678579-04	WG702099
1,2,3-Trichlorobenzene	mg/l	0.0219	0.0	.025	87.0	59.1-138	L678579-04	WG702099
1,2,3-Trichloropropane	mg/l	0.0200	0.0	.025	80.0	61.4-128	L678579-04	WG702099
1,2,3-Trimethylbenzene	mg/l	0.0189	0.0	.025	76.0	61.3-122	L678579-04	WG702099
1,2,4-Trichlorobenzene	mg/l	0.0239	0.0	.025	95.0	63.6-143	L678579-04	WG702099
1,2,4-Trimethylbenzene	mg/l	0.0236	0.0	.025	94.0	57.4-137	L678579-04	WG702099
1,2-Dibromo-3-Chloropropane	mg/l	0.0196	0.0	.025	79.0	57.3-136	L678579-04	WG702099
1,2-Dibromoethane	mg/l	0.0205	0.0	.025	82.0	67.1-125	L678579-04	WG702099
1,2-Dichlorobenzene	mg/l	0.0226	0.0	.025	90.0	68.2-123	L678579-04	WG702099
1,2-Dichloroethane	mg/l	0.0220	0.0	.025	88.0	60-126	L678579-04	WG702099
1,2-Dichloropropane	mg/l	0.0215	0.0	.025	86.0	64.2-123	L678579-04	WG702099
1,3,5-Trimethylbenzene	mg/l	0.0239	0.0	.025	95.0	63.6-132	L678579-04	WG702099
1,3-Dichlorobenzene	mg/l	0.0250	0.0	.025	100.	63.1-131	L678579-04	WG702099
1,3-Dichloropropane	mg/l	0.0203	0.0	.025	81.0	67.9-121	L678579-04	WG702099
1,4-Dichlorobenzene	mg/l	0.0228	0.0	.025	91.0	68.6-123	L678579-04	WG702099
2,2-Dichloropropane	mg/l	0.0226	0.0	.025	90.0	50.5-144	L678579-04	WG702099
2-Butanone (MEK)	mg/l	0.0674	0.0	.125	54.0	22.4-138	L678579-04	WG702099
2-Chloroethyl vinyl ether	mg/l	0.0245	0.0	.125	20.0	10-155	L678579-04	WG702099
2-Chlorotoluene	mg/l	0.0239	0.0	.025	96.0	63.6-128	L678579-04	WG702099
4-Chlorotoluene	mg/l	0.0231	0.0	.025	92.0	65.7-127	L678579-04	WG702099
4-Methyl-2-pentanone (MIBK)	mg/l	0.0967	0.0	.125	77.0	60.8-140	L678579-04	WG702099
Acetone	mg/l	0.0452	0.00170	.125	35.0	10-130	L678579-04	WG702099
Acrolein	mg/l	0.0853	0.0	.125	68.0	10-200	L678579-04	WG702099
Acrylonitrile	mg/l	0.104	0.0	.125	83.0	49.4-133	L678579-04	WG702099
Benzene	mg/l	0.0216	0.0	.025	86.0	54.3-133	L678579-04	WG702099
Bromobenzene	mg/l	0.0230	0.0	.025	92.0	63.9-124	L678579-04	WG702099
Bromodichloromethane	mg/l	0.0217	0.0	.025	87.0	63.9-121	L678579-04	WG702099
Bromoform	mg/l	0.0240	0.0	.025	96.0	59.5-134	L678579-04	WG702099
Bromomethane	mg/l	0.0288	0.0	.025	120.	41.7-155	L678579-04	WG702099
Carbon tetrachloride	mg/l	0.0235	0.0	.025	94.0	55.7-134	L678579-04	WG702099
Chlorobenzene	mg/l	0.0232	0.0	.025	93.0	67-125	L678579-04	WG702099
Chlorodibromomethane	mg/l	0.0225	0.0	.025	90.0	64.3-125	L678579-04	WG702099
Chloroethane	mg/l	0.0243	0.0	.025	97.0	51.5-136	L678579-04	WG702099
Chloroform	mg/l	0.0225	0.000414	.025	88.0	63-129	L678579-04	WG702099
Chloromethane	mg/l	0.0187	0.0	.025	75.0	42.4-135	L678579-04	WG702099
cis-1,2-Dichloroethene	mg/l	0.0223	0.0	.025	89.0	59.2-129	L678579-04	WG702099
cis-1,3-Dichloropropene	mg/l	0.0215	0.0	.025	86.0	66.4-125	L678579-04	WG702099
Di-isopropyl ether	mg/l	0.0201	0.0	.025	81.0	56.9-136	L678579-04	WG702099
Dibromomethane	mg/l	0.0214	0.0	.025	86.0	68.2-124	L678579-04	WG702099
Dichlorodifluoromethane	mg/l	0.0229	0.0	.025	92.0	40.6-144	L678579-04	WG702099

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Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Ethylbenzene	mg/l	0.0234	0.0	.025	94.0	61.4-133	L678579-04	WG702099
Hexachloro-1,3-butadiene	mg/l	0.0214	0.0	.025	86.0	55.1-136	L678579-04	WG702099
Isopropylbenzene	mg/l	0.0256	0.0	.025	100.	66.8-141	L678579-04	WG702099
Methyl tert-butyl ether	mg/l	0.0215	0.0	.025	86.0	57.7-134	L678579-04	WG702099
Methylene Chloride	mg/l	0.0207	0.0	.025	83.0	58.1-122	L678579-04	WG702099
n-Butylbenzene	mg/l	0.0229	0.0	.025	92.0	62.7-140	L678579-04	WG702099
n-Propylbenzene	mg/l	0.0241	0.0	.025	96.0	65.9-131	L678579-04	WG702099
Naphthalene	mg/l	0.0198	0.0	.025	79.0	58-135	L678579-04	WG702099
p-Isopropyltoluene	mg/l	0.0244	0.0	.025	97.0	63.2-139	L678579-04	WG702099
sec-Butylbenzene	mg/l	0.0238	0.0	.025	95.0	62.2-136	L678579-04	WG702099
Styrene	mg/l	0.0244	0.0	.025	98.0	66.8-133	L678579-04	WG702099
tert-Butylbenzene	mg/l	0.0239	0.0	.025	96.0	63.3-134	L678579-04	WG702099
Tetrachloroethene	mg/l	0.0240	0.0	.025	96.0	53-139	L678579-04	WG702099
Toluene	mg/l	0.0218	0.0	.025	87.0	61.4-130	L678579-04	WG702099
trans-1,2-Dichloroethene	mg/l	0.0218	0.0	.025	87.0	56.5-129	L678579-04	WG702099
trans-1,3-Dichloropropene	mg/l	0.0213	0.0	.025	85.0	64.1-128	L678579-04	WG702099
Trichloroethene	mg/l	0.0233	0.0	.025	93.0	44.1-149	L678579-04	WG702099
Trichlorofluoromethane	mg/l	0.0273	0.0	.025	110.	49.6-145	L678579-04	WG702099
Vinyl chloride	mg/l	0.0224	0.0	.025	89.0	47.8-137	L678579-04	WG702099
Xylenes, Total	mg/l	0.0695	0.0	.075	93.0	63.3-131	L678579-04	WG702099
4-Bromofluorobenzene					102.0	71-126		WG702099
Dibromofluoromethane					104.0	78.3-121		WG702099
Toluene-d8					107.0	88.5-111		WG702099
a,a,a-Trifluorotoluene					107.0	85-114		WG702099
1,1,1,2-Tetrachloroethane	mg/kg	0.114	0.0	.025	92.0	64-128	L678551-01	WG702041
1,1,1-Trichloroethane	mg/kg	0.121	0.0	.025	96.0	58.7-134	L678551-01	WG702041
1,1,2,2-Tetrachloroethane	mg/kg	0.107	0.0	.025	86.0	56-132	L678551-01	WG702041
1,1,2-Trichloroethane	mg/kg	0.112	0.0	.025	90.0	66.3-125	L678551-01	WG702041
1,1-Dichloroethane	mg/kg	0.125	0.0	.025	100.	58.5-132	L678551-01	WG702041
1,1-Dichloroethene	mg/kg	0.134	0.0	.025	110.	51.1-140	L678551-01	WG702041
1,1-Dichloropropene	mg/kg	0.122	0.0	.025	98.0	57.3-136	L678551-01	WG702041
1,2,3-Trichlorobenzene	mg/kg	0.108	0.0	.025	86.0	59.1-138	L678551-01	WG702041
1,2,3-Trichloropropane	mg/kg	0.111	0.0	.025	89.0	61.4-128	L678551-01	WG702041
1,2,4-Trichlorobenzene	mg/kg	0.113	0.0	.025	90.0	63.6-143	L678551-01	WG702041
1,2,4-Trimethylbenzene	mg/kg	0.115	0.0	.025	92.0	57.4-137	L678551-01	WG702041
1,2-Dibromo-3-Chloropropane	mg/kg	0.111	0.0	.025	89.0	57.3-136	L678551-01	WG702041
1,2-Dibromoethane	mg/kg	0.111	0.0	.025	88.0	67.1-125	L678551-01	WG702041
1,2-Dichlorobenzene	mg/kg	0.111	0.0	.025	89.0	68.2-123	L678551-01	WG702041
1,2-Dichloroethane	mg/kg	0.116	0.0	.025	93.0	60-126	L678551-01	WG702041
1,2-Dichloropropane	mg/kg	0.119	0.0	.025	95.0	64.2-123	L678551-01	WG702041
1,3,5-Trimethylbenzene	mg/kg	0.117	0.0	.025	93.0	63.6-132	L678551-01	WG702041
1,3-Dichlorobenzene	mg/kg	0.110	0.0	.025	88.0	63.1-131	L678551-01	WG702041
1,3-Dichloropropane	mg/kg	0.113	0.0	.025	90.0	67.9-121	L678551-01	WG702041
1,4-Dichlorobenzene	mg/kg	0.111	0.0	.025	89.0	68.6-123	L678551-01	WG702041
2,2-Dichloropropane	mg/kg	0.128	0.0	.025	100.	50.5-144	L678551-01	WG702041
2-Butanone (MEK)	mg/kg	0.536	0.0	.125	86.0	22.4-138	L678551-01	WG702041
2-Chloroethyl vinyl ether	mg/kg	0.610	0.0	.125	98.0	10-155	L678551-01	WG702041
2-Chlorotoluene	mg/kg	0.106	0.0	.025	85.0	63.6-128	L678551-01	WG702041
4-Chlorotoluene	mg/kg	0.114	0.0	.025	91.0	65.7-127	L678551-01	WG702041
4-Methyl-2-pentanone (MIBK)	mg/kg	0.572	0.0	.125	92.0	60.8-140	L678551-01	WG702041
Acetone	mg/kg	0.533	0.00500	.125	84.0	10-130	L678551-01	WG702041
Acrylonitrile	mg/kg	0.557	0.0	.125	89.0	49.4-133	L678551-01	WG702041
Benzene	mg/kg	0.114	0.0	.025	91.0	54.3-133	L678551-01	WG702041
Bromobenzene	mg/kg	0.112	0.0	.025	90.0	63.9-124	L678551-01	WG702041
Bromodichloromethane	mg/kg	0.113	0.0	.025	90.0	63.9-121	L678551-01	WG702041
Bromoform	mg/kg	0.112	0.0	.025	90.0	59.5-134	L678551-01	WG702041
Bromomethane	mg/kg	0.118	0.0	.025	95.0	41.7-155	L678551-01	WG702041

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January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Carbon tetrachloride	mg/kg	0.122	0.0	.025	98.0	55.7-134	L678551-01	WG702041
Chlorobenzene	mg/kg	0.113	0.0	.025	91.0	67-125	L678551-01	WG702041
Chlorodibromomethane	mg/kg	0.110	0.0	.025	88.0	64.3-125	L678551-01	WG702041
Chloroethane	mg/kg	0.120	0.0	.025	96.0	51.5-136	L678551-01	WG702041
Chloroform	mg/kg	0.120	0.0	.025	96.0	63-129	L678551-01	WG702041
Chloromethane	mg/kg	0.111	0.0	.025	89.0	42.4-135	L678551-01	WG702041
cis-1,2-Dichloroethene	mg/kg	0.118	0.0	.025	94.0	59.2-129	L678551-01	WG702041
cis-1,3-Dichloropropene	mg/kg	0.117	0.0	.025	94.0	66.4-125	L678551-01	WG702041
Di-isopropyl ether	mg/kg	0.120	0.0	.025	96.0	56.9-136	L678551-01	WG702041
Dibromomethane	mg/kg	0.115	0.0	.025	92.0	68.2-124	L678551-01	WG702041
Dichlorodifluoromethane	mg/kg	0.116	0.0	.025	93.0	40.6-144	L678551-01	WG702041
Ethylbenzene	mg/kg	0.117	0.0	.025	93.0	61.4-133	L678551-01	WG702041
Hexachloro-1,3-butadiene	mg/kg	0.108	0.0	.025	87.0	55.1-136	L678551-01	WG702041
Isopropylbenzene	mg/kg	0.123	0.0	.025	99.0	66.8-141	L678551-01	WG702041
Methyl tert-butyl ether	mg/kg	0.115	0.0	.025	92.0	57.7-134	L678551-01	WG702041
Methylene Chloride	mg/kg	0.114	0.000675	.025	90.0	58.1-122	L678551-01	WG702041
n-Butylbenzene	mg/kg	0.123	0.0	.025	98.0	62.7-140	L678551-01	WG702041
n-Propylbenzene	mg/kg	0.117	0.0	.025	94.0	10-176	L678551-01	WG702041
Naphthalene	mg/kg	0.109	0.00108	.025	86.0	58-135	L678551-01	WG702041
p-Isopropyltoluene	mg/kg	0.120	0.0	.025	96.0	63.2-139	L678551-01	WG702041
sec-Butylbenzene	mg/kg	0.120	0.0	.025	96.0	62.2-136	L678551-01	WG702041
Styrene	mg/kg	0.120	0.0	.025	96.0	66.8-133	L678551-01	WG702041
tert-Butylbenzene	mg/kg	0.119	0.0	.025	95.0	63.3-134	L678551-01	WG702041
Tetrachloroethene	mg/kg	0.116	0.0	.025	93.0	53-139	L678551-01	WG702041
Toluene	mg/kg	0.115	0.000323	.025	92.0	61.4-130	L678551-01	WG702041
trans-1,2-Dichloroethene	mg/kg	0.119	0.0	.025	95.0	56.5-129	L678551-01	WG702041
trans-1,3-Dichloropropene	mg/kg	0.110	0.0	.025	88.0	64.1-128	L678551-01	WG702041
Trichloroethene	mg/kg	0.116	0.0	.025	93.0	44.1-149	L678551-01	WG702041
Trichlorofluoromethane	mg/kg	0.123	0.0	.025	98.0	49.6-145	L678551-01	WG702041
Vinyl chloride	mg/kg	0.117	0.0	.025	93.0	47.8-137	L678551-01	WG702041
Xylenes, Total	mg/kg	0.352	0.000363	.075	94.0	63.3-131	L678551-01	WG702041
4-Bromofluorobenzene					104.0	71-126		WG702041
Dibromofluoromethane					102.0	78.3-121		WG702041
Toluene-d8					105.0	88.5-111		WG702041
a,a,a-Trifluorotoluene					103.0	85-114		WG702041
4,4-DDD	mg/kg	0.0452	0.0	.067	67.0	23.4-145	L678442-02	WG701964
4,4-DDE	mg/kg	0.125	0.0563	.067	100.	16.4-147	L678442-02	WG701964
4,4-DDT	mg/kg	0.0689	0.0197	.067	73.0	26.7-129	L678442-02	WG701964
Aldrin	mg/kg	0.0433	0.0	.067	65.0	40.2-116	L678442-02	WG701964
Alpha BHC	mg/kg	0.0636	0.0	.067	95.0	53.6-109	L678442-02	WG701964
Beta BHC	mg/kg	0.0702	0.0	.067	100.	38.3-126	L678442-02	WG701964
Delta BHC	mg/kg	0.0692	0.0	.067	100.	44.8-125	L678442-02	WG701964
Dieldrin	mg/kg	0.0479	0.0	.067	71.0	31.4-137	L678442-02	WG701964
Endosulfan I	mg/kg	0.0478	0.0	.067	71.0	40.3-120	L678442-02	WG701964
Endosulfan II	mg/kg	0.0527	0.0	.067	79.0	29.1-140	L678442-02	WG701964
Endosulfan sulfate	mg/kg	0.0546	0.0	.067	81.0	43.3-129	L678442-02	WG701964
Endrin	mg/kg	0.0461	0.0	.067	69.0	34.9-125	L678442-02	WG701964
Endrin aldehyde	mg/kg	0.0558	0.0	.067	83.0	15.6-139	L678442-02	WG701964
Endrin ketone	mg/kg	0.0590	0.0	.067	88.0	35.4-137	L678442-02	WG701964
Gamma BHC	mg/kg	0.0671	0.0	.067	100.	55.3-110	L678442-02	WG701964
Heptachlor	mg/kg	0.0459	0.0	.067	68.0	41.6-115	L678442-02	WG701964
Heptachlor epoxide	mg/kg	0.0500	0.0	.067	75.0	34.8-128	L678442-02	WG701964
Hexachlorobenzene	mg/kg	0.0482	0.0	.067	72.0	40.2-119	L678442-02	WG701964
Methoxychlor	mg/kg	0.0377	0.0	.067	56.0	16-134	L678442-02	WG701964
Decachlorobiphenyl					48.40	10-145		WG701964
Tetrachloro-m-xylene					61.90	21.1-148		WG701964

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Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,2,4-Trichlorobenzene	mg/kg	0.219	0.0	.333	66.0	36.5-114	L678874-01	WG702394
2,4,6-Trichlorophenol	mg/kg	0.299	0.0	.333	90.0	33.8-133	L678874-01	WG702394
2,4-Dichlorophenol	mg/kg	0.257	0.0	.333	77.0	34.8-134	L678874-01	WG702394
2,4-Dimethylphenol	mg/kg	0.260	0.0	.333	78.0	12.3-149	L678874-01	WG702394
2,4-Dinitrophenol	mg/kg	0.147	0.0	.333	44.0	10-121	L678874-01	WG702394
2,4-Dinitrotoluene	mg/kg	0.306	0.0	.333	92.0	27.8-147	L678874-01	WG702394
2,6-Dinitrotoluene	mg/kg	0.315	0.0	.333	95.0	36.5-137	L678874-01	WG702394
2-Chloronaphthalene	mg/kg	0.278	0.0	.333	83.0	37.5-123	L678874-01	WG702394
2-Chlorophenol	mg/kg	0.231	0.0	.333	69.0	33.2-121	L678874-01	WG702394
2-Nitrophenol	mg/kg	0.269	0.0	.333	81.0	29.5-144	L678874-01	WG702394
3,3-Dichlorobenzidine	mg/kg	0.280	0.0	.333	84.0	10-129	L678874-01	WG702394
4,6-Dinitro-2-methylphenol	mg/kg	0.190	0.0	.333	57.0	10-144	L678874-01	WG702394
4-Bromophenyl-phenylether	mg/kg	0.284	0.0	.333	85.0	39-130	L678874-01	WG702394
4-Chloro-3-methylphenol	mg/kg	0.290	0.0	.333	87.0	27-154	L678874-01	WG702394
4-Chlorophenyl-phenylether	mg/kg	0.287	0.0	.333	86.0	37.9-123	L678874-01	WG702394
4-Nitrophenol	mg/kg	0.313	0.0	.333	94.0	20-133	L678874-01	WG702394
Acenaphthene	mg/kg	0.278	0.0	.333	83.0	32.2-134	L678874-01	WG702394
Acenaphthylene	mg/kg	0.286	0.0	.333	86.0	38.7-129	L678874-01	WG702394
Anthracene	mg/kg	0.285	0.0	.333	86.0	32.3-137	L678874-01	WG702394
Benzidine	mg/kg	0.0172	0.0	.333	5.20	0-49.9	L678874-01	WG702394
Benzo(a)anthracene	mg/kg	0.283	0.0	.333	85.0	33.3-124	L678874-01	WG702394
Benzo(a)pyrene	mg/kg	0.276	0.0	.333	83.0	28.2-128	L678874-01	WG702394
Benzo(b)fluoranthene	mg/kg	0.308	0.0	.333	92.0	23.3-133	L678874-01	WG702394
Benzo(g,h,i)perylene	mg/kg	0.299	0.0	.333	90.0	10-127	L678874-01	WG702394
Benzo(k)fluoranthene	mg/kg	0.296	0.0	.333	89.0	31-129	L678874-01	WG702394
Benzylbutyl phthalate	mg/kg	0.304	0.0	.333	91.0	33.4-128	L678874-01	WG702394
Bis(2-chlorethoxy)methane	mg/kg	0.237	0.0	.333	71.0	35-132	L678874-01	WG702394
Bis(2-chloroethyl)ether	mg/kg	0.214	0.0	.333	64.0	28.8-128	L678874-01	WG702394
Bis(2-chloroisopropyl)ether	mg/kg	0.220	0.0	.333	66.0	31.8-118	L678874-01	WG702394
Bis(2-ethylhexyl)phthalate	mg/kg	0.303	0.0	.333	91.0	21.8-141	L678874-01	WG702394
Chrysene	mg/kg	0.289	0.0	.333	87.0	36.3-129	L678874-01	WG702394
Di-n-butyl phthalate	mg/kg	0.261	0.0	.333	78.0	32.2-133	L678874-01	WG702394
Di-n-octyl phthalate	mg/kg	0.320	0.0	.333	96.0	28.5-128	L678874-01	WG702394
Dibenz(a,h)anthracene	mg/kg	0.300	0.0	.333	90.0	10.5-128	L678874-01	WG702394
Diethyl phthalate	mg/kg	0.294	0.0	.333	88.0	39.4-136	L678874-01	WG702394
Dimethyl phthalate	mg/kg	0.302	0.0	.333	91.0	35.8-137	L678874-01	WG702394
Fluoranthene	mg/kg	0.266	0.0	.333	80.0	27.9-138	L678874-01	WG702394
Fluorene	mg/kg	0.291	0.0	.333	87.0	34-133	L678874-01	WG702394
Hexachloro-1,3-butadiene	mg/kg	0.219	0.0	.333	66.0	36.5-125	L678874-01	WG702394
Hexachlorobenzene	mg/kg	0.285	0.0	.333	86.0	34.4-116	L678874-01	WG702394
Hexachlorocyclopentadiene	mg/kg	0.136	0.0	.333	41.0	10-124	L678874-01	WG702394
Hexachloroethane	mg/kg	0.218	0.0	.333	66.0	11.3-143	L678874-01	WG702394
Indeno(1,2,3-cd)pyrene	mg/kg	0.302	0.0	.333	91.0	10-128	L678874-01	WG702394
Isophorone	mg/kg	0.269	0.0	.333	81.0	25.7-116	L678874-01	WG702394
n-Nitrosodi-n-propylamine	mg/kg	0.233	0.0	.333	70.0	33-134	L678874-01	WG702394
n-Nitrosodimethylamine	mg/kg	0.193	0.0	.333	58.0	19.2-127	L678874-01	WG702394
n-Nitrosodiphenylamine	mg/kg	0.275	0.0	.333	82.0	26.8-133	L678874-01	WG702394
Naphthalene	mg/kg	0.234	0.0	.333	70.0	36.4-121	L678874-01	WG702394
Nitrobenzene	mg/kg	0.260	0.0	.333	78.0	30.9-134	L678874-01	WG702394
Pentachlorophenol	mg/kg	0.278	0.0	.333	83.0	10-139	L678874-01	WG702394
Phenanthrene	mg/kg	0.303	0.0	.333	91.0	30.8-137	L678874-01	WG702394
Phenol	mg/kg	0.238	0.0	.333	72.0	25.1-130	L678874-01	WG702394
Pyrene	mg/kg	0.288	0.0	.333	86.0	24.1-130	L678874-01	WG702394
2,4,6-Tribromophenol					99.10	21.6-142		WG702394
2-Fluorobiphenyl					82.00	34.9-129		WG702394
2-Fluorophenol					64.00	21.1-116		WG702394
Nitrobenzene-d5					72.10	21.9-129		WG702394
Phenol-d5					71.30	26.3-121		WG702394

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Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
			Matrix Spike					
p-Terphenyl-d14					74.20	21.5-128		
Antimony	mg/kg	46.1	-1.72	50	92.0	75-125	L678618-01	WG702129
Arsenic	mg/kg	57.9	8.21	50	99.0	75-125	L678618-01	WG702129
Beryllium	mg/kg	52.7	0.0926	50	100.	75-125	L678618-01	WG702129
Cadmium	mg/kg	49.5	0.877	50	97.0	75-125	L678618-01	WG702129
Chromium	mg/kg	51.7	4.15	50	95.0	75-125	L678618-01	WG702129
Copper	mg/kg	90.1	37.4	50	100.	75-125	L678618-01	WG702129
Lead	mg/kg	52.2	3.32	50	98.0	75-125	L678618-01	WG702129
Nickel	mg/kg	50.1	1.50	50	97.0	75-125	L678618-01	WG702129
Silver	mg/kg	51.4	0.0786	50	100.	75-125	L678618-01	WG702129
Thallium	mg/kg	48.8	-0.534	50	98.0	75-125	L678618-01	WG702129
Zinc	mg/kg	177.	132.	50	90.0	75-125	L678618-01	WG702129
Selenium	mg/kg	52.6	1.20	50	100.	75-125	L678618-01	WG702129
Azinphos-Methyl	mg/kg	0.291	0.0	.3335	87.0	21.6-134	L678615-01	WG702063
Bolstar (Sulprofos)	mg/kg	0.307	0.0	.3335	92.0	38.1-117	L678615-01	WG702063
Chlorpyrifos	mg/kg	0.301	0.0	.3335	90.0	39.5-109	L678615-01	WG702063
Coumaphos	mg/kg	0.286	0.0	.3335	86.0	32.2-129	L678615-01	WG702063
Demeton,-O and -S	mg/kg	0.148	0.0	.1668	89.0	17.3-123	L678615-01	WG702063
Diazinon	mg/kg	0.300	0.0	.3335	90.0	34.6-118	L678615-01	WG702063
Dichlorvos	mg/kg	0.276	0.0	.3335	83.0	14.8-126	L678615-01	WG702063
Dimethoate	mg/kg	0.244	0.0	.3335	73.0	10-128	L678615-01	WG702063
Disulfoton	mg/kg	0.305	0.0	.3335	92.0	38.1-108	L678615-01	WG702063
EPN	mg/kg	0.314	0.0	.3335	94.0	34.1-123	L678615-01	WG702063
Ethoprop	mg/kg	0.295	0.0	.3335	89.0	35.9-111	L678615-01	WG702063
Ethyl Parathion	mg/kg	0.307	0.0	.3335	92.0	34-116	L678615-01	WG702063
Fensulfothion	mg/kg	0.279	0.0	.3335	84.0	16.5-127	L678615-01	WG702063
Fenthion	mg/kg	0.289	0.0	.3335	87.0	38.5-111	L678615-01	WG702063
Malathion	mg/kg	0.297	0.0	.3335	89.0	37.4-114	L678615-01	WG702063
Merphos	mg/kg	0.305	0.0	.3335	91.0	32.7-108	L678615-01	WG702063
Methyl parathion	mg/kg	0.315	0.0	.3335	95.0	33-114	L678615-01	WG702063
Mevinphos	mg/kg	0.292	0.0	.3335	88.0	13.4-123	L678615-01	WG702063
Naled	mg/kg	0.303	0.0	.3335	91.0	10-154	L678615-01	WG702063
Phorate	mg/kg	0.306	0.0	.3335	92.0	37.4-108	L678615-01	WG702063
Ronnel	mg/kg	0.298	0.0	.3335	89.0	37.9-108	L678615-01	WG702063
Stirophos	mg/kg	0.299	0.0	.3335	90.0	32.2-113	L678615-01	WG702063
Sulfotep	mg/kg	0.290	0.0	.3335	87.0	37.9-112	L678615-01	WG702063
TEPP	mg/kg	0.291	0.0	.3335	87.0	10-132	L678615-01	WG702063
Tokuthion (Prothothiofos)	mg/kg	0.304	0.0	.3335	91.0	37.6-114	L678615-01	WG702063
Trichloronate	mg/kg	0.303	0.0	.3335	91.0	40-107	L678615-01	WG702063
Tributyl Phosphate					80.20	26.9-135		WG702063
Triphenyl Phosphate					81.80	40-121		WG702063

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
			Matrix Spike Duplicate						
Mercury	mg/kg	0.290	0.279	103.	80-120	4.00	20	L678607-05	WG702044
1,1,1,2-Tetrachloroethane	mg/l	0.0245	0.0232	97.8	64-128	5.17	20	L678579-04	WG702099
1,1,1-Trichloroethane	mg/l	0.0245	0.0228	97.9	58.7-134	7.21	20	L678579-04	WG702099
1,1,2,2-Tetrachloroethane	mg/l	0.0234	0.0207	93.6	56-132	12.3	22.2	L678579-04	WG702099
1,1,2-Trichloroethane	mg/l	0.0238	0.0216	95.4	66.3-125	10.0	20	L678579-04	WG702099
1,1,2-Trichlorotrifluoroethane	mg/l	0.0242	0.0211	96.7	54.8-154	13.4	22.5	L678579-04	WG702099
1,1-Dichloroethane	mg/l	0.0228	0.0212	91.2	58.5-132	7.10	20	L678579-04	WG702099
1,1-Dichloroethene	mg/l	0.0237	0.0203	94.7	51.1-140	15.5	20.2	L678579-04	WG702099
1,1-Dichloropropene	mg/l	0.0229	0.0216	91.7	57.3-136	5.83	20	L678579-04	WG702099
1,2,3-Trichlorobenzene	mg/l	0.0236	0.0219	94.4	59.1-138	7.62	23.7	L678579-04	WG702099

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January 24, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,2,3-Trichloropropane	mg/l	0.0231	0.0200	92.4	61.4-128	14.3	22.4	L678579-04	WG702099
1,2,3-Trimethylbenzene	mg/l	0.0201	0.0189	80.6	61.3-122	6.54	20	L678579-04	WG702099
1,2,4-Trichlorobenzene	mg/l	0.0255	0.0239	102.	63.6-143	6.59	21.9	L678579-04	WG702099
1,2,4-Trimethylbenzene	mg/l	0.0252	0.0236	101.	57.4-137	6.28	20	L678579-04	WG702099
1,2-Dibromo-3-Chloropropane	mg/l	0.0221	0.0196	88.3	57.3-136	11.7	27	L678579-04	WG702099
1,2-Dibromoethane	mg/l	0.0230	0.0205	92.0	67.1-125	11.7	20	L678579-04	WG702099
1,2-Dichlorobenzene	mg/l	0.0245	0.0226	98.1	68.2-123	8.17	20	L678579-04	WG702099
1,2-Dichloroethane	mg/l	0.0239	0.0220	95.6	60-126	8.37	20	L678579-04	WG702099
1,2-Dichloropropane	mg/l	0.0226	0.0215	90.3	64.2-123	4.85	20	L678579-04	WG702099
1,3,5-Trimethylbenzene	mg/l	0.0253	0.0239	101.	63.6-132	5.70	20.5	L678579-04	WG702099
1,3-Dichlorobenzene	mg/l	0.0269	0.0250	108.	63.1-131	7.17	20	L678579-04	WG702099
1,3-Dichloropropane	mg/l	0.0226	0.0203	90.6	67.9-121	10.8	20	L678579-04	WG702099
1,4-Dichlorobenzene	mg/l	0.0245	0.0228	97.9	68.6-123	7.03	20	L678579-04	WG702099
2,2-Dichloropropane	mg/l	0.0243	0.0226	97.0	50.5-144	6.98	21.9	L678579-04	WG702099
2-Butanone (MEK)	mg/l	0.0772	0.0674	61.7	22.4-138	13.5	27	L678579-04	WG702099
2-Chloroethyl vinyl ether	mg/l	0.00442	0.0245	3.53*	10-155	139.*	20	L678579-04	WG702099
2-Chlorotoluene	mg/l	0.0253	0.0239	101.	63.6-128	5.62	20	L678579-04	WG702099
4-Chlorotoluene	mg/l	0.0249	0.0231	99.7	65.7-127	7.69	20	L678579-04	WG702099
4-Methyl-2-pentanone (MIBK)	mg/l	0.111	0.0967	88.7	60.8-140	13.6	25.1	L678579-04	WG702099
Acetone	mg/l	0.0495	0.0452	38.3	10-130	9.06	27.9	L678579-04	WG702099
Acrolein	mg/l	0.0948	0.0853	75.8	10-200	10.6	27.7	L678579-04	WG702099
Acrylonitrile	mg/l	0.115	0.104	92.2	49.4-133	10.0	25.3	L678579-04	WG702099
Benzene	mg/l	0.0232	0.0216	92.7	54.3-133	7.09	20	L678579-04	WG702099
Bromobenzene	mg/l	0.0245	0.0230	98.0	63.9-124	6.41	20	L678579-04	WG702099
Bromodichloromethane	mg/l	0.0240	0.0217	96.2	63.9-121	10.4	20	L678579-04	WG702099
Bromoform	mg/l	0.0274	0.0240	109.	59.5-134	13.1	20.5	L678579-04	WG702099
Bromomethane	mg/l	0.0316	0.0288	126.	41.7-155	9.36	21.9	L678579-04	WG702099
Carbon tetrachloride	mg/l	0.0216	0.0235	86.4	55.7-134	8.25	20	L678579-04	WG702099
Chlorobenzene	mg/l	0.0251	0.0232	100.	67-125	7.72	20	L678579-04	WG702099
Chlorodibromomethane	mg/l	0.0243	0.0225	97.2	64.3-125	7.69	20.8	L678579-04	WG702099
Chloroethane	mg/l	0.0258	0.0243	103.	51.5-136	5.84	40	L678579-04	WG702099
Chloroform	mg/l	0.0239	0.0225	94.0	63-129	6.20	20	L678579-04	WG702099
Chloromethane	mg/l	0.0195	0.0187	77.8	42.4-135	4.07	20	L678579-04	WG702099
cis-1,2-Dichloroethene	mg/l	0.0242	0.0223	96.6	59.2-129	7.89	20	L678579-04	WG702099
cis-1,3-Dichloropropene	mg/l	0.0236	0.0215	94.3	66.4-125	9.22	20	L678579-04	WG702099
Di-isopropyl ether	mg/l	0.0217	0.0201	86.7	56.9-136	7.38	20	L678579-04	WG702099
Dibromomethane	mg/l	0.0235	0.0214	94.0	68.2-124	9.51	20	L678579-04	WG702099
Dichlorodifluoromethane	mg/l	0.0241	0.0229	96.3	40.6-144	4.94	20.2	L678579-04	WG702099
Ethylbenzene	mg/l	0.0245	0.0234	97.9	61.4-133	4.60	20	L678579-04	WG702099
Hexachloro-1,3-butadiene	mg/l	0.0218	0.0214	87.2	55.1-136	1.82	23.6	L678579-04	WG702099
Isopropylbenzene	mg/l	0.0269	0.0256	108.	66.8-141	4.92	20	L678579-04	WG702099
Methyl tert-butyl ether	mg/l	0.0232	0.0215	92.7	57.7-134	7.35	20	L678579-04	WG702099
Methylene Chloride	mg/l	0.0221	0.0207	88.5	58.1-122	6.85	20	L678579-04	WG702099
n-Butylbenzene	mg/l	0.0239	0.0229	95.4	62.7-140	4.21	20.3	L678579-04	WG702099
n-Propylbenzene	mg/l	0.0256	0.0241	102.	65.9-131	6.02	20	L678579-04	WG702099
Naphthalene	mg/l	0.0214	0.0198	85.7	58-135	8.07	25.5	L678579-04	WG702099
p-Isopropyltoluene	mg/l	0.0257	0.0244	103.	63.2-139	5.42	20.4	L678579-04	WG702099
sec-Butylbenzene	mg/l	0.0250	0.0238	99.9	62.2-136	5.01	20.3	L678579-04	WG702099
Styrene	mg/l	0.0261	0.0244	104.	66.8-133	6.85	20	L678579-04	WG702099
tert-Butylbenzene	mg/l	0.0255	0.0239	102.	63.3-134	6.31	21	L678579-04	WG702099
Tetrachloroethene	mg/l	0.0248	0.0240	99.3	53-139	3.25	20	L678579-04	WG702099
Toluene	mg/l	0.0232	0.0218	92.9	61.4-130	6.12	20	L678579-04	WG702099
trans-1,2-Dichloroethene	mg/l	0.0228	0.0218	91.3	56.5-129	4.73	20	L678579-04	WG702099
trans-1,3-Dichloropropene	mg/l	0.0243	0.0213	97.0	64.1-128	12.8	20	L678579-04	WG702099
Trichloroethene	mg/l	0.0238	0.0233	95.4	44.1-149	2.41	20	L678579-04	WG702099
Trichlorofluoromethane	mg/l	0.0290	0.0273	116.	49.6-145	6.20	21.2	L678579-04	WG702099
Vinyl chloride	mg/l	0.0230	0.0224	92.1	47.8-137	2.99	20	L678579-04	WG702099
Xylenes, Total	mg/l	0.0736	0.0695	98.1	63.3-131	5.70	20	L678579-04	WG702099
4-Bromofluorobenzene				104.0	71-126				WG702099

* Performance of this Analyte is outside of established criteria.
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12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	MSD	Matrix Spike Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
Dibromofluoromethane				104.0	78.3-121				
Toluene-d8				106.0	88.5-111				
a,a,a-Trifluorotoluene				107.0	85-114				
1,1,1,2-Tetrachloroethane	mg/kg	0.126	0.114	101.	64-128	9.72	20	L678551-01	WG702041
1,1,1-Trichloroethane	mg/kg	0.128	0.121	103.	58.7-134	6.34	20	L678551-01	WG702041
1,1,2,2-Tetrachloroethane	mg/kg	0.118	0.107	94.3	56-132	9.75	22.2	L678551-01	WG702041
1,1,2-Trichloroethane	mg/kg	0.126	0.112	100.	66.3-125	11.6	20	L678551-01	WG702041
1,1-Dichloroethane	mg/kg	0.132	0.125	105.	58.5-132	5.57	20	L678551-01	WG702041
1,1-Dichloroethene	mg/kg	0.138	0.134	110.	51.1-140	2.56	20.2	L678551-01	WG702041
1,1-Dichloropropene	mg/kg	0.127	0.122	101.	57.3-136	3.84	20	L678551-01	WG702041
1,2,3-Trichlorobenzene	mg/kg	0.114	0.108	91.5	59.1-138	6.02	23.7	L678551-01	WG702041
1,2,3-Trichloropropane	mg/kg	0.122	0.111	98.0	61.4-128	9.79	22.4	L678551-01	WG702041
1,2,4-Trichlorobenzene	mg/kg	0.120	0.113	96.4	63.6-143	6.41	21.9	L678551-01	WG702041
1,2,4-Trimethylbenzene	mg/kg	0.124	0.115	99.1	57.4-137	7.17	20	L678551-01	WG702041
1,2-Dibromo-3-Chloropropane	mg/kg	0.125	0.111	99.6	57.3-136	11.2	27	L678551-01	WG702041
1,2-Dibromoethane	mg/kg	0.121	0.111	96.5	67.1-125	8.78	20	L678551-01	WG702041
1,2-Dichlorobenzene	mg/kg	0.117	0.111	93.4	68.2-123	4.60	20	L678551-01	WG702041
1,2-Dichloroethane	mg/kg	0.125	0.116	100.	60-126	7.47	20	L678551-01	WG702041
1,2-Dichloropropane	mg/kg	0.125	0.119	100.	64.2-123	5.31	20	L678551-01	WG702041
1,3,5-Trimethylbenzene	mg/kg	0.126	0.117	101.	63.6-132	7.58	20.5	L678551-01	WG702041
1,3-Dichlorobenzene	mg/kg	0.117	0.110	93.8	63.1-131	6.20	20	L678551-01	WG702041
1,3-Dichloropropane	mg/kg	0.124	0.113	98.8	67.9-121	8.74	20	L678551-01	WG702041
1,4-Dichlorobenzene	mg/kg	0.117	0.111	93.7	68.6-123	5.14	20	L678551-01	WG702041
2,2-Dichloropropane	mg/kg	0.140	0.128	112.	50.5-144	8.33	21.9	L678551-01	WG702041
2-Butanone (MEK)	mg/kg	0.579	0.536	92.6	22.4-138	7.64	27	L678551-01	WG702041
2-Chloroethyl vinyl ether	mg/kg	0.651	0.610	104.	10-155	6.53	40	L678551-01	WG702041
2-Chlorotoluene	mg/kg	0.113	0.106	90.4	63.6-128	6.03	20	L678551-01	WG702041
4-Chlorotoluene	mg/kg	0.121	0.114	96.5	65.7-127	5.62	20	L678551-01	WG702041
4-Methyl-2-pentanone (MIBK)	mg/kg	0.631	0.572	101.	60.8-140	9.86	25.1	L678551-01	WG702041
Acetone	mg/kg	0.581	0.533	92.2	10-130	8.70	27.9	L678551-01	WG702041
Acrylonitrile	mg/kg	0.599	0.557	95.8	49.4-133	7.21	25.3	L678551-01	WG702041
Benzene	mg/kg	0.122	0.114	97.8	54.3-133	6.91	20	L678551-01	WG702041
Bromobenzene	mg/kg	0.120	0.112	96.1	63.9-124	6.57	20	L678551-01	WG702041
Bromodichloromethane	mg/kg	0.118	0.113	94.5	63.9-121	4.75	20	L678551-01	WG702041
Bromoform	mg/kg	0.122	0.112	97.9	59.5-134	8.96	20.8	L678551-01	WG702041
Bromomethane	mg/kg	0.122	0.118	97.8	41.7-155	3.37	20.5	L678551-01	WG702041
Carbon tetrachloride	mg/kg	0.130	0.122	104.	55.7-134	6.22	20.3	L678551-01	WG702041
Chlorobenzene	mg/kg	0.121	0.113	96.7	67-125	6.42	20	L678551-01	WG702041
Chlorodibromomethane	mg/kg	0.123	0.110	98.0	64.3-125	10.5	20	L678551-01	WG702041
Chloroethane	mg/kg	0.118	0.120	94.5	51.5-136	1.76	20.8	L678551-01	WG702041
Chloroform	mg/kg	0.125	0.120	100.	63-129	4.68	20	L678551-01	WG702041
Chloromethane	mg/kg	0.117	0.111	93.2	42.4-135	4.61	20	L678551-01	WG702041
cis-1,2-Dichloroethene	mg/kg	0.125	0.118	100.	59.2-129	6.08	20	L678551-01	WG702041
cis-1,3-Dichloropropene	mg/kg	0.124	0.117	99.5	66.4-125	6.21	20	L678551-01	WG702041
Di-isopropyl ether	mg/kg	0.129	0.120	103.	56.9-136	7.00	20	L678551-01	WG702041
Dibromomethane	mg/kg	0.123	0.115	98.3	68.2-124	6.63	20	L678551-01	WG702041
Dichlorodifluoromethane	mg/kg	0.119	0.116	95.2	40.6-144	2.58	20.2	L678551-01	WG702041
Ethylbenzene	mg/kg	0.126	0.117	100.	61.4-133	7.48	20	L678551-01	WG702041
Hexachloro-1,3-butadiene	mg/kg	0.118	0.108	94.6	55.1-136	8.76	23.6	L678551-01	WG702041
Isopropylbenzene	mg/kg	0.135	0.123	108.	66.8-141	9.27	20	L678551-01	WG702041
Methyl tert-butyl ether	mg/kg	0.121	0.115	96.6	57.7-134	5.14	20	L678551-01	WG702041
Methylene Chloride	mg/kg	0.120	0.114	95.5	58.1-122	5.43	20	L678551-01	WG702041
n-Butylbenzene	mg/kg	0.126	0.123	101.	62.7-140	2.94	20	L678551-01	WG702041
n-Propylbenzene	mg/kg	0.126	0.117	101.	10-176	7.33	26.6	L678551-01	WG702041
Naphthalene	mg/kg	0.118	0.109	93.3	58-135	7.95	25.5	L678551-01	WG702041
p-Isopropyltoluene	mg/kg	0.129	0.120	103.	63.2-139	7.20	20.4	L678551-01	WG702041
sec-Butylbenzene	mg/kg	0.128	0.120	103.	62.2-136	7.10	20.3	L678551-01	WG702041
Styrene	mg/kg	0.127	0.120	102.	66.8-133	6.28	20	L678551-01	WG702041
tert-Butylbenzene	mg/kg	0.128	0.119	102.	63.3-134	7.22	20.3	L678551-01	WG702041

* Performance of this Analyte is outside of established criteria.
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12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Tetrachloroethene	mg/kg	0.124	0.116	99.2	53-139	6.90	20	L678551-01	WG702041
Toluene	mg/kg	0.121	0.115	96.3	61.4-130	4.83	20	L678551-01	WG702041
trans-1,2-Dichloroethene	mg/kg	0.124	0.119	99.5	56.5-129	4.77	20	L678551-01	WG702041
trans-1,3-Dichloropropene	mg/kg	0.117	0.110	93.8	64.1-128	6.69	20	L678551-01	WG702041
Trichloroethene	mg/kg	0.123	0.116	98.6	44.1-149	5.87	20	L678551-01	WG702041
Trichlorofluoromethane	mg/kg	0.127	0.123	102.	49.6-145	3.34	21.2	L678551-01	WG702041
Vinyl chloride	mg/kg	0.121	0.117	96.4	47.8-137	3.36	20	L678551-01	WG702041
Xylenes, Total	mg/kg	0.375	0.352	99.9	63.3-131	6.25	20	L678551-01	WG702041
4-Bromofluorobenzene				107.0	71-126				WG702041
Dibromofluoromethane				102.0	78.3-121				WG702041
Toluene-d8				105.0	88.5-111				WG702041
a,a,a-Trifluorotoluene				103.0	85-114				WG702041
4,4-DDD	mg/kg	0.0395	0.0452	59.0	23.4-145	13.4	20	L678442-02	WG701964
4,4-DDE	mg/kg	0.112	0.125	83.6	16.4-147	10.4	20	L678442-02	WG701964
4,4-DDT	mg/kg	0.0617	0.0689	62.8	26.7-129	10.9	23.8	L678442-02	WG701964
Aldrin	mg/kg	0.0374	0.0433	55.8	40.2-116	14.6	20	L678442-02	WG701964
Alpha BHC	mg/kg	0.0559	0.0636	83.4	53.6-109	12.9	20	L678442-02	WG701964
Beta BHC	mg/kg	0.0649	0.0702	96.9	38.3-126	7.73	20	L678442-02	WG701964
Delta BHC	mg/kg	0.0634	0.0692	94.7	44.8-125	8.72	20	L678442-02	WG701964
Dieldrin	mg/kg	0.0412	0.0479	61.5	31.4-137	14.9	20	L678442-02	WG701964
Endosulfan I	mg/kg	0.0403	0.0478	60.1	40.3-120	17.1	20	L678442-02	WG701964
Endosulfan II	mg/kg	0.0457	0.0527	68.2	29.1-140	14.4	20	L678442-02	WG701964
Endosulfan sulfate	mg/kg	0.0478	0.0546	71.3	43.3-129	13.2	21.5	L678442-02	WG701964
Endrin	mg/kg	0.0384	0.0461	57.3	34.9-125	18.2	21.2	L678442-02	WG701964
Endrin aldehyde	mg/kg	0.0484	0.0558	72.2	15.6-139	14.2	20	L678442-02	WG701964
Endrin ketone	mg/kg	0.0501	0.0590	74.8	35.4-137	16.3	20	L678442-02	WG701964
Gamma BHC	mg/kg	0.0596	0.0671	89.0	55.3-110	11.8	20	L678442-02	WG701964
Heptachlor	mg/kg	0.0396	0.0459	59.2	41.6-115	14.7	20	L678442-02	WG701964
Heptachlor epoxide	mg/kg	0.0433	0.0500	64.6	34.8-128	14.4	20	L678442-02	WG701964
Hexachlorobenzene	mg/kg	0.0394	0.0482	58.8	40.2-119	20.1*	20	L678442-02	WG701964
Methoxychlor	mg/kg	0.0337	0.0377	50.2	16-134	11.5	25.4	L678442-02	WG701964
Decachlorobiphenyl				50.70	10-145				WG701964
Tetrachloro-m-xylene				64.60	21.1-148				WG701964
1,2,4-Trichlorobenzene	mg/kg	0.241	0.219	72.3	36.5-114	9.29	28.4	L678874-01	WG702394
2,4,6-Trichlorophenol	mg/kg	0.288	0.299	86.6	33.8-133	3.42	28.1	L678874-01	WG702394
2,4-Dichlorophenol	mg/kg	0.273	0.257	82.1	34.8-134	6.20	27.3	L678874-01	WG702394
2,4-Dimethylphenol	mg/kg	0.277	0.260	83.3	12.3-149	6.33	32.3	L678874-01	WG702394
2,4-Dinitrophenol	mg/kg	0.156	0.147	46.9	10-121	5.94	39.4	L678874-01	WG702394
2,4-Dinitrotoluene	mg/kg	0.313	0.306	93.9	27.8-147	2.15	29.7	L678874-01	WG702394
2,6-Dinitrotoluene	mg/kg	0.313	0.315	93.9	36.5-137	0.900	29.7	L678874-01	WG702394
2-Chloronaphthalene	mg/kg	0.294	0.278	88.4	37.5-123	5.77	26.5	L678874-01	WG702394
2-Chlorophenol	mg/kg	0.256	0.231	76.8	33.2-121	10.1	29.3	L678874-01	WG702394
2-Nitrophenol	mg/kg	0.297	0.269	89.2	29.5-144	9.73	29.9	L678874-01	WG702394
3,3-Dichlorobenzidine	mg/kg	0.275	0.280	82.7	10-129	1.56	40	L678874-01	WG702394
4,6-Dinitro-2-methylphenol	mg/kg	0.204	0.190	61.2	10-144	6.92	32.7	L678874-01	WG702394
4-Bromophenyl-phenylether	mg/kg	0.290	0.284	87.1	39-130	2.13	26	L678874-01	WG702394
4-Chloro-3-methylphenol	mg/kg	0.293	0.290	87.9	27-154	1.11	26.6	L678874-01	WG702394
4-Chlorophenyl-phenylether	mg/kg	0.286	0.287	85.8	37.9-123	0.450	25.9	L678874-01	WG702394
4-Nitrophenol	mg/kg	0.313	0.313	93.9	20-133	0.0500	30.2	L678874-01	WG702394
Acenaphthene	mg/kg	0.285	0.278	85.7	32.2-134	2.82	27.3	L678874-01	WG702394
Acenaphthylene	mg/kg	0.299	0.286	89.7	38.7-129	4.22	25.9	L678874-01	WG702394
Anthracene	mg/kg	0.285	0.285	85.5	32.3-137	0.0	28.4	L678874-01	WG702394
Benzidine	mg/kg	0.0139	0.0172	4.16	0-49.9	21.8	40	L678874-01	WG702394
Benzo(a)anthracene	mg/kg	0.282	0.283	84.7	33.3-124	0.260	29	L678874-01	WG702394
Benzo(a)pyrene	mg/kg	0.277	0.276	83.3	28.2-128	0.390	28.4	L678874-01	WG702394

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L678615

January 24, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzo(b)fluoranthene	mg/kg	0.303	0.308	91.1	23.3-133	1.38	30.3	L678874-01	WG702394
Benzo(g,h,i)perylene	mg/kg	0.308	0.299	92.5	10-127	3.01	31.9	L678874-01	WG702394
Benzo(k)fluoranthene	mg/kg	0.290	0.296	87.1	31-129	1.91	26.7	L678874-01	WG702394
Benzylbutyl phthalate	mg/kg	0.302	0.304	90.7	33.4-128	0.550	28.5	L678874-01	WG702394
Bis(2-chlorethoxy)methane	mg/kg	0.253	0.237	76.0	35-132	6.55	26.1	L678874-01	WG702394
Bis(2-chloroethyl)ether	mg/kg	0.234	0.214	70.4	28.8-128	9.26	33.6	L678874-01	WG702394
Bis(2-chloroisopropyl)ether	mg/kg	0.242	0.220	72.6	31.8-118	9.24	31.7	L678874-01	WG702394
Bis(2-ethylhexyl)phthalate	mg/kg	0.292	0.303	87.8	21.8-141	3.45	35.2	L678874-01	WG702394
Chrysene	mg/kg	0.284	0.289	85.3	36.3-129	1.59	28	L678874-01	WG702394
Di-n-butyl phthalate	mg/kg	0.261	0.261	78.2	32.2-133	0.100	25.9	L678874-01	WG702394
Di-n-octyl phthalate	mg/kg	0.318	0.320	95.3	28.5-128	0.700	32.5	L678874-01	WG702394
Dibenz(a,h)anthracene	mg/kg	0.307	0.300	92.3	10.5-128	2.29	29.5	L678874-01	WG702394
Diethyl phthalate	mg/kg	0.287	0.294	86.1	39.4-136	2.46	25.5	L678874-01	WG702394
Dimethyl phthalate	mg/kg	0.305	0.302	91.5	35.8-137	0.690	25.4	L678874-01	WG702394
Fluoranthene	mg/kg	0.260	0.266	78.1	27.9-138	2.33	26.9	L678874-01	WG702394
Fluorene	mg/kg	0.292	0.291	87.8	34-133	0.610	27.1	L678874-01	WG702394
Hexachloro-1,3-butadiene	mg/kg	0.242	0.219	72.6	36.5-125	9.91	29.7	L678874-01	WG702394
Hexachlorobenzene	mg/kg	0.289	0.285	86.9	34.4-116	1.51	25.4	L678874-01	WG702394
Hexachlorocyclopentadiene	mg/kg	0.159	0.136	47.6	10-124	15.3	37.5	L678874-01	WG702394
Hexachloroethane	mg/kg	0.250	0.218	75.2	11.3-143	13.7	31.9	L678874-01	WG702394
Indeno(1,2,3-cd)pyrene	mg/kg	0.310	0.302	93.0	10-128	2.36	31.5	L678874-01	WG702394
Isophorone	mg/kg	0.285	0.269	85.7	25.7-116	5.92	27.7	L678874-01	WG702394
n-Nitrosodi-n-propylamine	mg/kg	0.247	0.233	74.0	33-134	5.60	28.2	L678874-01	WG702394
n-Nitrosodimethylamine	mg/kg	0.214	0.193	64.4	19.2-127	10.7	32	L678874-01	WG702394
n-Nitrosodiphenylamine	mg/kg	0.285	0.275	85.7	26.8-133	3.78	25.9	L678874-01	WG702394
Naphthalene	mg/kg	0.249	0.234	74.9	36.4-121	6.54	27.2	L678874-01	WG702394
Nitrobenzene	mg/kg	0.278	0.260	83.5	30.9-134	6.75	27.8	L678874-01	WG702394
Pentachlorophenol	mg/kg	0.272	0.278	81.6	10-139	2.18	28.3	L678874-01	WG702394
Phenanthrene	mg/kg	0.310	0.303	93.0	30.8-137	2.15	26.5	L678874-01	WG702394
Phenol	mg/kg	0.268	0.238	80.4	25.1-130	11.6	29.6	L678874-01	WG702394
Pyrene	mg/kg	0.286	0.288	85.9	24.1-130	0.700	29.9	L678874-01	WG702394
2,4,6-Tribromophenol				99.90	21.6-142				WG702394
2-Fluorobiphenyl				82.70	34.9-129				WG702394
2-Fluorophenol				74.30	21.1-116				WG702394
Nitrobenzene-d5				78.50	21.9-129				WG702394
Phenol-d5				77.70	26.3-121				WG702394
p-Terphenyl-d14				71.90	21.5-128				WG702394
Antimony	mg/kg	46.5	46.1	96.4	75-125	1.00	20	L678618-01	WG702129
Arsenic	mg/kg	58.5	57.9	100.	75-125	1.00	20	L678618-01	WG702129
Beryllium	mg/kg	52.2	52.7	104.	75-125	1.00	20	L678618-01	WG702129
Cadmium	mg/kg	49.2	49.5	96.7	75-125	1.00	20	L678618-01	WG702129
Chromium	mg/kg	51.7	51.7	95.1	75-125	0.0	20	L678618-01	WG702129
Copper	mg/kg	90.9	90.1	107.	75-125	1.00	20	L678618-01	WG702129
Lead	mg/kg	52.3	52.2	98.0	75-125	0.0	20	L678618-01	WG702129
Nickel	mg/kg	50.1	50.1	97.2	75-125	0.0	20	L678618-01	WG702129
Silver	mg/kg	51.7	51.4	103.	75-125	1.00	20	L678618-01	WG702129
Thallium	mg/kg	49.0	48.8	99.0	75-125	0.0	20	L678618-01	WG702129
Zinc	mg/kg	180.	177.	96.3	75-125	2.00	20	L678618-01	WG702129
Selenium	mg/kg	51.2	52.6	99.9	75-125	3.00	20	L678618-01	WG702129
Azinphos-Methyl	mg/kg	0.282	0.291	84.7	21.6-134	2.84	37.7	L678615-01	WG702063
Bolstar (Sulprofos)	mg/kg	0.293	0.307	87.7	38.1-117	4.96	28.3	L678615-01	WG702063
Chlorpyrifos	mg/kg	0.293	0.301	88.0	39.5-109	2.60	29.6	L678615-01	WG702063
Coumaphos	mg/kg	0.279	0.286	83.6	32.2-129	2.42	29.5	L678615-01	WG702063
Demeton,-O and -S	mg/kg	0.147	0.148	88.0	17.3-123	0.910	40	L678615-01	WG702063
Diazinon	mg/kg	0.294	0.300	88.3	34.6-118	1.94	31.3	L678615-01	WG702063

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678615

January 24, 2014

		Matrix Spike Duplicate							
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Dichlorvos	mg/kg	0.292	0.276	87.6	14.8-126	5.56	38.6	L678615-01	WG702063
Dimethoate	mg/kg	0.243	0.244	72.9	10-128	0.320	40	L678615-01	WG702063
Disulfoton	mg/kg	0.298	0.305	89.5	38.1-108	2.23	29.3	L678615-01	WG702063
EPN	mg/kg	0.302	0.314	90.6	34.1-123	3.84	26.8	L678615-01	WG702063
Ethoprop	mg/kg	0.297	0.295	89.0	35.9-111	0.410	32.1	L678615-01	WG702063
Ethyl Parathion	mg/kg	0.299	0.307	89.6	34-116	2.69	29.4	L678615-01	WG702063
Fensulfothion	mg/kg	0.270	0.279	81.1	16.5-127	3.16	40	L678615-01	WG702063
Fenthion	mg/kg	0.281	0.289	84.3	38.5-111	2.83	28	L678615-01	WG702063
Malathion	mg/kg	0.291	0.297	87.4	37.4-114	1.91	27.7	L678615-01	WG702063
Merphos	mg/kg	0.288	0.305	86.2	32.7-108	5.74	33.4	L678615-01	WG702063
Methyl parathion	mg/kg	0.312	0.315	93.6	33-114	1.07	32	L678615-01	WG702063
Mevinphos	mg/kg	0.300	0.292	90.0	13.4-123	2.74	40	L678615-01	WG702063
Naled	mg/kg	0.293	0.303	88.0	10-154	3.22	40	L678615-01	WG702063
Phorate	mg/kg	0.302	0.306	90.6	37.4-108	1.44	31.9	L678615-01	WG702063
Ronnel	mg/kg	0.289	0.298	86.6	37.9-108	3.17	29.2	L678615-01	WG702063
Stirophos	mg/kg	0.291	0.299	87.3	32.2-113	2.72	29.3	L678615-01	WG702063
Sulfotep	mg/kg	0.286	0.290	85.8	37.9-112	1.39	27.3	L678615-01	WG702063
TEPP	mg/kg	0.285	0.291	85.5	10-132	1.93	40	L678615-01	WG702063
Tokuthion (Prothothiofos)	mg/kg	0.294	0.304	88.2	37.6-114	3.38	29.2	L678615-01	WG702063
Trichloronate	mg/kg	0.294	0.303	88.3	40-107	2.79	29.5	L678615-01	WG702063
Tributyl Phosphate				78.00	26.9-135				WG702063
Triphenyl Phosphate				78.80	40-121				WG702063

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678615

January 24, 2014

WG702085: R2877378: L678615-01 02
WG702044: R2877507: L678615-01 02
WG702099: R2877527: L678615-03
WG702041: R2877584: L678615-01 02
WG701964: R2877761 R2877932: L678615-01 02
WG702394: R2878290: L678615-01 02
WG702129: R2878609 R2878933: L678615-01 02
WG702063: R2879420: L678615-01 02

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
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Quality Assurance Report
Level II

L678615

January 24, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Phillip Jones

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1678615
D038

Acctnum: **DUNDUNNC**
Template:
Prelogin:
TSR: **Hunt**
Cooler:
Shipped Via: **Raleigh Serv**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Contaminant	Sample # (lab only)
2HA-A(6-12")	G	SS	6-12"	1/16/14	0755	8	X	X	X	X			X					-01
2HA-B(6-12")	↓	↓	↓	↓	0821	8	X	X	X	X			X					-02
TRIP BLANK		OT				1	X										NoTICs	-03

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☒ Client
[signature]	1/16/14	17:20	[signature]	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.9°C Bottles Received: 17
Relinquished by : (Signature) [signature]	Date: 1/16/14	Time: 18:00	Received for lab by: (Signature) [signature]	Date: 1/17/14 Time: 0930

Condition: (lab use only) TD OK
COC Seal Intact: ✓ Y ___N ___NA
pH Checked: NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 2HA-A 6-12IN

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678615-01

Date Collected: 1/16/2014

Lab File ID: 0118_27

Date Analyzed: 1/18/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000541-05-9	Cyclotrisiloxane, hexamethyl-	5.08	0.004	80.00	J

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 2HA-A 6-12IN

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678615-01

Date Collected: 1/16/2014

Lab File ID: 0122_24

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	2.96	0.769	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 2HA-B 6-12IN

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678615-02

Date Collected: 1/16/2014

Lab File ID: 0118_28

Date Analyzed: 1/18/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 2HA-B 6-12IN

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678615-02

Date Collected: 1/16/2014

Lab File ID: 0122_25

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	2.96	0.719	72.00	J

Divider
Page

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PO Box 639
Cary, NC 27512

Report Summary

Tuesday February 04, 2014

Report Number: L679999
Samples Received: 01/17/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 04,2014

ESC Sample # : L679999-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 07:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	86.1	0.0333	0.100	%		2540 G-2	01/18/14	1
Herbicides								
2,4-D	U	0.023	0.081	mg/kg		8151	01/31/14	1
Dalapon	U	0.27	0.93	mg/kg	L1	8151	01/31/14	1
2,4-DB	U	0.023	0.081	mg/kg		8151	01/31/14	1
Dicamba	U	0.023	0.081	mg/kg		8151	01/31/14	1
Dichloroprop	U	0.023	0.081	mg/kg		8151	01/31/14	1
Dinoseb	U	0.023	0.081	mg/kg	J4J3	8151	01/31/14	1
MCPA	U	2.2	7.5	mg/kg		8151	01/31/14	1
MCPP	U	2.2	7.5	mg/kg		8151	01/31/14	1
2,4,5-T	U	0.023	0.081	mg/kg		8151	01/31/14	1
2,4,5-TP (Silvex)	U	0.023	0.081	mg/kg		8151	01/31/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	68.2			% Rec.		8151	01/31/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Reported: 02/03/14 16:39 Revised: 02/04/14 07:55

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 04,2014

ESC Sample # : L679999-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 08:21

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	87.9	0.0333	0.100	%		2540 G-2	01/18/14	1
Herbicides								
2,4-D	U	0.023	0.080	mg/kg		8151	01/31/14	1
Dalapon	U	0.27	0.91	mg/kg	L1	8151	01/31/14	1
2,4-DB	U	0.023	0.080	mg/kg		8151	01/31/14	1
Dicamba	U	0.023	0.080	mg/kg		8151	01/31/14	1
Dichloroprop	U	0.023	0.080	mg/kg		8151	01/31/14	1
Dinoseb	U	0.023	0.080	mg/kg	J4J3	8151	01/31/14	1
MCPA	U	2.2	7.4	mg/kg		8151	01/31/14	1
MCPP	U	2.2	7.4	mg/kg		8151	01/31/14	1
2,4,5-T	U	0.023	0.080	mg/kg		8151	01/31/14	1
2,4,5-TP (Silvex)	U	0.023	0.080	mg/kg		8151	01/31/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	87.5			% Rec.		8151	01/31/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Reported: 02/03/14 16:39 Revised: 02/04/14 07:55

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L679999-01	WG703915	SAMP	Dalapon	R2881822	L1
	WG703915	SAMP	Dinoseb	R2881822	J4J3
L679999-02	WG703915	SAMP	Dalapon	R2881822	L1
	WG703915	SAMP	Dinoseb	R2881822	J4J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
L1	(ESC) The associated batch LCS exceeded the upper control limit, which indicates a high bias; The sample analyte was "not detected" and is therefore unaffected.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/04/14 at 07:55:37

TSR Signing Reports: 350
R5 - Desired TAT

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L679999-01 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 02/03/14 00:00 RPT Date: 02/03/14 16:39
Relogged from L678615-01
Sample: L679999-02 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 02/03/14 00:00 RPT Date: 02/03/14 16:39
Relogged from L678615-02

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Mt. Juliet, TN 37122
(615) 758-5858
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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L679999

February 04, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG702085	01/18/14 08:54
2,4,5-T	< .07	mg/kg			WG703915	01/31/14 17:48
2,4,5-TP (Silvex)	< .07	mg/kg			WG703915	01/31/14 17:48
2,4-D	< .07	mg/kg			WG703915	01/31/14 17:48
2,4-DB	< .07	mg/kg			WG703915	01/31/14 17:48
Dalapon	< .8	mg/kg			WG703915	01/31/14 17:48
Dicamba	< .07	mg/kg			WG703915	01/31/14 17:48
Dichloroprop	< .07	mg/kg			WG703915	01/31/14 17:48
Dinoseb	< .07	mg/kg			WG703915	01/31/14 17:48
MCPA	< 6.5	mg/kg			WG703915	01/31/14 17:48
MCPP	< 6.5	mg/kg			WG703915	01/31/14 17:48
2,4-Dichlorophenyl Acetic Acid		% Rec.	82.40	20.1-127	WG703915	01/31/14 17:48

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	83.7	87.9	4.95	5	L678615-02	WG702085

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	49.9	99.8	85-115	WG702085
2,4,5-T	mg/kg	.1667	0.139	83.7	39.4-109	WG703915
2,4,5-TP (Silvex)	mg/kg	.1667	0.131	78.4	45.7-123	WG703915
2,4-D	mg/kg	.1667	0.115	68.9	39.3-100	WG703915
2,4-DB	mg/kg	.1667	0.139	83.6	34.2-120	WG703915
Dalapon	mg/kg	.1667	0.152	90.9	38.6-98	WG703915
Dicamba	mg/kg	.1667	0.143	85.5	48.1-111	WG703915
Dichloroprop	mg/kg	.1667	0.114	68.7	27.8-124	WG703915
Dinoseb	mg/kg	.1667	0.0150	9.03*	32.1-121	WG703915
MCPA	mg/kg	16.666	12.5	74.8	22.1-130	WG703915
MCPP	mg/kg	16.666	18.1	108.	24.5-186	WG703915
2,4-Dichlorophenyl Acetic Acid				81.40	20.1-127	WG703915

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
2,4,5-T	mg/kg	0.138	0.139	83.0	39.4-109	1.08	26.8	WG703915
2,4,5-TP (Silvex)	mg/kg	0.122	0.131	73.0	45.7-123	6.63	27	WG703915
2,4-D	mg/kg	0.121	0.115	72.0	39.3-100	5.20	26.2	WG703915
2,4-DB	mg/kg	0.143	0.139	86.0	34.2-120	2.68	28.5	WG703915
Dalapon	mg/kg	0.173	0.152	104*	38.6-98	13.0	31.1	WG703915
Dicamba	mg/kg	0.145	0.143	87.0	48.1-111	1.37	23.6	WG703915
Dichloroprop	mg/kg	0.117	0.114	70.0	27.8-124	2.12	29.7	WG703915
Dinoseb	mg/kg	0.0323	0.0150	19*	32.1-121	72.8*	35.9	WG703915
MCPA	mg/kg	11.3	12.5	68.0	22.1-130	9.90	32.8	WG703915
MCPP	mg/kg	18.7	18.1	112.	24.5-186	3.48	26.3	WG703915
2,4-Dichlorophenyl Acetic Acid				80.10	20.1-127			WG703915

Batch number /Run number / Sample number cross reference

WG702085: R2877378: L679999-01 02
WG703915: R2881822: L679999-01 02
* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L679999

February 04, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Phillip Jones

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Contaminant	Sample # (lab only)
2HA-A(6-12")	G	SS	6-12"	1/16/14	0755	8	X	X	X	X			X				-01	-01
2HA-B(6-12")	↓	↓	↓	↓	0821	8	X	X	X	X			X				02	-02
TRIP Blank		OT				1	X										NoTICs	-03

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/16/14	17:20	[signature]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/16/14	18:00	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☒ Client

Temp: 0 °C 3.1 °C Bottles Received: 17

Date: 1/17/14 Time: 0950

Hold #

Condition: (lab use only) TD OK

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: NCF:

Chain of Custody Page 1 of 1

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Phone: 800-767-5859
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L# ~~L678615~~
D038
L679999

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Andy Vann

From: Jimmy Hunt
Sent: Monday, January 27, 2014 9:12 AM
To: Login
Cc: Extractions; Due SVOC
Subject: FW: L678615

Importance: High

Please relog L678615-01 (2HA-A 6-12IN) and -02 (2HA-B 6-12IN) from DUNDUNNC for SV8151. Transfer the TS results from L678615 to the new login numbers. Make these R5 due 2/3. Please note that the samples go out of hold on 1/30.

Thanks,
Jimmy

From: Daphne Jones [mailto:daphne@dunckleedunham.com]
Sent: Saturday, January 25, 2014 12:36 PM
To: Jimmy Hunt
Subject: L678615
Importance: High

Jimmy- I am going through the data you sent back, and I missed that we did not ask for herbicides for these two sample locations during the check-in review. Can you still do herbicides on samples 2HA-A and 2-HA-B within hold? I do apologize for missing this before. Daphne

Daphne M. Jones, P.G., R.S.M.
Senior Geologist
511 Keisler Drive, Suite 102
Cary, North Carolina 27518
Mobile: 919-271-3251
Office: 919-858-9898 x207
www.dunckleedunham.com

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Divider
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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Friday January 24, 2014

Report Number: L678607
Samples Received: 01/17/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Fax (615) 758-5859

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 09:11

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	83.2	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.070	0.0014	0.024	mg/kg		7471	01/18/14	1
Antimony	1.6	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	5.3	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.31	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.29	0.035	0.30	mg/kg	J	6010C	01/22/14	1
Chromium	16.	0.070	0.60	mg/kg		6010C	01/22/14	1
Copper	9.4	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	12.	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	4.6	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	0.68	0.37	1.2	mg/kg	J	6010C	01/23/14	1
Silver	U	0.14	0.60	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	22.	0.30	1.8	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.24	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.024	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.024	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.024	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.024	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.48	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	56.9			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	76.9			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Reported: 01/24/14 12:07 Printed: 01/24/14 12:08

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Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 09:11

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.084	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	0.96	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.084	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.084	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.084	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.084	mg/kg		8151	01/21/14	1
MCPA	U	2.2	7.8	mg/kg		8151	01/21/14	1
MCPP	U	2.2	7.8	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.084	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.084	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	78.5			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 09:48

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	86.3	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.032	0.0014	0.023	mg/kg		7471	01/18/14	1
Antimony	1.5	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	5.1	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.27	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.17	0.035	0.29	mg/kg	J	6010C	01/22/14	1
Chromium	30.	0.070	0.58	mg/kg		6010C	01/22/14	1
Copper	12.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	11.	0.095	0.29	mg/kg		6010C	01/22/14	1
Nickel	3.6	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	0.86	0.37	1.2	mg/kg	J	6010C	01/23/14	1
Silver	U	0.14	0.58	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	17.	0.30	1.7	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.23	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.023	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.023	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.023	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.023	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.46	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	62.2			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	84.1			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 09:48

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.081	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	0.93	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.081	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.081	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.081	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.081	mg/kg		8151	01/21/14	1
MCPA	U	2.2	7.5	mg/kg		8151	01/21/14	1
MCPP	U	2.2	7.5	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.081	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.081	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	84.5			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-03

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-C 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 10:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	86.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.043	0.0014	0.023	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/23/14	1
Arsenic	9.6	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.66	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.13	0.035	0.29	mg/kg	J	6010C	01/22/14	1
Chromium	14.	0.070	0.58	mg/kg		6010C	01/22/14	1
Copper	17.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	9.1	0.095	0.29	mg/kg		6010C	01/22/14	1
Nickel	6.0	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.2	mg/kg		6010C	01/23/14	1
Silver	U	0.14	0.58	mg/kg		6010C	01/22/14	1
Thallium	0.58	0.32	1.2	mg/kg	J	6010C	01/22/14	1
Zinc	21.	0.30	1.7	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.23	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.023	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.023	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.023	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.023	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.46	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	68.1			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	94.3			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-03

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-C 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 10:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.081	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	0.92	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.081	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.081	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.081	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.081	mg/kg		8151	01/21/14	1
MCPA	U	2.2	7.5	mg/kg		8151	01/21/14	1
MCPP	U	2.2	7.5	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.081	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.081	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	75.1			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-04

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-D 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 11:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	85.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.034	0.0014	0.023	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/23/14	1
Arsenic	11.	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.55	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	U	0.035	0.29	mg/kg		6010C	01/22/14	1
Chromium	28.	0.070	0.58	mg/kg		6010C	01/22/14	1
Copper	19.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	10.	0.095	0.29	mg/kg		6010C	01/22/14	1
Nickel	5.7	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	0.92	0.37	1.2	mg/kg	J	6010C	01/23/14	1
Silver	U	0.14	0.58	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	27.	0.30	1.8	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.023	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.23	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.023	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.023	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.023	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.023	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.023	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.023	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.47	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	63.2			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	86.5			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-04

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-D 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 11:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.082	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	0.93	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.082	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.082	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.082	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.082	mg/kg		8151	01/21/14	1
MCPA	U	2.2	7.6	mg/kg		8151	01/21/14	1
MCPP	U	2.2	7.6	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.082	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.082	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	80.2			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-05

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-E 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 12:53

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	79.9	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.041	0.0014	0.025	mg/kg	O1	7471	01/18/14	1
Antimony	2.2	0.38	1.2	mg/kg		6010C	01/23/14	1
Arsenic	25.	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.93	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	U	0.035	0.31	mg/kg		6010C	01/22/14	1
Chromium	12.	0.070	0.62	mg/kg		6010C	01/22/14	1
Copper	51.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	11.	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	7.2	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	6.2	mg/kg	O	6010C	01/22/14	5
Silver	U	0.14	0.62	mg/kg		6010C	01/22/14	1
Thallium	U	1.6	6.2	mg/kg	O	6010C	01/22/14	5
Zinc	60.	0.30	1.9	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.25	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.025	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.025	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.025	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.025	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.50	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	67.8			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	82.8			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-05

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-E 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 12:53

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	1.0	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.088	mg/kg		8151	01/21/14	1
MCPA	U	2.2	8.1	mg/kg		8151	01/21/14	1
MCPP	U	2.2	8.1	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.088	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.088	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	79.2			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-06

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-F 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 13:41

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	80.8	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	1.4	0.0070	0.12	mg/kg		7471	01/18/14	5
Antimony	U	0.38	1.2	mg/kg		6010C	01/23/14	1
Arsenic	5.4	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.46	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.33	0.035	0.31	mg/kg		6010C	01/22/14	1
Chromium	12.	0.070	0.62	mg/kg		6010C	01/22/14	1
Copper	22.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	12.	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	8.3	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.2	mg/kg		6010C	01/23/14	1
Silver	U	0.14	0.62	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	40.	0.30	1.8	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.25	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.025	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.025	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.025	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.025	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.50	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	60.1			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	82.0			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-06

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-F 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 13:41

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.087	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	0.99	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.087	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.087	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.087	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.087	mg/kg		8151	01/21/14	1
MCPA	U	2.2	8.0	mg/kg		8151	01/21/14	1
MCPP	U	2.2	8.0	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.087	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.087	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	77.4			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-07

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-G 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 14:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	79.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.077	0.0014	0.025	mg/kg		7471	01/18/14	1
Antimony	0.54	0.38	1.2	mg/kg	J	6010C	01/23/14	1
Arsenic	26.	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.4	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	U	0.035	0.31	mg/kg		6010C	01/22/14	1
Chromium	59.	0.070	0.63	mg/kg		6010C	01/22/14	1
Copper	46.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	24.	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	15.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	6.3	mg/kg	O	6010C	01/22/14	5
Silver	0.35	0.14	0.63	mg/kg	J	6010C	01/22/14	1
Thallium	U	1.6	6.3	mg/kg	O	6010C	01/22/14	5
Zinc	55.	0.30	1.9	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.025	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.25	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.025	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.025	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.025	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.025	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.025	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.025	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.50	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	71.3			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	86.6			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-07

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-G 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 14:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	1.0	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.088	mg/kg		8151	01/21/14	1
MCPA	U	2.2	8.2	mg/kg		8151	01/21/14	1
MCPP	U	2.2	8.2	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.088	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.088	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	75.3			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-08

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-H 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 14:52

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	84.4	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.034	0.0014	0.024	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/23/14	1
Arsenic	8.2	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.41	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.16	0.035	0.30	mg/kg	J	6010C	01/22/14	1
Chromium	19.	0.070	0.59	mg/kg		6010C	01/22/14	1
Copper	24.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	10.	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	7.1	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	0.52	0.37	1.2	mg/kg	J	6010C	01/23/14	1
Silver	0.25	0.14	0.59	mg/kg	J	6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	18.	0.30	1.8	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.24	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.024	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.024	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.024	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.024	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.47	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	61.6			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	79.1			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-08

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-H 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 14:52

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.083	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	0.95	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.083	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.083	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.083	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.083	mg/kg		8151	01/21/14	1
MCPA	U	2.2	7.7	mg/kg		8151	01/21/14	1
MCPP	U	2.2	7.7	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.083	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.083	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	83.6			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-09

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-I 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 15:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	83.4	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.083	0.0014	0.024	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/23/14	1
Arsenic	20.	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.66	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.68	0.18	1.5	mg/kg	J	6010C	01/22/14	5
Chromium	34.	0.070	0.60	mg/kg		6010C	01/22/14	1
Copper	34.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	19.	0.48	1.5	mg/kg		6010C	01/23/14	5
Nickel	13.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	6.0	mg/kg	O	6010C	01/22/14	5
Silver	0.25	0.14	0.60	mg/kg	J	6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	40.	0.30	1.8	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.24	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.024	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.024	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.024	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.024	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.48	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	62.7			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	78.1			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-09

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-I 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 15:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.084	mg/kg		8151	01/23/14	1
Dalapon	U	0.27	0.96	mg/kg		8151	01/23/14	1
2,4-DB	U	0.023	0.084	mg/kg		8151	01/23/14	1
Dicamba	U	0.023	0.084	mg/kg		8151	01/23/14	1
Dichloroprop	U	0.023	0.084	mg/kg		8151	01/23/14	1
Dinoseb	U	0.023	0.084	mg/kg		8151	01/23/14	1
MCPA	U	2.2	7.8	mg/kg		8151	01/23/14	1
MCPP	U	2.2	7.8	mg/kg		8151	01/23/14	1
2,4,5-T	U	0.023	0.084	mg/kg		8151	01/23/14	1
2,4,5-TP (Silvex)	U	0.023	0.084	mg/kg		8151	01/23/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	72.6			% Rec.		8151	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-10

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-J 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 16:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	73.7	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.27	0.0014	0.027	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/23/14	1
Arsenic	16.	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	0.73	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	0.46	0.035	0.34	mg/kg		6010C	01/22/14	1
Chromium	34.	0.070	0.68	mg/kg		6010C	01/22/14	1
Copper	37.	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	24.	0.095	0.34	mg/kg		6010C	01/22/14	1
Nickel	9.5	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	0.66	0.37	1.4	mg/kg	J	6010C	01/23/14	1
Silver	U	0.14	0.68	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.4	mg/kg		6010C	01/22/14	1
Zinc	37.	0.30	2.0	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.027	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.027	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.027	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.027	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.027	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.27	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.027	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.027	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.027	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.027	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.027	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.027	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.027	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.027	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.027	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.027	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.027	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.027	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.027	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.027	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.54	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	56.2			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	77.7			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-10

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-J 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 16:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.095	mg/kg		8151	01/23/14	1
Dalapon	U	0.27	1.1	mg/kg		8151	01/23/14	1
2,4-DB	U	0.023	0.095	mg/kg		8151	01/23/14	1
Dicamba	U	0.023	0.095	mg/kg		8151	01/23/14	1
Dichloroprop	U	0.023	0.095	mg/kg		8151	01/23/14	1
Dinoseb	U	0.023	0.095	mg/kg		8151	01/23/14	1
MCPA	U	2.2	8.8	mg/kg		8151	01/23/14	1
MCPP	U	2.2	8.8	mg/kg		8151	01/23/14	1
2,4,5-T	U	0.023	0.095	mg/kg		8151	01/23/14	1
2,4,5-TP (Silvex)	U	0.023	0.095	mg/kg		8151	01/23/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	75.6			% Rec.		8151	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-11

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-K 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 16:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	72.0	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.046	0.0014	0.028	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/23/14	1
Arsenic	18.	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	0.82	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	0.25	0.035	0.35	mg/kg	J	6010C	01/22/14	1
Chromium	30.	0.070	0.69	mg/kg		6010C	01/22/14	1
Copper	29.	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	18.	0.095	0.35	mg/kg		6010C	01/22/14	1
Nickel	9.9	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	1.4	0.37	1.4	mg/kg		6010C	01/23/14	1
Silver	0.36	0.14	0.69	mg/kg	J	6010C	01/22/14	1
Thallium	U	0.32	1.4	mg/kg		6010C	01/22/14	1
Zinc	29.	0.30	2.1	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.028	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.028	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.028	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.028	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.028	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.28	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.028	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.028	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.028	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.028	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.028	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.028	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.028	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.028	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.028	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.028	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.028	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.028	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.028	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.028	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.56	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	82.9			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	98.5			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678607-11

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-K 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 16:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.097	mg/kg		8151	01/23/14	1
Dalapon	U	0.27	1.1	mg/kg		8151	01/23/14	1
2,4-DB	U	0.023	0.097	mg/kg		8151	01/23/14	1
Dicamba	U	0.023	0.097	mg/kg		8151	01/23/14	1
Dichloroprop	U	0.023	0.097	mg/kg		8151	01/23/14	1
Dinoseb	U	0.023	0.097	mg/kg		8151	01/23/14	1
MCPA	U	2.2	9.0	mg/kg		8151	01/23/14	1
MCPP	U	2.2	9.0	mg/kg		8151	01/23/14	1
2,4,5-T	U	0.023	0.097	mg/kg		8151	01/23/14	1
2,4,5-TP (Silvex)	U	0.023	0.097	mg/kg		8151	01/23/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	74.9			% Rec.		8151	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678607-12

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3HA-L 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 16:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	82.3	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.042	0.0014	0.024	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/23/14	1
Arsenic	14.	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.73	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.28	0.035	0.30	mg/kg	J	6010C	01/22/14	1
Chromium	28.	0.070	0.61	mg/kg		6010C	01/22/14	1
Copper	42.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	17.	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	12.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	1.0	0.37	1.2	mg/kg	J	6010C	01/23/14	1
Silver	0.38	0.14	0.61	mg/kg	J	6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	24.	0.30	1.8	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Alpha BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Beta BHC	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Delta BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Gamma BHC	U	0.0014	0.024	mg/kg		8081A	01/23/14	1
Chlordane	U	0.039	0.24	mg/kg		8081A	01/23/14	1
4,4-DDD	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
4,4-DDE	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
4,4-DDT	U	0.0020	0.024	mg/kg		8081A	01/23/14	1
Dieldrin	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endosulfan I	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endosulfan II	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Endosulfan sulfate	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Endrin	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Endrin aldehyde	U	0.0013	0.024	mg/kg		8081A	01/23/14	1
Endrin ketone	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Hexachlorobenzene	U	0.0018	0.024	mg/kg		8081A	01/23/14	1
Heptachlor	U	0.0015	0.024	mg/kg		8081A	01/23/14	1
Heptachlor epoxide	U	0.0016	0.024	mg/kg		8081A	01/23/14	1
Methoxychlor	U	0.0018	0.024	mg/kg		8081A	01/23/14	1
Toxaphene	U	0.036	0.49	mg/kg		8081A	01/23/14	1
Pesticide Surrogates								
Decachlorobiphenyl	64.7			% Rec.		8081A	01/23/14	1
Tetrachloro-m-xylene	81.1			% Rec.		8081A	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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The reported analytical results relate only to the sample submitted
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678607-12

Site ID : RALEIGH, NC

Project # : 201336

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Sample ID : 3HA-L 6-12IN

Collected By : Phillip Jones
Collection Date : 01/16/14 16:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.085	mg/kg		8151	01/23/14	1
Dalapon	U	0.27	0.97	mg/kg		8151	01/23/14	1
2,4-DB	U	0.023	0.085	mg/kg		8151	01/23/14	1
Dicamba	U	0.023	0.085	mg/kg		8151	01/23/14	1
Dichloroprop	U	0.023	0.085	mg/kg		8151	01/23/14	1
Dinoseb	U	0.023	0.085	mg/kg		8151	01/23/14	1
MCPA	U	2.2	7.9	mg/kg		8151	01/23/14	1
MCPP	U	2.2	7.9	mg/kg		8151	01/23/14	1
2,4,5-T	U	0.023	0.085	mg/kg		8151	01/23/14	1
2,4,5-TP (Silvex)	U	0.023	0.085	mg/kg		8151	01/23/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	75.7			% Rec.		8151	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678607-13

Site ID : RALEIGH, NC

Project # : 201336

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Sample ID : TRIP BLANK

Collected By : Phillip Jones
Collection Date : 01/16/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 01/24/14 12:07 Printed: 01/24/14 12:08

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678607-01	WG702129	SAMP	Cadmium	R2878609	J
	WG702129	SAMP	Selenium	R2878933	J
L678607-02	WG702129	SAMP	Cadmium	R2878609	J
	WG702129	SAMP	Selenium	R2878933	J
L678607-03	WG702129	SAMP	Cadmium	R2878609	J
	WG702129	SAMP	Thallium	R2878609	J
L678607-04	WG702129	SAMP	Selenium	R2878933	J
L678607-05	WG702044	SAMP	Mercury	R2877507	O1
	WG702129	SAMP	Selenium	R2878609	O
	WG702129	SAMP	Thallium	R2878609	O
L678607-07	WG702129	SAMP	Antimony	R2878933	J
	WG702129	SAMP	Selenium	R2878609	O
	WG702129	SAMP	Silver	R2878609	J
	WG702129	SAMP	Thallium	R2878609	O
L678607-08	WG702129	SAMP	Cadmium	R2878609	J
	WG702129	SAMP	Selenium	R2878933	J
	WG702129	SAMP	Silver	R2878609	J
L678607-09	WG702129	SAMP	Cadmium	R2878609	J
	WG702129	SAMP	Selenium	R2878609	O
	WG702129	SAMP	Silver	R2878609	J
L678607-10	WG702129	SAMP	Selenium	R2878933	J
L678607-11	WG702129	SAMP	Cadmium	R2878609	J
	WG702129	SAMP	Silver	R2878609	J
L678607-12	WG702129	SAMP	Cadmium	R2878609	J
	WG702129	SAMP	Selenium	R2878933	J
	WG702129	SAMP	Silver	R2878609	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/24/14 at 12:08:59

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678607-01 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07
Turn off Trip Blank results - jeh
Sample: L678607-02 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-03 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-04 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-05 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-06 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-07 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-08 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-09 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-10 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-11 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-12 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

Sample: L678607-13 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:07

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Cary, NC 27512

Quality Assurance Report
Level II

L678607

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG702085	01/18/14 08:54
Total Solids	< .1	%			WG702083	01/18/14 09:03
Mercury	< .02	mg/kg			WG701904	01/18/14 17:23
Mercury	< .02	mg/kg			WG702044	01/18/14 18:57
2,4,5-T	< .07	mg/kg			WG702320	01/21/14 17:43
2,4,5-TP (Silvex)	< .07	mg/kg			WG702320	01/21/14 17:43
2,4-D	< .07	mg/kg			WG702320	01/21/14 17:43
2,4-DB	< .07	mg/kg			WG702320	01/21/14 17:43
Dalapon	< .8	mg/kg			WG702320	01/21/14 17:43
Dicamba	< .07	mg/kg			WG702320	01/21/14 17:43
Dichloroprop	< .07	mg/kg			WG702320	01/21/14 17:43
Dinoseb	< .07	mg/kg			WG702320	01/21/14 17:43
MCPA	< 6.5	mg/kg			WG702320	01/21/14 17:43
MCPP	< 6.5	mg/kg			WG702320	01/21/14 17:43
2,4-Dichlorophenyl Acetic Acid		% Rec.	87.00	20.1-127	WG702320	01/21/14 17:43
Antimony	< 1	mg/kg			WG702129	01/22/14 14:49
Arsenic	< 1	mg/kg			WG702129	01/22/14 14:49
Beryllium	< .1	mg/kg			WG702129	01/22/14 14:49
Cadmium	< .25	mg/kg			WG702129	01/22/14 14:49
Chromium	< .5	mg/kg			WG702129	01/22/14 14:49
Copper	< 1	mg/kg			WG702129	01/22/14 14:49
Lead	< .25	mg/kg			WG702129	01/22/14 14:49
Nickel	< 1	mg/kg			WG702129	01/22/14 14:49
Silver	< .5	mg/kg			WG702129	01/22/14 14:49
Thallium	< 1	mg/kg			WG702129	01/22/14 14:49
Zinc	< 1.5	mg/kg			WG702129	01/22/14 14:49
Selenium	< 1	mg/kg			WG702129	01/23/14 10:16
2,4,5-T	< .07	mg/kg			WG702782	01/23/14 18:45
2,4,5-TP (Silvex)	< .07	mg/kg			WG702782	01/23/14 18:45
2,4-D	< .07	mg/kg			WG702782	01/23/14 18:45
2,4-DB	< .07	mg/kg			WG702782	01/23/14 18:45
Dalapon	< .8	mg/kg			WG702782	01/23/14 18:45
Dicamba	< .07	mg/kg			WG702782	01/23/14 18:45
Dichloroprop	< .07	mg/kg			WG702782	01/23/14 18:45
Dinoseb	< .07	mg/kg			WG702782	01/23/14 18:45
MCPA	< 6.5	mg/kg			WG702782	01/23/14 18:45
MCPP	< 6.5	mg/kg			WG702782	01/23/14 18:45
2,4-Dichlorophenyl Acetic Acid		% Rec.	78.50	20.1-127	WG702782	01/23/14 18:45
4,4-DDD	< .02	mg/kg			WG702070	01/23/14 11:30
4,4-DDE	< .02	mg/kg			WG702070	01/23/14 11:30
4,4-DDT	< .02	mg/kg			WG702070	01/23/14 11:30
Aldrin	< .02	mg/kg			WG702070	01/23/14 11:30
Alpha BHC	< .02	mg/kg			WG702070	01/23/14 11:30
Beta BHC	< .02	mg/kg			WG702070	01/23/14 11:30
Chlordane	< .2	mg/kg			WG702070	01/23/14 11:30

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Mt. Juliet, TN 37122
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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678607

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Delta BHC	< .02	mg/kg			WG702070	01/23/14 11:30
Dieldrin	< .02	mg/kg			WG702070	01/23/14 11:30
Endosulfan I	< .02	mg/kg			WG702070	01/23/14 11:30
Endosulfan II	< .02	mg/kg			WG702070	01/23/14 11:30
Endosulfan sulfate	< .02	mg/kg			WG702070	01/23/14 11:30
Endrin	< .02	mg/kg			WG702070	01/23/14 11:30
Endrin aldehyde	< .02	mg/kg			WG702070	01/23/14 11:30
Endrin ketone	< .02	mg/kg			WG702070	01/23/14 11:30
Gamma BHC	< .02	mg/kg			WG702070	01/23/14 11:30
Heptachlor	< .02	mg/kg			WG702070	01/23/14 11:30
Heptachlor epoxide	< .02	mg/kg			WG702070	01/23/14 11:30
Hexachlorobenzene	< .02	mg/kg			WG702070	01/23/14 11:30
Methoxychlor	< .02	mg/kg			WG702070	01/23/14 11:30
Toxaphene	< .4	mg/kg			WG702070	01/23/14 11:30
Decachlorobiphenyl		% Rec.	88.40	10-145	WG702070	01/23/14 11:30
Tetrachloro-m-xylene		% Rec.	92.00	21.1-148	WG702070	01/23/14 11:30

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	83.7	87.9	4.95	5	L678615-02	WG702085
Total Solids	%	75.0	73.7	1.66	5	L678607-10	WG702083
Mercury	mg/kg	0.0740	0.0749	1.00	20	L678495-03	WG701904
Mercury	mg/kg	0.0330	0.0330	1.00	20	L678607-05	WG702044
Antimony	mg/kg	0.0	-1.72	49.0*	20	L678618-01	WG702129
Arsenic	mg/kg	5.80	8.21	34.0*	20	L678618-01	WG702129
Beryllium	mg/kg	0.0	0.0926	18.0	20	L678618-01	WG702129
Cadmium	mg/kg	0.680	0.877	26.0*	20	L678618-01	WG702129
Chromium	mg/kg	3.40	4.15	19.0	20	L678618-01	WG702129
Copper	mg/kg	37.0	37.4	2.00	20	L678618-01	WG702129
Lead	mg/kg	3.10	3.32	6.00	20	L678618-01	WG702129
Nickel	mg/kg	1.40	1.50	4.00	20	L678618-01	WG702129
Silver	mg/kg	0.0	0.0786	104.*	20	L678618-01	WG702129
Thallium	mg/kg	0.0	-0.534	759.*	20	L678618-01	WG702129
Zinc	mg/kg	130.	132.	3.00	20	L678618-01	WG702129
Selenium	mg/kg	1.10	1.20	9.00	20	L678618-01	WG702129

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	49.9	99.8	85-115	WG702085
Total Solids	%	50	50.1	100.	85-115	WG702083
Mercury	mg/kg	12.4	15.4	124.	71.6-128	WG701904
Mercury	mg/kg	12.4	15.0	121.	71.6-128	WG702044

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Quality Assurance Report
Level II

L678607

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
2,4,5-T	mg/kg	.1667	0.135	80.9	39.4-109	WG702320
2,4,5-TP (Silvex)	mg/kg	.1667	0.140	83.9	45.7-123	WG702320
2,4-D	mg/kg	.1667	0.111	66.3	39.3-100	WG702320
2,4-DB	mg/kg	.1667	0.128	76.9	34.2-120	WG702320
Dalapon	mg/kg	.1667	0.116	69.5	38.6-98	WG702320
Dicamba	mg/kg	.1667	0.145	86.9	48.1-111	WG702320
Dichloroprop	mg/kg	.1667	0.112	67.0	27.8-124	WG702320
Dinoseb	mg/kg	.1667	0.112	67.3	32.1-121	WG702320
MCPA	mg/kg	16.666	11.0	65.8	22.1-130	WG702320
MCPP	mg/kg	16.666	13.1	78.9	24.5-186	WG702320
2,4-Dichlorophenyl Acetic Acid				110.0	20.1-127	WG702320
Antimony	mg/kg	113	68.1	60.0	0.88-223	WG702129
Arsenic	mg/kg	237	243.	103.	83.1-117	WG702129
Beryllium	mg/kg	93.3	101.	108.	83.3-117	WG702129
Cadmium	mg/kg	191	193.	101.	83.2-117	WG702129
Chromium	mg/kg	128	127.	99.0	81.3-118	WG702129
Copper	mg/kg	123	138.	113.	83.7-116	WG702129
Lead	mg/kg	103	99.3	96.0	83.1-117	WG702129
Nickel	mg/kg	118	125.	106.	82-118	WG702129
Silver	mg/kg	47.3	48.6	103.	66.2-134	WG702129
Thallium	mg/kg	158	146.	92.0	81-119	WG702129
Zinc	mg/kg	183	186.	102.	82-118	WG702129
Selenium	mg/kg	110	115.	105.	78.7-122	WG702129
2,4,5-T	mg/kg	.1667	0.125	74.9	39.4-109	WG702782
2,4,5-TP (Silvex)	mg/kg	.1667	0.131	78.7	45.7-123	WG702782
2,4-D	mg/kg	.1667	0.110	65.9	39.3-100	WG702782
2,4-DB	mg/kg	.1667	0.109	65.3	34.2-120	WG702782
Dalapon	mg/kg	.1667	0.119	71.6	38.6-98	WG702782
Dicamba	mg/kg	.1667	0.138	82.6	48.1-111	WG702782
Dichloroprop	mg/kg	.1667	0.109	65.6	27.8-124	WG702782
Dinoseb	mg/kg	.1667	0.0915	54.9	32.1-121	WG702782
MCPA	mg/kg	16.666	11.5	68.8	22.1-130	WG702782
MCPP	mg/kg	16.666	11.1	66.4	24.5-186	WG702782
2,4-Dichlorophenyl Acetic Acid				87.70	20.1-127	WG702782
4,4-DDD	mg/kg	.067	0.0623	92.9	70.3-111	WG702070
4,4-DDE	mg/kg	.067	0.0618	92.3	69.9-113	WG702070
4,4-DDT	mg/kg	.067	0.0604	90.1	68.1-111	WG702070
Aldrin	mg/kg	.067	0.0573	85.5	66.9-111	WG702070
Alpha BHC	mg/kg	.067	0.0575	85.9	65.1-111	WG702070
Beta BHC	mg/kg	.067	0.0592	88.3	69.6-112	WG702070
Delta BHC	mg/kg	.067	0.0616	91.9	68.3-114	WG702070
Dieldrin	mg/kg	.067	0.0611	91.2	70.2-112	WG702070
Endosulfan I	mg/kg	.067	0.0614	91.6	69.8-113	WG702070
Endosulfan II	mg/kg	.067	0.0615	91.8	69.2-113	WG702070
Endosulfan sulfate	mg/kg	.067	0.0612	91.4	62-123	WG702070
Endrin	mg/kg	.067	0.0653	97.4	65.9-115	WG702070
Endrin aldehyde	mg/kg	.067	0.0524	78.2	47.6-124	WG702070
Endrin ketone	mg/kg	.067	0.0636	94.9	69-120	WG702070
Gamma BHC	mg/kg	.067	0.0583	87.1	68.2-111	WG702070
Heptachlor	mg/kg	.067	0.0592	88.3	65.9-111	WG702070
Heptachlor epoxide	mg/kg	.067	0.0622	92.9	69.7-113	WG702070
Hexachlorobenzene	mg/kg	.067	0.0522	77.9	59.6-113	WG702070

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Fax (615) 758-5859

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PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678607

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Methoxychlor	mg/kg	.067	0.0642	95.8	66.2-114	WG702070
Decachlorobiphenyl				77.00	10-145	WG702070
Tetrachloro-m-xylene				76.20	21.1-148	WG702070

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
2,4,5-T	mg/kg	0.150	0.135	90.0	39.4-109	10.4	26.8	WG702320
2,4,5-TP (Silvex)	mg/kg	0.131	0.140	78.0	45.7-123	6.78	27	WG702320
2,4-D	mg/kg	0.121	0.111	73.0	39.3-100	9.14	26.2	WG702320
2,4-DB	mg/kg	0.148	0.128	89.0	34.2-120	14.6	28.5	WG702320
Dalapon	mg/kg	0.111	0.116	66.0	38.6-98	4.66	31.1	WG702320
Dicamba	mg/kg	0.150	0.145	90.0	48.1-111	3.51	23.6	WG702320
Dichloroprop	mg/kg	0.122	0.112	73.0	27.8-124	8.59	29.7	WG702320
Dinoseb	mg/kg	0.112	0.112	67.0	32.1-121	0.0900	35.9	WG702320
MCPA	mg/kg	13.4	11.0	81.0	22.1-130	20.2	32.8	WG702320
MCPP	mg/kg	11.9	13.1	71.0	24.5-186	9.89	26.3	WG702320
2,4-Dichlorophenyl Acetic Acid				101.0	20.1-127			WG702320
2,4,5-T	mg/kg	0.122	0.125	73.0	39.4-109	2.72	26.8	WG702782
2,4,5-TP (Silvex)	mg/kg	0.129	0.131	77.0	45.7-123	2.05	27	WG702782
2,4-D	mg/kg	0.0965	0.110	58.0	39.3-100	13.0	26.2	WG702782
2,4-DB	mg/kg	0.107	0.109	64.0	34.2-120	2.08	28.5	WG702782
Dalapon	mg/kg	0.139	0.119	83.0	38.6-98	15.2	31.1	WG702782
Dicamba	mg/kg	0.135	0.138	81.0	48.1-111	1.73	23.6	WG702782
Dichloroprop	mg/kg	0.105	0.109	63.0	27.8-124	4.47	29.7	WG702782
Dinoseb	mg/kg	0.115	0.0915	69.0	32.1-121	22.6	35.9	WG702782
MCPA	mg/kg	9.45	11.5	57.0	22.1-130	19.3	32.8	WG702782
MCPP	mg/kg	11.0	11.1	66.0	24.5-186	0.720	26.3	WG702782
2,4-Dichlorophenyl Acetic Acid				87.50	20.1-127			WG702782
4,4-DDD	mg/kg	0.0652	0.0623	97.0	70.3-111	4.54	20	WG702070
4,4-DDE	mg/kg	0.0646	0.0618	96.0	69.9-113	4.46	20	WG702070
4,4-DDT	mg/kg	0.0626	0.0604	93.0	68.1-111	3.61	20	WG702070
Aldrin	mg/kg	0.0598	0.0573	89.0	66.9-111	4.23	20	WG702070
Alpha BHC	mg/kg	0.0602	0.0575	90.0	65.1-111	4.52	20	WG702070
Beta BHC	mg/kg	0.0625	0.0592	93.0	69.6-112	5.42	20	WG702070
Delta BHC	mg/kg	0.0640	0.0616	96.0	68.3-114	3.87	20	WG702070
Dieldrin	mg/kg	0.0641	0.0611	96.0	70.2-112	4.82	20	WG702070
Endosulfan I	mg/kg	0.0645	0.0614	96.0	69.8-113	4.89	20	WG702070
Endosulfan II	mg/kg	0.0613	0.0615	91.0	69.2-113	0.290	20	WG702070
Endosulfan sulfate	mg/kg	0.0609	0.0612	91.0	62-123	0.480	20	WG702070
Endrin	mg/kg	0.0678	0.0653	101.	65.9-115	3.81	20	WG702070
Endrin aldehyde	mg/kg	0.0465	0.0524	69.0	47.6-124	12.0	20	WG702070
Endrin ketone	mg/kg	0.0657	0.0636	98.0	69-120	3.34	20	WG702070
Gamma BHC	mg/kg	0.0615	0.0583	92.0	68.2-111	5.32	20	WG702070
Heptachlor	mg/kg	0.0620	0.0592	92.0	65.9-111	4.64	20	WG702070
Heptachlor epoxide	mg/kg	0.0652	0.0622	97.0	69.7-113	4.70	20	WG702070
Hexachlorobenzene	mg/kg	0.0533	0.0522	80.0	59.6-113	2.12	20	WG702070
Methoxychlor	mg/kg	0.0650	0.0642	97.0	66.2-114	1.20	20	WG702070
Decachlorobiphenyl				79.00	10-145			WG702070
Tetrachloro-m-xylene				73.80	21.1-148			WG702070

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/kg	0.329	0.0749	.25	100.	80-120	L678495-03	WG701904

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Quality Assurance Report
Level II

L678607

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/kg	0.279	0.0330	.25	98.0	80-120	L678607-05	WG702044
2,4,5-T	mg/kg	0.139	0.0	.1667	84.0	20.3-119	L678607-08	WG702320
2,4,5-TP (Silvex)	mg/kg	0.124	0.0	.1667	74.0	23.6-133	L678607-08	WG702320
2,4-D	mg/kg	0.121	0.0	.1667	73.0	10-141	L678607-08	WG702320
2,4-DB	mg/kg	0.148	0.0	.1667	89.0	24.8-132	L678607-08	WG702320
Dalapon	mg/kg	0.138	0.0	.1667	83.0	10-115	L678607-08	WG702320
Dicamba	mg/kg	0.143	0.0	.1667	86.0	23-124	L678607-08	WG702320
Dichloroprop	mg/kg	0.113	0.0	.1667	68.0	17.5-129	L678607-08	WG702320
Dinoseb	mg/kg	0.117	0.0	.1667	70.0	26.2-129	L678607-08	WG702320
MCPA	mg/kg	13.1	0.0	16.666	79.0	10-159	L678607-08	WG702320
MCPP	mg/kg	13.9	0.0	16.666	83.0	10-200	L678607-08	WG702320
2,4-Dichlorophenyl Acetic Acid					95.20	20.1-127		WG702320
Antimony	mg/kg	46.1	-1.72	50	92.0	75-125	L678618-01	WG702129
Arsenic	mg/kg	57.9	8.21	50	99.0	75-125	L678618-01	WG702129
Beryllium	mg/kg	52.7	0.0926	50	100.	75-125	L678618-01	WG702129
Cadmium	mg/kg	49.5	0.877	50	97.0	75-125	L678618-01	WG702129
Chromium	mg/kg	51.7	4.15	50	95.0	75-125	L678618-01	WG702129
Copper	mg/kg	90.1	37.4	50	100.	75-125	L678618-01	WG702129
Lead	mg/kg	52.2	3.32	50	98.0	75-125	L678618-01	WG702129
Nickel	mg/kg	50.1	1.50	50	97.0	75-125	L678618-01	WG702129
Silver	mg/kg	51.4	0.0786	50	100.	75-125	L678618-01	WG702129
Thallium	mg/kg	48.8	-0.534	50	98.0	75-125	L678618-01	WG702129
Zinc	mg/kg	177.	132.	50	90.0	75-125	L678618-01	WG702129
Selenium	mg/kg	52.6	1.20	50	100.	75-125	L678618-01	WG702129
2,4,5-T	mg/kg	0.124	0.0	.1667	75.0	20.3-119	L678922-01	WG702782
2,4,5-TP (Silvex)	mg/kg	0.125	0.0	.1667	75.0	23.6-133	L678922-01	WG702782
2,4-D	mg/kg	0.112	0.0	.1667	67.0	10-141	L678922-01	WG702782
2,4-DB	mg/kg	0.134	0.0	.1667	80.0	24.8-132	L678922-01	WG702782
Dalapon	mg/kg	0.116	0.0	.1667	69.0	10-115	L678922-01	WG702782
Dicamba	mg/kg	0.139	0.0	.1667	83.0	23-124	L678922-01	WG702782
Dichloroprop	mg/kg	0.111	0.0	.1667	67.0	17.5-129	L678922-01	WG702782
Dinoseb	mg/kg	0.0768	0.0	.1667	46.0	26.2-129	L678922-01	WG702782
MCPA	mg/kg	10.6	0.0	16.666	63.0	10-159	L678922-01	WG702782
MCPP	mg/kg	11.8	0.0	16.666	71.0	10-200	L678922-01	WG702782
2,4-Dichlorophenyl Acetic Acid					90.10	20.1-127		WG702782
4,4-DDD	mg/kg	0.0696	0.0	.067	100.	23.4-145	L678607-11	WG702070
4,4-DDE	mg/kg	0.0710	0.0	.067	110.	16.4-147	L678607-11	WG702070
4,4-DDT	mg/kg	0.0667	0.0	.067	100.	26.7-129	L678607-11	WG702070
Aldrin	mg/kg	0.0712	0.0	.067	110.	40.2-116	L678607-11	WG702070
Alpha BHC	mg/kg	0.0702	0.0	.067	100.	53.6-109	L678607-11	WG702070
Beta BHC	mg/kg	0.0728	0.0	.067	110.	38.3-126	L678607-11	WG702070
Delta BHC	mg/kg	0.0732	0.0	.067	110.	44.8-125	L678607-11	WG702070
Dieldrin	mg/kg	0.0677	0.0	.067	100.	31.4-137	L678607-11	WG702070
Endosulfan I	mg/kg	0.0698	0.0	.067	100.	40.3-120	L678607-11	WG702070
Endosulfan II	mg/kg	0.0684	0.0	.067	100.	29.1-140	L678607-11	WG702070
Endosulfan sulfate	mg/kg	0.0692	0.0	.067	100.	43.3-129	L678607-11	WG702070
Endrin	mg/kg	0.0717	0.0	.067	110.	34.9-125	L678607-11	WG702070
Endrin aldehyde	mg/kg	0.0679	0.0	.067	100.	15.6-139	L678607-11	WG702070
Endrin ketone	mg/kg	0.0724	0.0	.067	110.	35.4-137	L678607-11	WG702070
Gamma BHC	mg/kg	0.0715	0.0	.067	110.	55.3-110	L678607-11	WG702070
Heptachlor	mg/kg	0.0717	0.0	.067	110.	41.6-115	L678607-11	WG702070

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Quality Assurance Report
Level II

L678607

January 24, 2014

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
		Matrix Spike						
Heptachlor epoxide	mg/kg	0.0701	0.0	.067	100.	34.8-128	L678607-11	WG702070
Hexachlorobenzene	mg/kg	0.0719	0.0	.067	110.	40.2-119	L678607-11	WG702070
Methoxychlor	mg/kg	0.0707	0.0	.067	110.	16-134	L678607-11	WG702070
Decachlorobiphenyl					90.40	10-145		WG702070
Tetrachloro-m-xylene					95.90	21.1-148		WG702070

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
		Matrix Spike Duplicate							
Mercury	mg/kg	0.353	0.329	111.	80-120	7.00	20	L678495-03	WG701904
Mercury	mg/kg	0.290	0.279	103.	80-120	4.00	20	L678607-05	WG702044
2,4,5-T	mg/kg	0.125	0.139	75.1	20.3-119	10.5	30	L678607-08	WG702320
2,4,5-TP (Silvex)	mg/kg	0.113	0.124	67.9	23.6-133	8.89	29.4	L678607-08	WG702320
2,4-D	mg/kg	0.111	0.121	66.9	10-141	8.14	36	L678607-08	WG702320
2,4-DB	mg/kg	0.125	0.148	75.2	24.8-132	16.8	34.5	L678607-08	WG702320
Dalapon	mg/kg	0.147	0.138	88.2	10-115	6.17	37.4	L678607-08	WG702320
Dicamba	mg/kg	0.139	0.143	83.5	23-124	2.86	27.4	L678607-08	WG702320
Dichloroprop	mg/kg	0.108	0.113	64.6	17.5-129	4.66	31.8	L678607-08	WG702320
Dinoseb	mg/kg	0.0966	0.117	57.9	26.2-129	19.4	34.1	L678607-08	WG702320
MCPA	mg/kg	12.2	13.1	73.3	10-159	7.07	40	L678607-08	WG702320
MCPP	mg/kg	14.7	13.9	88.4	10-200	5.96	40	L678607-08	WG702320
2,4-Dichlorophenyl Acetic Acid				94.30	20.1-127				WG702320
Antimony	mg/kg	46.5	46.1	96.4	75-125	1.00	20	L678618-01	WG702129
Arsenic	mg/kg	58.5	57.9	100.	75-125	1.00	20	L678618-01	WG702129
Beryllium	mg/kg	52.2	52.7	104.	75-125	1.00	20	L678618-01	WG702129
Cadmium	mg/kg	49.2	49.5	96.7	75-125	1.00	20	L678618-01	WG702129
Chromium	mg/kg	51.7	51.7	95.1	75-125	0.0	20	L678618-01	WG702129
Copper	mg/kg	90.9	90.1	107.	75-125	1.00	20	L678618-01	WG702129
Lead	mg/kg	52.3	52.2	98.0	75-125	0.0	20	L678618-01	WG702129
Nickel	mg/kg	50.1	50.1	97.2	75-125	0.0	20	L678618-01	WG702129
Silver	mg/kg	51.7	51.4	103.	75-125	1.00	20	L678618-01	WG702129
Thallium	mg/kg	49.0	48.8	99.0	75-125	0.0	20	L678618-01	WG702129
Zinc	mg/kg	180.	177.	96.3	75-125	2.00	20	L678618-01	WG702129
Selenium	mg/kg	51.2	52.6	99.9	75-125	3.00	20	L678618-01	WG702129
2,4,5-T	mg/kg	0.116	0.124	69.7	20.3-119	6.70	30	L678922-01	WG702782
2,4,5-TP (Silvex)	mg/kg	0.115	0.125	68.7	23.6-133	9.08	29.4	L678922-01	WG702782
2,4-D	mg/kg	0.0985	0.112	59.1	10-141	12.7	36	L678922-01	WG702782
2,4-DB	mg/kg	0.116	0.134	69.8	24.8-132	13.7	34.5	L678922-01	WG702782
Dalapon	mg/kg	0.115	0.116	68.7	10-115	0.970	37.4	L678922-01	WG702782
Dicamba	mg/kg	0.129	0.139	77.7	23-124	6.94	27.4	L678922-01	WG702782
Dichloroprop	mg/kg	0.100	0.111	60.1	17.5-129	10.4	31.8	L678922-01	WG702782
Dinoseb	mg/kg	0.0759	0.0768	45.6	26.2-129	1.14	34.1	L678922-01	WG702782
MCPA	mg/kg	10.7	10.6	64.0	10-159	1.14	40	L678922-01	WG702782
MCPP	mg/kg	11.2	11.8	67.4	10-200	5.15	40	L678922-01	WG702782
2,4-Dichlorophenyl Acetic Acid				84.80	20.1-127				WG702782
4,4-DDD	mg/kg	0.0715	0.0696	107.	23.4-145	2.74	20	L678607-11	WG702070
4,4-DDE	mg/kg	0.0734	0.0710	110.	16.4-147	3.38	20	L678607-11	WG702070
4,4-DDT	mg/kg	0.0681	0.0667	102.	26.7-129	1.99	23.8	L678607-11	WG702070
Aldrin	mg/kg	0.0734	0.0712	110.	40.2-116	3.15	20	L678607-11	WG702070

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Quality Assurance Report
Level II

L678607

January 24, 2014

		Matrix Spike Duplicate							
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Alpha BHC	mg/kg	0.0729	0.0702	109.	53.6-109	3.77	20	L678607-11	WG702070
Beta BHC	mg/kg	0.0746	0.0728	111.	38.3-126	2.45	20	L678607-11	WG702070
Delta BHC	mg/kg	0.0752	0.0732	112.	44.8-125	2.70	20	L678607-11	WG702070
Dieldrin	mg/kg	0.0696	0.0677	104.	31.4-137	2.87	20	L678607-11	WG702070
Endosulfan I	mg/kg	0.0728	0.0698	109.	40.3-120	4.09	20	L678607-11	WG702070
Endosulfan II	mg/kg	0.0704	0.0684	105.	29.1-140	2.90	20	L678607-11	WG702070
Endosulfan sulfate	mg/kg	0.0710	0.0692	106.	43.3-129	2.68	21.5	L678607-11	WG702070
Endrin	mg/kg	0.0741	0.0717	111.	34.9-125	3.30	21.2	L678607-11	WG702070
Endrin aldehyde	mg/kg	0.0698	0.0679	104.	15.6-139	2.86	20	L678607-11	WG702070
Endrin ketone	mg/kg	0.0737	0.0724	110.	35.4-137	1.73	20	L678607-11	WG702070
Gamma BHC	mg/kg	0.0740	0.0715	110.	55.3-110	3.38	20	L678607-11	WG702070
Heptachlor	mg/kg	0.0743	0.0717	111.	41.6-115	3.47	20	L678607-11	WG702070
Heptachlor epoxide	mg/kg	0.0728	0.0701	109.	34.8-128	3.76	20	L678607-11	WG702070
Hexachlorobenzene	mg/kg	0.0761	0.0719	114.	40.2-119	5.64	20	L678607-11	WG702070
Methoxychlor	mg/kg	0.0719	0.0707	107.	16-134	1.60	25.4	L678607-11	WG702070
Decachlorobiphenyl				90.40	10-145				WG702070
Tetrachloro-m-xylene				104.0	21.1-148				WG702070

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

WG702085: R2877378: L678607-11 12
WG702083: R2877380: L678607-01 02 03 04 05 06 07 08 09 10
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WG701904: R2877506: L678607-01 02 03 04
WG702044: R2877507: L678607-05 06 07 08 09 10 11 12
WG702099: R2877527: L678607-13
WG702320: R2878185: L678607-01 02 03 04 05 06 07 08
WG702129: R2878609 R2878933: L678607-01 02 03 04 05 06 07 08 09 10 11 12
WG702782: R2879099: L678607-09 10 11 12
WG702070: R2879162 R2879254: L678607-01 02 03 04 05 06 07 08 09 10 11 12

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678607

January 24, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Phil P Jones

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1678607
D031

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Contaminant	Sample # (lab only)
3HA-A (6-12")	G	SS	6-12"	1/16/14	0911	3			X	X		X						-01
3HA-B (6-12")					0948				X	X		X						-02
3HA-C (6-12")					1040				X	X		X						-03
3HA-D (6-12")					1115				X	X		X						-04
3HA-E (6-12")					1253				X	X		X						-05
3HA-F (6-12")					1341				X	X		X						-06
3HA-G (6-12")					1415				X	X		X						-07
3HA-H (6-12")					1452				X	X		X						-08
3HA-I (6-12")					1525				X	X		X						-09
3HA-J (6-12")					1600				X	X		X						-10

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/16/14	17:20	[signature]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/16/14	18:00	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☒ SUA

Temp: 3.1°C °C Bottles Received: 37 40z

Date: 1/17/14 Time: 0930

Condition: (lab use only) JD OK

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Phillip Jones

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____ Same Day 200%
____ Next Day 100%
____ Two Day 50%
____ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

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Fax: 615-758-5859

L# L678607

Table #

Acctnum: DUNDUNNC

Template:

Prelogin:

TSR: Hunt

Cooler:

Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Contaminant	Sample # (lab only)
3HA-K(6-12")	G	SS	6-12"	1/16/14	1630	3			X	X		X						-11
3HA-L(6-12")	↓	↓	↓	↓	1655	3			X	X		X						-12
~~Trip Blank~~		OT				1	X										NO TICs	-13

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	1/16/14	17:20	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
	1/16/14	18:00	

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☒ GWA

Temp: 0 °C Bottles Received: 37 4*oz

Date: 1/17/14 Time: 0430

Hold #

Condition: (lab Use only) TD

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: NCF:

Divider
Page

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Friday January 24, 2014

Report Number: L678922
Samples Received: 01/18/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678922-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 4-SB-A 3.5-4.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	78.9	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.10	0.0014	0.025	mg/kg		7471	01/22/14	1
Antimony	11.	0.38	1.3	mg/kg		6010C	01/22/14	1
Arsenic	18.	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	0.80	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.89	0.035	0.32	mg/kg		6010C	01/22/14	1
Chromium	27.	0.070	0.63	mg/kg		6010C	01/22/14	1
Copper	39.	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	16.	0.095	0.32	mg/kg		6010C	01/22/14	1
Nickel	7.5	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	6.3	mg/kg	O	6010C	01/22/14	5
Silver	0.87	0.14	0.63	mg/kg		6010C	01/22/14	1
Thallium	0.91	0.32	1.3	mg/kg	J	6010C	01/22/14	1
Zinc	33.	0.30	1.9	mg/kg		6010C	01/22/14	1
TPH (GC/FID) Low Fraction	U	0.40	2.3	mg/kg		GRO	01/21/14	18.25
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	117.			% Rec.		GRO	01/21/14	18.25
Volatile Organics								
Acetone	0.018	0.010	0.063	mg/kg	J	8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.013	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0013	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0063	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0013	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0013	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0063	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.063	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0063	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0032	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0063	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678922-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 4-SB-A 3.5-4.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dibromomethane	U	0.00038	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1
Dichlorodifluoromethane	U	0.00071	0.0063	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.013	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0063	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.013	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0063	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0063	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0013	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0013	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0063	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0032	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0038	mg/kg		8260B	01/21/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678922-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 4-SB-A 3.5-4.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	97.1			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	97.1			% Rec.		8260B	01/21/14	1
4-Bromofluorobenzene	94.9			% Rec.		8260B	01/21/14	1
TPH (GC/FID) High Fraction	U	0.77	5.1	mg/kg		3546/DRO	01/21/14	1
Surrogate recovery(%)								
o-Terphenyl	51.0			% Rec.		3546/DRO	01/21/14	1
Pesticides								
Aldrin	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Alpha BHC	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Beta BHC	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Delta BHC	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Gamma BHC	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Chlordane	U	0.039	0.25	mg/kg		8081A	01/20/14	1
4,4-DDD	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
4,4-DDE	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
4,4-DDT	U	0.0020	0.025	mg/kg		8081A	01/20/14	1
Dieldrin	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Endosulfan I	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Endosulfan II	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Endosulfan sulfate	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Endrin	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Endrin aldehyde	U	0.0013	0.025	mg/kg		8081A	01/20/14	1
Endrin ketone	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Hexachlorobenzene	U	0.0018	0.025	mg/kg		8081A	01/20/14	1
Heptachlor	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Heptachlor epoxide	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Methoxychlor	U	0.0018	0.025	mg/kg		8081A	01/20/14	1
Toxaphene	U	0.036	0.51	mg/kg		8081A	01/20/14	1
Pesticide Surrogates								
Decachlorobiphenyl	59.3			% Rec.		8081A	01/20/14	1
Tetrachloro-m-xylene	75.7			% Rec.		8081A	01/20/14	1
Herbicides								
2,4-D	U	0.023	0.089	mg/kg		8151	01/23/14	1
Dalapon	U	0.27	1.0	mg/kg		8151	01/23/14	1
2,4-DB	U	0.023	0.089	mg/kg		8151	01/23/14	1
Dicamba	U	0.023	0.089	mg/kg		8151	01/23/14	1
Dichloroprop	U	0.023	0.089	mg/kg		8151	01/23/14	1
Dinoseb	U	0.023	0.089	mg/kg		8151	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678922-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 4-SB-A 3.5-4.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
MCPA	U	2.2	8.2	mg/kg		8151	01/23/14	1
MCPP	U	2.2	8.2	mg/kg		8151	01/23/14	1
2,4,5-T	U	0.023	0.089	mg/kg		8151	01/23/14	1
2,4,5-TP (Silvex)	U	0.023	0.089	mg/kg		8151	01/23/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	75.5			% Rec.		8151	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.042	mg/kg		8270D	01/23/14	1
Acenaphthylene	U	0.0067	0.042	mg/kg		8270D	01/23/14	1
Anthracene	U	0.0063	0.042	mg/kg		8270D	01/23/14	1
Benzidine	U	0.064	0.42	mg/kg		8270D	01/23/14	1
Benzo(a)anthracene	U	0.0043	0.042	mg/kg		8270D	01/23/14	1
Benzo(b)fluoranthene	U	0.0070	0.042	mg/kg		8270D	01/23/14	1
Benzo(k)fluoranthene	U	0.0058	0.042	mg/kg		8270D	01/23/14	1
Benzo(g,h,i)perylene	U	0.0072	0.042	mg/kg		8270D	01/23/14	1
Benzo(a)pyrene	U	0.0055	0.042	mg/kg		8270D	01/23/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.42	mg/kg		8270D	01/23/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.42	mg/kg		8270D	01/23/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.42	mg/kg		8270D	01/23/14	1
4-Bromophenyl-phenylether	U	0.011	0.42	mg/kg		8270D	01/23/14	1
2-Chloronaphthalene	U	0.0064	0.042	mg/kg		8270D	01/23/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.42	mg/kg		8270D	01/23/14	1
Chrysene	U	0.0056	0.042	mg/kg		8270D	01/23/14	1
Dibenz(a,h)anthracene	U	0.0082	0.042	mg/kg		8270D	01/23/14	1
3,3-Dichlorobenzidine	U	0.079	0.42	mg/kg		8270D	01/23/14	1
2,4-Dinitrotoluene	U	0.0061	0.42	mg/kg		8270D	01/23/14	1
2,6-Dinitrotoluene	U	0.0074	0.42	mg/kg		8270D	01/23/14	1
Fluoranthene	U	0.0050	0.042	mg/kg		8270D	01/23/14	1
Fluorene	U	0.0068	0.042	mg/kg		8270D	01/23/14	1
Hexachlorobenzene	U	0.0086	0.42	mg/kg		8270D	01/23/14	1
Hexachloro-1,3-butadiene	U	0.010	0.42	mg/kg		8270D	01/23/14	1
Hexachlorocyclopentadiene	U	0.059	0.42	mg/kg		8270D	01/23/14	1
Hexachloroethane	U	0.013	0.42	mg/kg		8270D	01/23/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.042	mg/kg		8270D	01/23/14	1
Isophorone	U	0.0052	0.42	mg/kg		8270D	01/23/14	1
Naphthalene	U	0.0089	0.042	mg/kg		8270D	01/23/14	1
Nitrobenzene	U	0.0070	0.42	mg/kg		8270D	01/23/14	1
n-Nitrosodimethylamine	U	0.065	0.42	mg/kg		8270D	01/23/14	1
n-Nitrosodiphenylamine	U	0.0059	0.42	mg/kg		8270D	01/23/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.42	mg/kg		8270D	01/23/14	1
Phenanthrene	U	0.0053	0.042	mg/kg		8270D	01/23/14	1
Benzylbutyl phthalate	U	0.010	0.42	mg/kg		8270D	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678922-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 4-SB-A 3.5-4.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	U	0.012	0.42	mg/kg		8270D	01/23/14	1
Di-n-butyl phthalate	U	0.011	0.42	mg/kg		8270D	01/23/14	1
Diethyl phthalate	U	0.0069	0.42	mg/kg		8270D	01/23/14	1
Dimethyl phthalate	U	0.0054	0.42	mg/kg		8270D	01/23/14	1
Di-n-octyl phthalate	U	0.0091	0.42	mg/kg		8270D	01/23/14	1
Pyrene	U	0.012	0.042	mg/kg		8270D	01/23/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.42	mg/kg		8270D	01/23/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.42	mg/kg		8270D	01/23/14	1
2-Chlorophenol	U	0.0083	0.42	mg/kg		8270D	01/23/14	1
2,4-Dichlorophenol	U	0.0075	0.42	mg/kg		8270D	01/23/14	1
2,4-Dimethylphenol	U	0.047	0.42	mg/kg	J	8270D	01/23/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.42	mg/kg		8270D	01/23/14	1
2,4-Dinitrophenol	U	0.098	0.42	mg/kg		8270D	01/23/14	1
2-Nitrophenol	U	0.013	0.42	mg/kg		8270D	01/23/14	1
4-Nitrophenol	U	0.052	0.42	mg/kg		8270D	01/23/14	1
Pentachlorophenol	U	0.048	0.42	mg/kg		8270D	01/23/14	1
Phenol	U	0.0070	0.42	mg/kg		8270D	01/23/14	1
2,4,6-Trichlorophenol	U	0.0078	0.42	mg/kg		8270D	01/23/14	1
Surrogate Recovery								
2-Fluorophenol	69.8			% Rec.		8270D	01/23/14	1
Phenol-d5	75.8			% Rec.		8270D	01/23/14	1
Nitrobenzene-d5	68.8			% Rec.		8270D	01/23/14	1
2-Fluorobiphenyl	77.2			% Rec.		8270D	01/23/14	1
2,4,6-Tribromophenol	91.8			% Rec.		8270D	01/23/14	1
p-Terphenyl-d14	59.6			% Rec.		8270D	01/23/14	1

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January 24,2014

ESC Sample # : L678922-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 12-SB-A 2-2.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 10:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	81.8	0.0333	0.100	%		2540 G-2	01/22/14	1
TPH (GC/FID) High Fraction	U	0.77	4.9	mg/kg		3546/DRO	01/21/14	1
Surrogate recovery(%)								
o-Terphenyl	53.9			% Rec.		3546/DRO	01/21/14	1

Results listed are dry weight basis.
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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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January 24,2014

ESC Sample # : L678922-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 12-SB-B 6-6.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 11:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	73.8	0.0333	0.100	%		2540 G-2	01/23/14	1
TPH (GC/FID) High Fraction	1.6	0.77	5.4	mg/kg	J	3546/DRO	01/21/14	1
Surrogate recovery(%)								
o-Terphenyl	54.0			% Rec.		3546/DRO	01/21/14	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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January 24,2014

ESC Sample # : L678922-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-HAO 2FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 15:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	74.4	0.0333	0.100	%		2540 G-2	01/23/14	1
TPH (GC/FID) Low Fraction	U	0.43	2.6	mg/kg		GRO	01/22/14	19.75
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.6			% Rec.		GRO	01/22/14	19.75
TPH (GC/FID) High Fraction	U	0.77	5.4	mg/kg		3546/DRO	01/21/14	1
Surrogate recovery(%)								
o-Terphenyl	53.8			% Rec.		3546/DRO	01/21/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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January 24, 2014

ESC Sample # : L678922-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-SB-P 2.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 15:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	73.5	0.0333	0.100	%		2540 G-2	01/23/14	1
TPH (GC/FID) Low Fraction	U	0.42	2.6	mg/kg		GRO	01/21/14	19.5
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.0			% Rec.		GRO	01/21/14	19.5
TPH (GC/FID) High Fraction	5.8	0.77	5.4	mg/kg		3546/DRO	01/21/14	1
Surrogate recovery(%)								
o-Terphenyl	51.8			% Rec.		3546/DRO	01/21/14	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

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Cary, NC 27512

January 24, 2014

ESC Sample # : L678922-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/19/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/19/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/19/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/19/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/19/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/19/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/19/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/19/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/19/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/19/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/19/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/19/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/19/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/19/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/19/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/19/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/19/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/19/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/19/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/19/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/19/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/19/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/19/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/19/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/19/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/19/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/19/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/19/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/19/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/19/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/19/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/19/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/19/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/19/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/19/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/19/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/19/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/19/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/19/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/19/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/19/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/19/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678922-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/17/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/19/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/19/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/19/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/19/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/19/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/19/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/19/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/19/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/19/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/19/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/19/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/19/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/19/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/19/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/19/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/19/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/19/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/19/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/19/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/19/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/19/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/19/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/19/14	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	01/19/14	1
Dibromofluoromethane	102.			% Rec.		8260B	01/19/14	1
a,a,a-Trifluorotoluene	106.			% Rec.		8260B	01/19/14	1
4-Bromofluorobenzene	107.			% Rec.		8260B	01/19/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 01/24/14 11:31 Printed: 01/24/14 11:31

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678922-01	WG702802	SAMP	2,4-Dimethylphenol	R2878861	J
	WG702232	SAMP	Acetone	R2878186	J
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702286	SAMP	Selenium	R2878381	O
	WG702286	SAMP	Thallium	R2878381	J
L678922-03	WG702264	SAMP	TPH (GC/FID) High Fraction	R2878205	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/24/14 at 11:31:51

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678922-01 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 11:31

Sample: L678922-02 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 11:31

Sample: L678922-03 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 11:31

Sample: L678922-04 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 11:31

Sample: L678922-05 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 11:31

Sample: L678922-06 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 11:31

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PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678922

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1,1-Trichloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1,2-Trichloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1-Dichloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1-Dichloroethene	< .001	mg/l			WG702037	01/19/14 12:20
1,1-Dichloropropene	< .001	mg/l			WG702037	01/19/14 12:20
1,2,3-Trichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,2,3-Trichloropropane	< .001	mg/l			WG702037	01/19/14 12:20
1,2,4-Trichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,2,4-Trimethylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG702037	01/19/14 12:20
1,2-Dibromoethane	< .001	mg/l			WG702037	01/19/14 12:20
1,2-Dichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,2-Dichloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,2-Dichloropropane	< .001	mg/l			WG702037	01/19/14 12:20
1,3,5-Trimethylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,3-Dichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,3-Dichloropropane	< .001	mg/l			WG702037	01/19/14 12:20
1,4-Dichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
2,2-Dichloropropane	< .001	mg/l			WG702037	01/19/14 12:20
2-Butanone (MEK)	< .01	mg/l			WG702037	01/19/14 12:20
2-Chloroethyl vinyl ether	< .05	mg/l			WG702037	01/19/14 12:20
2-Chlorotoluene	< .001	mg/l			WG702037	01/19/14 12:20
4-Chlorotoluene	< .001	mg/l			WG702037	01/19/14 12:20
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG702037	01/19/14 12:20
Acetone	< .05	mg/l			WG702037	01/19/14 12:20
Acrolein	< .025	mg/l			WG702037	01/19/14 12:20
Acrylonitrile	< .01	mg/l			WG702037	01/19/14 12:20
Benzene	< .001	mg/l			WG702037	01/19/14 12:20
Bromobenzene	< .001	mg/l			WG702037	01/19/14 12:20
Bromodichloromethane	< .001	mg/l			WG702037	01/19/14 12:20
Bromoform	< .001	mg/l			WG702037	01/19/14 12:20
Bromomethane	< .005	mg/l			WG702037	01/19/14 12:20
Carbon tetrachloride	< .001	mg/l			WG702037	01/19/14 12:20
Chlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
Chlorodibromomethane	< .001	mg/l			WG702037	01/19/14 12:20
Chloroethane	< .005	mg/l			WG702037	01/19/14 12:20
Chloroform	< .005	mg/l			WG702037	01/19/14 12:20
Chloromethane	< .0025	mg/l			WG702037	01/19/14 12:20
cis-1,2-Dichloroethene	< .001	mg/l			WG702037	01/19/14 12:20
cis-1,3-Dichloropropene	< .001	mg/l			WG702037	01/19/14 12:20
Di-isopropyl ether	< .001	mg/l			WG702037	01/19/14 12:20
Dibromomethane	< .001	mg/l			WG702037	01/19/14 12:20
Dichlorodifluoromethane	< .005	mg/l			WG702037	01/19/14 12:20
Ethylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Hexachloro-1,3-butadiene	< .001	mg/l			WG702037	01/19/14 12:20
Isopropylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Methyl tert-butyl ether	< .001	mg/l			WG702037	01/19/14 12:20
Methylene Chloride	< .005	mg/l			WG702037	01/19/14 12:20
n-Butylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
n-Propylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Naphthalene	< .005	mg/l			WG702037	01/19/14 12:20
p-Isopropyltoluene	< .001	mg/l			WG702037	01/19/14 12:20
sec-Butylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Styrene	< .001	mg/l			WG702037	01/19/14 12:20
tert-Butylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Tetrachloroethene	< .001	mg/l			WG702037	01/19/14 12:20
Toluene	< .005	mg/l			WG702037	01/19/14 12:20

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Quality Assurance Report
Level II

L678922

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
trans-1,2-Dichloroethene	< .001	mg/l			WG702037	01/19/14 12:20
trans-1,3-Dichloropropene	< .001	mg/l			WG702037	01/19/14 12:20
Trichloroethene	< .001	mg/l			WG702037	01/19/14 12:20
Trichlorofluoromethane	< .005	mg/l			WG702037	01/19/14 12:20
Vinyl chloride	< .001	mg/l			WG702037	01/19/14 12:20
Xylenes, Total	< .003	mg/l			WG702037	01/19/14 12:20
4-Bromofluorobenzene		% Rec.	106.0	71-126	WG702037	01/19/14 12:20
Dibromofluoromethane		% Rec.	102.0	78.3-121	WG702037	01/19/14 12:20
Toluene-d8		% Rec.	106.0	88.5-111	WG702037	01/19/14 12:20
a,a,a-Trifluorotoluene		% Rec.	105.0	85-114	WG702037	01/19/14 12:20
4,4-DDD	< .02	mg/kg			WG702159	01/20/14 10:55
4,4-DDE	< .02	mg/kg			WG702159	01/20/14 10:55
4,4-DDT	< .02	mg/kg			WG702159	01/20/14 10:55
Aldrin	< .02	mg/kg			WG702159	01/20/14 10:55
Alpha BHC	< .02	mg/kg			WG702159	01/20/14 10:55
Beta BHC	< .02	mg/kg			WG702159	01/20/14 10:55
Chlordane	< .2	mg/kg			WG702159	01/20/14 10:55
Delta BHC	< .02	mg/kg			WG702159	01/20/14 10:55
Dieldrin	< .02	mg/kg			WG702159	01/20/14 10:55
Endosulfan I	< .02	mg/kg			WG702159	01/20/14 10:55
Endosulfan II	< .02	mg/kg			WG702159	01/20/14 10:55
Endosulfan sulfate	< .02	mg/kg			WG702159	01/20/14 10:55
Endrin	< .02	mg/kg			WG702159	01/20/14 10:55
Endrin aldehyde	< .02	mg/kg			WG702159	01/20/14 10:55
Endrin ketone	< .02	mg/kg			WG702159	01/20/14 10:55
Gamma BHC	< .02	mg/kg			WG702159	01/20/14 10:55
Heptachlor	< .02	mg/kg			WG702159	01/20/14 10:55
Heptachlor epoxide	< .02	mg/kg			WG702159	01/20/14 10:55
Hexachlorobenzene	< .02	mg/kg			WG702159	01/20/14 10:55
Methoxychlor	< .02	mg/kg			WG702159	01/20/14 10:55
Toxaphene	< .4	mg/kg			WG702159	01/20/14 10:55
Decachlorobiphenyl		% Rec.	95.00	10-145	WG702159	01/20/14 10:55
Tetrachloro-m-xylene		% Rec.	104.0	21.1-148	WG702159	01/20/14 10:55
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG702495	01/21/14 13:52
a,a,a-Trifluorotoluene(FID)		% Rec.	99.40	59-128	WG702495	01/21/14 13:52
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,1-Trichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,2-Trichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,3-Trichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,3-Trichloropropane	< .0025	mg/kg			WG702232	01/21/14 12:10
1,2,4-Trichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,4-Trimethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG702232	01/21/14 12:10
1,2-Dibromoethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
1,3,5-Trimethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,3-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10

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Quality Assurance Report
Level II

L678922

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,3-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
1,4-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
2,2-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
2-Butanone (MEK)	< .01	mg/kg			WG702232	01/21/14 12:10
2-Chloroethyl vinyl ether	< .05	mg/kg			WG702232	01/21/14 12:10
2-Chlorotoluene	< .001	mg/kg			WG702232	01/21/14 12:10
4-Chlorotoluene	< .001	mg/kg			WG702232	01/21/14 12:10
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG702232	01/21/14 12:10
Acetone	< .05	mg/kg			WG702232	01/21/14 12:10
Acrylonitrile	< .01	mg/kg			WG702232	01/21/14 12:10
Benzene	< .001	mg/kg			WG702232	01/21/14 12:10
Bromobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Bromodichloromethane	< .001	mg/kg			WG702232	01/21/14 12:10
Bromoform	< .001	mg/kg			WG702232	01/21/14 12:10
Bromomethane	< .005	mg/kg			WG702232	01/21/14 12:10
Carbon tetrachloride	< .001	mg/kg			WG702232	01/21/14 12:10
Chlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Chlorodibromomethane	< .001	mg/kg			WG702232	01/21/14 12:10
Chloroethane	< .005	mg/kg			WG702232	01/21/14 12:10
Chloroform	< .005	mg/kg			WG702232	01/21/14 12:10
Chloromethane	< .0025	mg/kg			WG702232	01/21/14 12:10
cis-1,2-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
cis-1,3-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
Di-isopropyl ether	< .001	mg/kg			WG702232	01/21/14 12:10
Dibromomethane	< .001	mg/kg			WG702232	01/21/14 12:10
Dichlorodifluoromethane	< .005	mg/kg			WG702232	01/21/14 12:10
Ethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Hexachloro-1,3-butadiene	< .001	mg/kg			WG702232	01/21/14 12:10
Isopropylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Methyl tert-butyl ether	< .001	mg/kg			WG702232	01/21/14 12:10
Methylene Chloride	< .005	mg/kg			WG702232	01/21/14 12:10
n-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
n-Propylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Naphthalene	< .005	mg/kg			WG702232	01/21/14 12:10
p-Isopropyltoluene	< .001	mg/kg			WG702232	01/21/14 12:10
sec-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Styrene	< .001	mg/kg			WG702232	01/21/14 12:10
tert-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Tetrachloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
Toluene	< .005	mg/kg			WG702232	01/21/14 12:10
trans-1,2-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
trans-1,3-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
Trichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
Trichlorofluoromethane	< .005	mg/kg			WG702232	01/21/14 12:10
Vinyl chloride	< .001	mg/kg			WG702232	01/21/14 12:10
Xylenes, Total	< .003	mg/kg			WG702232	01/21/14 12:10
4-Bromofluorobenzene		% Rec.	99.50	71-126	WG702232	01/21/14 12:10
Dibromofluoromethane		% Rec.	98.00	78.3-121	WG702232	01/21/14 12:10
Toluene-d8		% Rec.	104.0	88.5-111	WG702232	01/21/14 12:10
a,a,a-Trifluorotoluene		% Rec.	101.0	85-114	WG702232	01/21/14 12:10
TPH (GC/FID) High Fraction	< 4	mg/kg			WG702264	01/21/14 15:42
o-Terphenyl		% Rec.	55.60	50-150	WG702264	01/21/14 15:42
Total Solids	< .1	%			WG702528	01/22/14 08:47

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Quality Assurance Report
Level II

L678922

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Mercury	< .02	mg/kg			WG702461	01/22/14 08:33
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG702244	01/21/14 12:57
a,a,a-Trifluorotoluene(FID)		% Rec.	112.0	59-128	WG702244	01/21/14 12:57
Antimony	< 1	mg/kg			WG702286	01/22/14 04:43
Arsenic	< 1	mg/kg			WG702286	01/22/14 04:43
Beryllium	< .1	mg/kg			WG702286	01/22/14 04:43
Cadmium	< .25	mg/kg			WG702286	01/22/14 04:43
Chromium	< .5	mg/kg			WG702286	01/22/14 04:43
Copper	< 1	mg/kg			WG702286	01/22/14 04:43
Lead	< .25	mg/kg			WG702286	01/22/14 04:43
Nickel	< 1	mg/kg			WG702286	01/22/14 04:43
Selenium	< 1	mg/kg			WG702286	01/22/14 04:43
Silver	< .5	mg/kg			WG702286	01/22/14 04:43
Thallium	< 1	mg/kg			WG702286	01/22/14 04:43
Zinc	< 1.5	mg/kg			WG702286	01/22/14 04:43
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG702702	01/22/14 13:20
a,a,a-Trifluorotoluene(FID)		% Rec.	100.0	59-128	WG702702	01/22/14 13:20
Total Solids	< .1	%			WG702529	01/23/14 06:41
1,2,4-Trichlorobenzene	< .333	mg/kg			WG702802	01/23/14 04:31
2,4,6-Trichlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dichlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dimethylphenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dinitrophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dinitrotoluene	< .333	mg/kg			WG702802	01/23/14 04:31
2,6-Dinitrotoluene	< .333	mg/kg			WG702802	01/23/14 04:31
2-Chloronaphthalene	< .033	mg/kg			WG702802	01/23/14 04:31
2-Chlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2-Nitrophenol	< .333	mg/kg			WG702802	01/23/14 04:31
3,3-Dichlorobenzidine	< .333	mg/kg			WG702802	01/23/14 04:31
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG702802	01/23/14 04:31
4-Bromophenyl-phenylether	< .333	mg/kg			WG702802	01/23/14 04:31
4-Chloro-3-methylphenol	< .333	mg/kg			WG702802	01/23/14 04:31
4-Chlorophenyl-phenylether	< .333	mg/kg			WG702802	01/23/14 04:31
4-Nitrophenol	< .333	mg/kg			WG702802	01/23/14 04:31
Acenaphthene	< .033	mg/kg			WG702802	01/23/14 04:31
Acenaphthylene	< .033	mg/kg			WG702802	01/23/14 04:31
Anthracene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzidine	< .333	mg/kg			WG702802	01/23/14 04:31
Benzo(a)anthracene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(a)pyrene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(b)fluoranthene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(g,h,i)perylene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(k)fluoranthene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzylbutyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-chloroethyl)ether	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Chrysene	< .033	mg/kg			WG702802	01/23/14 04:31

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Quality Assurance Report
Level II

L678922

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Di-n-butyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Di-n-octyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Dibenz(a,h)anthracene	< .033	mg/kg			WG702802	01/23/14 04:31
Diethyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Dimethyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Fluoranthene	< .033	mg/kg			WG702802	01/23/14 04:31
Fluorene	< .033	mg/kg			WG702802	01/23/14 04:31
Hexachloro-1,3-butadiene	< .333	mg/kg			WG702802	01/23/14 04:31
Hexachlorobenzene	< .333	mg/kg			WG702802	01/23/14 04:31
Hexachlorocyclopentadiene	< .333	mg/kg			WG702802	01/23/14 04:31
Hexachloroethane	< .333	mg/kg			WG702802	01/23/14 04:31
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG702802	01/23/14 04:31
Isophorone	< .333	mg/kg			WG702802	01/23/14 04:31
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG702802	01/23/14 04:31
n-Nitrosodimethylamine	< .333	mg/kg			WG702802	01/23/14 04:31
n-Nitrosodiphenylamine	< .333	mg/kg			WG702802	01/23/14 04:31
Naphthalene	< .033	mg/kg			WG702802	01/23/14 04:31
Nitrobenzene	< .333	mg/kg			WG702802	01/23/14 04:31
Pentachlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
Phenanthrene	< .033	mg/kg			WG702802	01/23/14 04:31
Phenol	< .333	mg/kg			WG702802	01/23/14 04:31
Pyrene	< .033	mg/kg			WG702802	01/23/14 04:31
2,4,6-Tribromophenol		% Rec.	93.60	21.6-142	WG702802	01/23/14 04:31
2-Fluorobiphenyl		% Rec.	68.00	34.9-129	WG702802	01/23/14 04:31
2-Fluorophenol		% Rec.	70.60	21.1-116	WG702802	01/23/14 04:31
Nitrobenzene-d5		% Rec.	72.10	21.9-129	WG702802	01/23/14 04:31
Phenol-d5		% Rec.	76.70	26.3-121	WG702802	01/23/14 04:31
p-Terphenyl-d14		% Rec.	77.40	21.5-128	WG702802	01/23/14 04:31
2,4,5-T	< .07	mg/kg			WG702782	01/23/14 18:45
2,4,5-TP (Silvex)	< .07	mg/kg			WG702782	01/23/14 18:45
2,4-D	< .07	mg/kg			WG702782	01/23/14 18:45
2,4-DB	< .07	mg/kg			WG702782	01/23/14 18:45
Dalapon	< .8	mg/kg			WG702782	01/23/14 18:45
Dicamba	< .07	mg/kg			WG702782	01/23/14 18:45
Dichloroprop	< .07	mg/kg			WG702782	01/23/14 18:45
Dinoseb	< .07	mg/kg			WG702782	01/23/14 18:45
MCPA	< 6.5	mg/kg			WG702782	01/23/14 18:45
MCPP	< 6.5	mg/kg			WG702782	01/23/14 18:45
2,4-Dichlorophenyl Acetic Acid		% Rec.	78.50	20.1-127	WG702782	01/23/14 18:45

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	81.8	78.9	3.64	5	L678922-01	WG702528
Mercury	mg/kg	0.0	0.0141	5.00	20	L678902-02	WG702461
Antimony	mg/kg	6.80	5.19	27.0*	20	L678779-03	WG702286
Arsenic	mg/kg	16.0	12.8	19.0	20	L678779-03	WG702286
Beryllium	mg/kg	0.830	0.638	26.0*	20	L678779-03	WG702286
Cadmium	mg/kg	0.490	0.364	30.0*	20	L678779-03	WG702286
Chromium	mg/kg	130.	68.0	65.0*	20	L678779-03	WG702286
Copper	mg/kg	2.50	2.08	18.0	20	L678779-03	WG702286
Lead	mg/kg	6.30	4.72	29.0*	20	L678779-03	WG702286
Nickel	mg/kg	3.30	3.36	2.00	20	L678779-03	WG702286

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Silver	mg/kg	0.790	0.565	34.0*	20	L678779-03	WG702286
Thallium	mg/kg	1.00	1.34	24.0*	20	L678779-03	WG702286
Zinc	mg/kg	28.0	19.6	34.0*	20	L678779-03	WG702286
Selenium	mg/kg	0.0	-4.87	42.0*	20	L678779-03	WG702286
Total Solids	%	83.2	83.2	0.0122	5	L678938-05	WG702529

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
			Laboratory Control Sample			
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0278	111.	74.2-124	WG702037
1,1,1-Trichloroethane	mg/l	.025	0.0266	106.	73.2-123	WG702037
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0266	106.	70.7-122	WG702037
1,1,2-Trichloroethane	mg/l	.025	0.0268	107.	77.7-118	WG702037
1,1-Dichloroethane	mg/l	.025	0.0269	107.	70.7-126	WG702037
1,1-Dichloroethene	mg/l	.025	0.0276	110.	67.8-129	WG702037
1,1-Dichloropropene	mg/l	.025	0.0258	103.	73.1-125	WG702037
1,2,3-Trichlorobenzene	mg/l	.025	0.0293	117.	64.9-135	WG702037
1,2,3-Trichloropropane	mg/l	.025	0.0270	108.	71.8-121	WG702037
1,2,4-Trichlorobenzene	mg/l	.025	0.0305	122.	69.7-136	WG702037
1,2,4-Trimethylbenzene	mg/l	.025	0.0277	111.	75-123	WG702037
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0282	113.	65.4-128	WG702037
1,2-Dibromoethane	mg/l	.025	0.0269	108.	76.6-121	WG702037
1,2-Dichlorobenzene	mg/l	.025	0.0269	108.	78.4-117	WG702037
1,2-Dichloroethane	mg/l	.025	0.0255	102.	68.8-124	WG702037
1,2-Dichloropropane	mg/l	.025	0.0265	106.	76.5-119	WG702037
1,3,5-Trimethylbenzene	mg/l	.025	0.0276	110.	75.6-124	WG702037
1,3-Dichlorobenzene	mg/l	.025	0.0277	111.	70.8-128	WG702037
1,3-Dichloropropane	mg/l	.025	0.0265	106.	77.4-117	WG702037
1,4-Dichlorobenzene	mg/l	.025	0.0267	107.	78.8-115	WG702037
2,2-Dichloropropane	mg/l	.025	0.0286	114.	62.4-133	WG702037
2-Butanone (MEK)	mg/l	.125	0.107	85.3	55-149	WG702037
2-Chloroethyl vinyl ether	mg/l	.125	0.143	114.	43.8-150	WG702037
2-Chlorotoluene	mg/l	.025	0.0257	103.	74.7-122	WG702037
4-Chlorotoluene	mg/l	.025	0.0274	110.	77.5-120	WG702037
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.140	112.	70.5-133	WG702037
Acetone	mg/l	.125	0.0798	63.8	35.6-163	WG702037
Acrolein	mg/l	.125	0.118	94.6	10-190	WG702037
Acrylonitrile	mg/l	.125	0.132	106.	55.2-130	WG702037
Benzene	mg/l	.025	0.0245	98.1	74.8-121	WG702037
Bromobenzene	mg/l	.025	0.0267	107.	77.5-116	WG702037
Bromodichloromethane	mg/l	.025	0.0257	103.	75.1-116	WG702037
Bromoform	mg/l	.025	0.0278	111.	67.5-130	WG702037
Bromomethane	mg/l	.025	0.0234	93.5	49.9-162	WG702037
Carbon tetrachloride	mg/l	.025	0.0270	108.	70.2-123	WG702037
Chlorobenzene	mg/l	.025	0.0268	107.	78.1-119	WG702037
Chlorodibromomethane	mg/l	.025	0.0268	107.	74-121	WG702037
Chloroethane	mg/l	.025	0.0246	98.5	61.7-135	WG702037
Chloroform	mg/l	.025	0.0259	104.	76-121	WG702037
Chloromethane	mg/l	.025	0.0220	87.9	61.5-129	WG702037
cis-1,2-Dichloroethene	mg/l	.025	0.0264	106.	76-119	WG702037
cis-1,3-Dichloropropene	mg/l	.025	0.0275	110.	78.2-120	WG702037
Di-isopropyl ether	mg/l	.025	0.0262	105.	65.6-132	WG702037
Dibromomethane	mg/l	.025	0.0273	109.	79.5-118	WG702037
Dichlorodifluoromethane	mg/l	.025	0.0230	91.9	54.8-135	WG702037
Ethylbenzene	mg/l	.025	0.0277	111.	78.8-122	WG702037
Hexachloro-1,3-butadiene	mg/l	.025	0.0272	109.	64.7-129	WG702037
Isopropylbenzene	mg/l	.025	0.0291	117.	78.6-132	WG702037

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Methyl tert-butyl ether	mg/l	.025	0.0258	103.	71.2-126	WG702037
Methylene Chloride	mg/l	.025	0.0245	98.2	70.3-120	WG702037
n-Butylbenzene	mg/l	.025	0.0281	112.	76.2-126	WG702037
n-Propylbenzene	mg/l	.025	0.0277	111.	78.2-122	WG702037
Naphthalene	mg/l	.025	0.0289	115.	68.4-128	WG702037
p-Isopropyltoluene	mg/l	.025	0.0286	115.	74-131	WG702037
sec-Butylbenzene	mg/l	.025	0.0282	113.	74.4-127	WG702037
Styrene	mg/l	.025	0.0285	114.	80.4-126	WG702037
tert-Butylbenzene	mg/l	.025	0.0284	114.	75.3-126	WG702037
Tetrachloroethene	mg/l	.025	0.0270	108.	72.6-126	WG702037
Toluene	mg/l	.025	0.0261	104.	79.7-116	WG702037
trans-1,2-Dichloroethene	mg/l	.025	0.0251	100.	72.6-121	WG702037
trans-1,3-Dichloropropene	mg/l	.025	0.0262	105.	74.3-123	WG702037
Trichloroethene	mg/l	.025	0.0265	106.	77.7-118	WG702037
Trichlorofluoromethane	mg/l	.025	0.0260	104.	63.5-135	WG702037
Vinyl chloride	mg/l	.025	0.0235	94.0	65.9-128	WG702037
Xylenes, Total	mg/l	.075	0.0818	109.	78.7-121	WG702037
4-Bromofluorobenzene				106.0	71-126	WG702037
Dibromofluoromethane				100.0	78.3-121	WG702037
Toluene-d8				107.0	88.5-111	WG702037
a,a,a-Trifluorotoluene				109.0	85-114	WG702037
4,4-DDD	mg/kg	.067	0.0730	109.	70.3-111	WG702159
4,4-DDE	mg/kg	.067	0.0731	109.	69.9-113	WG702159
4,4-DDT	mg/kg	.067	0.0702	105.	68.1-111	WG702159
Aldrin	mg/kg	.067	0.0698	104.	66.9-111	WG702159
Alpha BHC	mg/kg	.067	0.0694	104.	65.1-111	WG702159
Beta BHC	mg/kg	.067	0.0715	107.	69.6-112	WG702159
Delta BHC	mg/kg	.067	0.0721	108.	68.3-114	WG702159
Dieldrin	mg/kg	.067	0.0724	108.	70.2-112	WG702159
Endosulfan I	mg/kg	.067	0.0729	109.	69.8-113	WG702159
Endosulfan II	mg/kg	.067	0.0722	108.	69.2-113	WG702159
Endosulfan sulfate	mg/kg	.067	0.0720	107.	62-123	WG702159
Endrin	mg/kg	.067	0.0761	114.	65.9-115	WG702159
Endrin aldehyde	mg/kg	.067	0.0636	94.9	47.6-124	WG702159
Endrin ketone	mg/kg	.067	0.0758	113.	69-120	WG702159
Gamma BHC	mg/kg	.067	0.0723	108.	68.2-111	WG702159
Heptachlor	mg/kg	.067	0.0703	105.	65.9-111	WG702159
Heptachlor epoxide	mg/kg	.067	0.0736	110.	69.7-113	WG702159
Hexachlorobenzene	mg/kg	.067	0.0666	99.5	59.6-113	WG702159
Methoxychlor	mg/kg	.067	0.0750	112.	66.2-114	WG702159
Decachlorobiphenyl				89.60	10-145	WG702159
Tetrachloro-m-xylene				95.60	21.1-148	WG702159
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.45	99.1	63.5-137	WG702495
a,a,a-Trifluorotoluene(FID)				108.0	59-128	WG702495
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0243	97.3	72.9-124	WG702232
1,1,1-Trichloroethane	mg/kg	.025	0.0261	104.	73.7-124	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0250	100.	69.4-122	WG702232
1,1,2-Trichloroethane	mg/kg	.025	0.0273	109.	79.1-118	WG702232
1,1-Dichloroethane	mg/kg	.025	0.0280	112.	75-124	WG702232
1,1-Dichloroethene	mg/kg	.025	0.0251	101.	70.4-129	WG702232
1,1-Dichloropropene	mg/kg	.025	0.0275	110.	74.9-124	WG702232
1,2,3-Trichlorobenzene	mg/kg	.025	0.0254	102.	69.3-131	WG702232
1,2,3-Trichloropropane	mg/kg	.025	0.0247	98.6	71.4-123	WG702232

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,2,4-Trichlorobenzene	mg/kg	.025	0.0264	106.	71.9-137	WG702232
1,2,4-Trimethylbenzene	mg/kg	.025	0.0239	95.4	75.5-122	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0268	107.	62.8-133	WG702232
1,2-Dibromoethane	mg/kg	.025	0.0279	111.	78.6-120	WG702232
1,2-Dichlorobenzene	mg/kg	.025	0.0245	97.8	78.3-118	WG702232
1,2-Dichloroethane	mg/kg	.025	0.0247	98.9	70.1-124	WG702232
1,2-Dichloropropane	mg/kg	.025	0.0281	112.	77.9-119	WG702232
1,3,5-Trimethylbenzene	mg/kg	.025	0.0244	97.7	75.9-124	WG702232
1,3-Dichlorobenzene	mg/kg	.025	0.0233	93.3	72-126	WG702232
1,3-Dichloropropane	mg/kg	.025	0.0276	110.	79.1-117	WG702232
1,4-Dichlorobenzene	mg/kg	.025	0.0239	95.5	78.3-117	WG702232
2,2-Dichloropropane	mg/kg	.025	0.0244	97.7	61.3-136	WG702232
2-Butanone (MEK)	mg/kg	.125	0.160	128.	53.7-153	WG702232
2-Chloroethyl vinyl ether	mg/kg	.125	0.179	144.	37.7-157	WG702232
2-Chlorotoluene	mg/kg	.025	0.0228	91.4	75.6-121	WG702232
4-Chlorotoluene	mg/kg	.025	0.0241	96.6	77.3-120	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.150	120.	70.4-137	WG702232
Acetone	mg/kg	.125	0.116	92.9	35.1-175	WG702232
Acrylonitrile	mg/kg	.125	0.167	134.*	56.4-128	WG702232
Benzene	mg/kg	.025	0.0268	107.	77.1-121	WG702232
Bromobenzene	mg/kg	.025	0.0247	98.7	78.2-115	WG702232
Bromodichloromethane	mg/kg	.025	0.0230	92.1	74.9-115	WG702232
Bromoform	mg/kg	.025	0.0249	99.8	65.9-132	WG702232
Bromomethane	mg/kg	.025	0.0267	107.	48.7-165	WG702232
Carbon tetrachloride	mg/kg	.025	0.0259	104.	70-124	WG702232
Chlorobenzene	mg/kg	.025	0.0259	104.	79.1-119	WG702232
Chlorodibromomethane	mg/kg	.025	0.0256	102.	73.5-121	WG702232
Chloroethane	mg/kg	.025	0.0269	108.	66.2-132	WG702232
Chloroform	mg/kg	.025	0.0253	101.	76.7-122	WG702232
Chloromethane	mg/kg	.025	0.0304	121.	63.4-131	WG702232
cis-1,2-Dichloroethene	mg/kg	.025	0.0266	106.	78.2-119	WG702232
cis-1,3-Dichloropropene	mg/kg	.025	0.0281	112.	79.6-120	WG702232
Di-isopropyl ether	mg/kg	.025	0.0284	114.	70.4-133	WG702232
Dibromomethane	mg/kg	.025	0.0258	103.	79.4-120	WG702232
Dichlorodifluoromethane	mg/kg	.025	0.0282	113.	57.1-137	WG702232
Ethylbenzene	mg/kg	.025	0.0262	105.	79.7-122	WG702232
Hexachloro-1,3-butadiene	mg/kg	.025	0.0234	93.8	68.2-123	WG702232
Isopropylbenzene	mg/kg	.025	0.0274	109.	80-135	WG702232
Methyl tert-butyl ether	mg/kg	.025	0.0251	100.	73-129	WG702232
Methylene Chloride	mg/kg	.025	0.0252	101.	72.6-120	WG702232
n-Butylbenzene	mg/kg	.025	0.0263	105.	77.5-126	WG702232
n-Propylbenzene	mg/kg	.025	0.0248	99.1	77.9-123	WG702232
Naphthalene	mg/kg	.025	0.0256	102.	69.8-128	WG702232
p-Isopropyltoluene	mg/kg	.025	0.0251	100.	75.8-129	WG702232
sec-Butylbenzene	mg/kg	.025	0.0247	98.7	75.8-126	WG702232
Styrene	mg/kg	.025	0.0262	105.	82.4-126	WG702232
tert-Butylbenzene	mg/kg	.025	0.0253	101.	76.4-126	WG702232
Tetrachloroethene	mg/kg	.025	0.0267	107.	73.9-125	WG702232
Toluene	mg/kg	.025	0.0259	104.	79.7-118	WG702232
trans-1,2-Dichloroethene	mg/kg	.025	0.0258	103.	73.8-122	WG702232
trans-1,3-Dichloropropene	mg/kg	.025	0.0267	107.	75.9-124	WG702232
Trichloroethene	mg/kg	.025	0.0260	104.	77.9-118	WG702232
Trichlorofluoromethane	mg/kg	.025	0.0234	93.7	67.7-131	WG702232
Vinyl chloride	mg/kg	.025	0.0297	119.	66.7-130	WG702232
Xylenes, Total	mg/kg	.075	0.0768	102.	78.8-121	WG702232
4-Bromofluorobenzene				95.90	71-126	WG702232
Dibromofluoromethane				95.30	78.3-121	WG702232
Toluene-d8				102.0	88.5-111	WG702232
a,a,a-Trifluorotoluene				98.10	85-114	WG702232

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
TPH (GC/FID) High Fraction	mg/kg	60	41.4	68.9	50-150	WG702264
o-Terphenyl				65.10	50-150	WG702264
Total Solids	%	50	50.2	100.	85-115	WG702528
Mercury	mg/kg	12.4	13.3	107.	71.6-128	WG702461
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.42	117.	63.5-137	WG702244
a,a,a-Trifluorotoluene(FID)				115.0	59-128	WG702244
Antimony	mg/kg	113	66.1	58.0	0.88-223	WG702286
Arsenic	mg/kg	237	269.	114.	83.1-117	WG702286
Beryllium	mg/kg	93.3	103.	111.	83.3-117	WG702286
Cadmium	mg/kg	191	190.	99.0	83.2-117	WG702286
Chromium	mg/kg	128	138.	108.	81.3-118	WG702286
Copper	mg/kg	123	135.	109.	83.7-116	WG702286
Lead	mg/kg	103	106.	103.	83.1-117	WG702286
Nickel	mg/kg	118	123.	105.	82-118	WG702286
Selenium	mg/kg	110	121.	110.	78.7-122	WG702286
Silver	mg/kg	47.3	51.1	108.	66.2-134	WG702286
Thallium	mg/kg	158	163.	103.	81-119	WG702286
Zinc	mg/kg	183	194.	106.	82-118	WG702286
TPH (GC/FID) Low Fraction	mg/kg	5.5	4.84	88.1	63.5-137	WG702702
a,a,a-Trifluorotoluene(FID)				103.0	59-128	WG702702
Total Solids	%	50	50.0	100.	85-115	WG702529
1,2,4-Trichlorobenzene	mg/kg	.333	0.234	70.4	39.8-100	WG702802
2,4,6-Trichlorophenol	mg/kg	.333	0.270	81.0	44.4-108	WG702802
2,4-Dichlorophenol	mg/kg	.333	0.268	80.6	46.2-109	WG702802
2,4-Dimethylphenol	mg/kg	.333	0.284	85.2	42.2-110	WG702802
2,4-Dinitrophenol	mg/kg	.333	0.144	43.4	10-105	WG702802
2,4-Dinitrotoluene	mg/kg	.333	0.323	97.1	53-112	WG702802
2,6-Dinitrotoluene	mg/kg	.333	0.325	97.5	51.6-110	WG702802
2-Chloronaphthalene	mg/kg	.333	0.256	76.9	47.1-105	WG702802
2-Chlorophenol	mg/kg	.333	0.246	74.0	40.8-103	WG702802
2-Nitrophenol	mg/kg	.333	0.272	81.8	44.2-113	WG702802
3,3-Dichlorobenzidine	mg/kg	.333	0.223	67.1	21-101	WG702802
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.283	85.1	23.1-119	WG702802
4-Bromophenyl-phenylether	mg/kg	.333	0.291	87.4	51.4-110	WG702802
4-Chloro-3-methylphenol	mg/kg	.333	0.305	91.5	51.1-113	WG702802
4-Chlorophenyl-phenylether	mg/kg	.333	0.253	75.8	48.1-108	WG702802
4-Nitrophenol	mg/kg	.333	0.250	75.2	34.8-109	WG702802
Acenaphthene	mg/kg	.333	0.274	82.3	48.9-107	WG702802
Acenaphthylene	mg/kg	.333	0.276	82.8	49.2-111	WG702802
Anthracene	mg/kg	.333	0.292	87.8	52-112	WG702802
Benzidine	mg/kg	.333	0.00588	1.77	0-48	WG702802
Benzo(a)anthracene	mg/kg	.333	0.265	79.5	52.3-106	WG702802
Benzo(a)pyrene	mg/kg	.333	0.247	74.3	51.9-106	WG702802
Benzo(b)fluoranthene	mg/kg	.333	0.259	77.7	51.3-106	WG702802
Benzo(g,h,i)perylene	mg/kg	.333	0.276	83.0	45.8-108	WG702802

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Benzo(k)fluoranthene	mg/kg	.333	0.272	81.7	52.9-107	WG702802
Benzylbutyl phthalate	mg/kg	.333	0.348	105.	47.5-115	WG702802
Bis(2-chlorethoxy)methane	mg/kg	.333	0.268	80.4	44.9-108	WG702802
Bis(2-chloroethyl)ether	mg/kg	.333	0.221	66.2	32.5-112	WG702802
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.261	78.5	40.4-99	WG702802
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.300	90.0	48.1-116	WG702802
Chrysene	mg/kg	.333	0.265	79.6	54.4-110	WG702802
Di-n-butyl phthalate	mg/kg	.333	0.361	109.	49.7-113	WG702802
Di-n-octyl phthalate	mg/kg	.333	0.300	90.2	49.6-112	WG702802
Dibenz(a,h)anthracene	mg/kg	.333	0.280	84.2	45.7-111	WG702802
Diethyl phthalate	mg/kg	.333	0.344	103.	52-112	WG702802
Dimethyl phthalate	mg/kg	.333	0.322	96.7	51.4-108	WG702802
Fluoranthene	mg/kg	.333	0.289	86.6	53.7-110	WG702802
Fluorene	mg/kg	.333	0.276	82.8	51.1-109	WG702802
Hexachloro-1,3-butadiene	mg/kg	.333	0.288	86.3	41.5-112	WG702802
Hexachlorobenzene	mg/kg	.333	0.301	90.5	43.2-104	WG702802
Hexachlorocyclopentadiene	mg/kg	.333	0.236	70.9	13.5-123	WG702802
Hexachloroethane	mg/kg	.333	0.258	77.5	36.2-103	WG702802
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.285	85.5	47.5-109	WG702802
Isophorone	mg/kg	.333	0.323	97.0	28.8-104	WG702802
n-Nitrosodi-n-propylamine	mg/kg	.333	0.267	80.0	43.3-109	WG702802
n-Nitrosodimethylamine	mg/kg	.333	0.232	69.6	18.1-122	WG702802
n-Nitrosodiphenylamine	mg/kg	.333	0.299	89.7	48.8-107	WG702802
Naphthalene	mg/kg	.333	0.235	70.5	43.4-103	WG702802
Nitrobenzene	mg/kg	.333	0.273	82.0	40.7-109	WG702802
Pentachlorophenol	mg/kg	.333	0.264	79.2	16.2-102	WG702802
Phenanthrene	mg/kg	.333	0.279	83.8	51.6-107	WG702802
Phenol	mg/kg	.333	0.251	75.5	41.5-106	WG702802
Pyrene	mg/kg	.333	0.267	80.2	47.1-108	WG702802
2,4,6-Tribromophenol				107.0	21.6-142	WG702802
2-Fluorobiphenyl				74.20	34.9-129	WG702802
2-Fluorophenol				70.60	21.1-116	WG702802
Nitrobenzene-d5				78.50	21.9-129	WG702802
Phenol-d5				76.80	26.3-121	WG702802
p-Terphenyl-d14				75.30	21.5-128	WG702802
2,4,5-T	mg/kg	.1667	0.125	74.9	39.4-109	WG702782
2,4,5-TP (Silvex)	mg/kg	.1667	0.131	78.7	45.7-123	WG702782
2,4-D	mg/kg	.1667	0.110	65.9	39.3-100	WG702782
2,4-DB	mg/kg	.1667	0.109	65.3	34.2-120	WG702782
Dalapon	mg/kg	.1667	0.119	71.6	38.6-98	WG702782
Dicamba	mg/kg	.1667	0.138	82.6	48.1-111	WG702782
Dichloroprop	mg/kg	.1667	0.109	65.6	27.8-124	WG702782
Dinoseb	mg/kg	.1667	0.0915	54.9	32.1-121	WG702782
MCPA	mg/kg	16.666	11.5	68.8	22.1-130	WG702782
MCPP	mg/kg	16.666	11.1	66.4	24.5-186	WG702782
2,4-Dichlorophenyl Acetic Acid				87.70	20.1-127	WG702782

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0275	0.0278	110.	74.2-124	1.15	20	WG702037
1,1,1-Trichloroethane	mg/l	0.0265	0.0266	106.	73.2-123	0.410	20	WG702037
1,1,2,2-Tetrachloroethane	mg/l	0.0271	0.0266	108.	70.7-122	1.87	20	WG702037
1,1,2-Trichloroethane	mg/l	0.0272	0.0268	109.	77.7-118	1.55	20	WG702037
1,1-Dichloroethane	mg/l	0.0262	0.0269	105.	70.7-126	2.58	20	WG702037
1,1-Dichloroethene	mg/l	0.0266	0.0276	106.	67.8-129	3.70	20	WG702037
1,1-Dichloropropene	mg/l	0.0252	0.0258	101.	73.1-125	2.29	20	WG702037

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2,3-Trichlorobenzene	mg/l	0.0303	0.0293	121.	64.9-135	3.52	20	WG702037
1,2,3-Trichloropropane	mg/l	0.0278	0.0270	111.	71.8-121	2.71	20	WG702037
1,2,4-Trichlorobenzene	mg/l	0.0313	0.0305	125.	69.7-136	2.41	20	WG702037
1,2,4-Trimethylbenzene	mg/l	0.0277	0.0277	111.	75-123	0.0500	20	WG702037
1,2-Dibromo-3-Chloropropane	mg/l	0.0295	0.0282	118.	65.4-128	4.25	20	WG702037
1,2-Dibromoethane	mg/l	0.0274	0.0269	110.	76.6-121	1.99	20	WG702037
1,2-Dichlorobenzene	mg/l	0.0273	0.0269	109.	78.4-117	1.45	20	WG702037
1,2-Dichloroethane	mg/l	0.0253	0.0255	101.	68.8-124	0.950	20	WG702037
1,2-Dichloropropane	mg/l	0.0262	0.0265	105.	76.5-119	1.34	20	WG702037
1,3,5-Trimethylbenzene	mg/l	0.0274	0.0276	110.	75.6-124	0.560	20	WG702037
1,3-Dichlorobenzene	mg/l	0.0280	0.0277	112.	70.8-128	1.00	20	WG702037
1,3-Dichloropropane	mg/l	0.0265	0.0265	106.	77.4-117	0.200	20	WG702037
1,4-Dichlorobenzene	mg/l	0.0267	0.0267	107.	78.8-115	0.180	20	WG702037
2,2-Dichloropropane	mg/l	0.0280	0.0286	112.	62.4-133	2.21	20	WG702037
2-Butanone (MEK)	mg/l	0.108	0.107	86.0	55-149	0.910	20	WG702037
2-Chloroethyl vinyl ether	mg/l	0.145	0.143	116.	43.8-150	1.27	20	WG702037
2-Chlorotoluene	mg/l	0.0254	0.0257	102.	74.7-122	1.20	20	WG702037
4-Chlorotoluene	mg/l	0.0273	0.0274	109.	77.5-120	0.380	20	WG702037
4-Methyl-2-pentanone (MIBK)	mg/l	0.142	0.140	114.	70.5-133	1.49	20	WG702037
Acetone	mg/l	0.0837	0.0798	67.0	35.6-163	4.79	23.9	WG702037
Acrolein	mg/l	0.117	0.118	94.0	10-190	1.00	28.1	WG702037
Acrylonitrile	mg/l	0.134	0.132	107.	55.2-130	1.18	20	WG702037
Benzene	mg/l	0.0244	0.0245	98.0	74.8-121	0.410	20	WG702037
Bromobenzene	mg/l	0.0269	0.0267	108.	77.5-116	0.790	20	WG702037
Bromodichloromethane	mg/l	0.0258	0.0257	103.	75.1-116	0.0300	20	WG702037
Bromoform	mg/l	0.0286	0.0278	114.	67.5-130	2.84	20	WG702037
Bromomethane	mg/l	0.0222	0.0234	89.0	49.9-162	4.98	20	WG702037
Carbon tetrachloride	mg/l	0.0267	0.0270	107.	70.2-123	0.940	20	WG702037
Chlorobenzene	mg/l	0.0264	0.0268	106.	78.1-119	1.58	20	WG702037
Chlorodibromomethane	mg/l	0.0272	0.0268	109.	74-121	1.61	20	WG702037
Chloroethane	mg/l	0.0234	0.0246	94.0	61.7-135	5.16	20	WG702037
Chloroform	mg/l	0.0258	0.0259	103.	76-121	0.690	20	WG702037
Chloromethane	mg/l	0.0213	0.0220	85.0	61.5-129	3.36	20	WG702037
cis-1,2-Dichloroethene	mg/l	0.0259	0.0264	104.	76-119	1.87	20	WG702037
cis-1,3-Dichloropropene	mg/l	0.0270	0.0275	108.	78.2-120	2.11	20	WG702037
Di-isopropyl ether	mg/l	0.0257	0.0262	103.	65.6-132	1.63	20	WG702037
Dibromomethane	mg/l	0.0268	0.0273	107.	79.5-118	1.71	20	WG702037
Dichlorodifluoromethane	mg/l	0.0218	0.0230	87.0	54.8-135	5.43	20	WG702037
Ethylbenzene	mg/l	0.0272	0.0277	109.	78.8-122	1.56	20	WG702037
Hexachloro-1,3-butadiene	mg/l	0.0277	0.0272	111.	64.7-129	1.76	20	WG702037
Isopropylbenzene	mg/l	0.0291	0.0291	116.	78.6-132	0.130	20	WG702037
Methyl tert-butyl ether	mg/l	0.0260	0.0258	104.	71.2-126	0.810	20	WG702037
Methylene Chloride	mg/l	0.0245	0.0245	98.0	70.3-120	0.0900	20	WG702037
n-Butylbenzene	mg/l	0.0279	0.0281	112.	76.2-126	0.480	20	WG702037
n-Propylbenzene	mg/l	0.0273	0.0277	109.	78.2-122	1.45	20	WG702037
Naphthalene	mg/l	0.0301	0.0289	120.	68.4-128	4.28	20	WG702037
p-Isopropyltoluene	mg/l	0.0287	0.0286	115.	74-131	0.360	20	WG702037
sec-Butylbenzene	mg/l	0.0278	0.0282	111.	74.4-127	1.23	20	WG702037
Styrene	mg/l	0.0286	0.0285	114.	80.4-126	0.450	20	WG702037
tert-Butylbenzene	mg/l	0.0282	0.0284	113.	75.3-126	0.770	20	WG702037
Tetrachloroethene	mg/l	0.0269	0.0270	108.	72.6-126	0.410	20	WG702037
Toluene	mg/l	0.0260	0.0261	104.	79.7-116	0.560	20	WG702037
trans-1,2-Dichloroethene	mg/l	0.0249	0.0251	100.	72.6-121	0.590	20	WG702037
trans-1,3-Dichloropropene	mg/l	0.0263	0.0262	105.	74.3-123	0.0100	20	WG702037
Trichloroethene	mg/l	0.0265	0.0265	106.	77.7-118	0.0500	20	WG702037
Trichlorofluoromethane	mg/l	0.0255	0.0260	102.	63.5-135	2.03	20	WG702037
Vinyl chloride	mg/l	0.0230	0.0235	92.0	65.9-128	2.14	20	WG702037
Xylenes, Total	mg/l	0.0824	0.0818	110.	78.7-121	0.700	20	WG702037
4-Bromofluorobenzene				106.0	71-126			WG702037

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Analyte	Units	Laboratory Control Sample Result	Ref	%Rec	Limit	Duplicate RPD	Limit	Batch
Dibromofluoromethane				98.40	78.3-121			
Toluene-d8				106.0	88.5-111			
a,a,a-Trifluorotoluene				107.0	85-114			
4,4-DDD	mg/kg	0.0643	0.0730	96.0	70.3-111	12.7	20	WG702159
4,4-DDE	mg/kg	0.0637	0.0731	95.0	69.9-113	13.7	20	WG702159
4,4-DDT	mg/kg	0.0619	0.0702	92.0	68.1-111	12.6	20	WG702159
Aldrin	mg/kg	0.0606	0.0698	90.0	66.9-111	14.1	20	WG702159
Alpha BHC	mg/kg	0.0608	0.0694	91.0	65.1-111	13.2	20	WG702159
Beta BHC	mg/kg	0.0628	0.0715	94.0	69.6-112	12.9	20	WG702159
Delta BHC	mg/kg	0.0642	0.0721	96.0	68.3-114	11.6	20	WG702159
Dieldrin	mg/kg	0.0643	0.0724	96.0	70.2-112	11.8	20	WG702159
Endosulfan I	mg/kg	0.0634	0.0729	95.0	69.8-113	13.9	20	WG702159
Endosulfan II	mg/kg	0.0641	0.0722	96.0	69.2-113	11.9	20	WG702159
Endosulfan sulfate	mg/kg	0.0642	0.0720	96.0	62-123	11.4	20	WG702159
Endrin	mg/kg	0.0661	0.0761	99.0	65.9-115	14.0	20	WG702159
Endrin aldehyde	mg/kg	0.0585	0.0636	87.0	47.6-124	8.27	20	WG702159
Endrin ketone	mg/kg	0.0672	0.0758	100.	69-120	12.0	20	WG702159
Gamma BHC	mg/kg	0.0633	0.0723	94.0	68.2-111	13.2	20	WG702159
Heptachlor	mg/kg	0.0619	0.0703	92.0	65.9-111	12.7	20	WG702159
Heptachlor epoxide	mg/kg	0.0646	0.0736	96.0	69.7-113	13.0	20	WG702159
Hexachlorobenzene	mg/kg	0.0604	0.0666	90.0	59.6-113	9.76	20	WG702159
Methoxychlor	mg/kg	0.0661	0.0750	99.0	66.2-114	12.7	20	WG702159
Decachlorobiphenyl				83.20	10-145			WG702159
Tetrachloro-m-xylene				90.00	21.1-148			WG702159
TPH (GC/FID) Low Fraction	mg/kg	5.32	5.45	97.0	63.5-137	2.48	20	WG702495
a,a,a-Trifluorotoluene(FID)				109.0	59-128			WG702495
1,1,1,2-Tetrachloroethane	mg/kg	0.0256	0.0243	102.	72.9-124	5.03	20	WG702232
1,1,1-Trichloroethane	mg/kg	0.0279	0.0261	112.	73.7-124	6.86	20	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0242	0.0250	97.0	69.4-122	3.42	20	WG702232
1,1,2-Trichloroethane	mg/kg	0.0248	0.0273	99.0	79.1-118	9.59	20	WG702232
1,1-Dichloroethane	mg/kg	0.0303	0.0280	121.	75-124	7.91	20	WG702232
1,1-Dichloroethene	mg/kg	0.0269	0.0251	108.	70.4-129	6.83	20	WG702232
1,1-Dichloropropene	mg/kg	0.0286	0.0275	114.	74.9-124	4.03	20	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0280	0.0254	112.	69.3-131	9.66	20	WG702232
1,2,3-Trichloropropane	mg/kg	0.0240	0.0247	96.0	71.4-123	2.66	20	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0293	0.0264	117.	71.9-137	10.2	20	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0254	0.0239	102.	75.5-122	6.44	20	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0255	0.0268	102.	62.8-133	4.83	20	WG702232
1,2-Dibromoethane	mg/kg	0.0245	0.0279	98.0	78.6-120	12.8	20	WG702232
1,2-Dichlorobenzene	mg/kg	0.0253	0.0245	101.	78.3-118	3.41	20	WG702232
1,2-Dichloroethane	mg/kg	0.0248	0.0247	99.0	70.1-124	0.180	20	WG702232
1,2-Dichloropropane	mg/kg	0.0281	0.0281	112.	77.9-119	0.270	20	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0260	0.0244	104.	75.9-124	6.21	20	WG702232
1,3-Dichlorobenzene	mg/kg	0.0245	0.0233	98.0	72-126	5.03	20	WG702232
1,3-Dichloropropane	mg/kg	0.0248	0.0276	99.0	79.1-117	10.7	20	WG702232
1,4-Dichlorobenzene	mg/kg	0.0239	0.0239	96.0	78.3-117	0.0400	20	WG702232
2,2-Dichloropropane	mg/kg	0.0277	0.0244	111.	61.3-136	12.6	20	WG702232
2-Butanone (MEK)	mg/kg	0.127	0.160	102.	53.7-153	22.7*	21.2	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.147	0.179	117.	37.7-157	20.1*	20	WG702232
2-Chlorotoluene	mg/kg	0.0246	0.0228	98.0	75.6-121	7.56	20	WG702232
4-Chlorotoluene	mg/kg	0.0254	0.0241	102.	77.3-120	5.03	20	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.135	0.150	108.	70.4-137	10.7	20	WG702232
Acetone	mg/kg	0.105	0.116	84.0	35.1-175	10.3	26.1	WG702232
Acrylonitrile	mg/kg	0.148	0.167	119.	56.4-128	11.9	20	WG702232
Benzene	mg/kg	0.0279	0.0268	112.	77.1-121	4.11	20	WG702232

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Cary, NC 27512

Quality Assurance Report
Level II

L678922

January 24, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Bromobenzene	mg/kg	0.0252	0.0247	101.	78.2-115	2.29	20	WG702232
Bromodichloromethane	mg/kg	0.0231	0.0230	92.0	74.9-115	0.250	20	WG702232
Bromoform	mg/kg	0.0235	0.0249	94.0	65.9-132	6.10	20	WG702232
Bromomethane	mg/kg	0.0299	0.0267	120.	48.7-165	11.4	20	WG702232
Carbon tetrachloride	mg/kg	0.0271	0.0259	108.	70-124	4.58	20	WG702232
Chlorobenzene	mg/kg	0.0256	0.0259	102.	79.1-119	1.02	20	WG702232
Chlorodibromomethane	mg/kg	0.0245	0.0256	98.0	73.5-121	4.07	20	WG702232
Chloroethane	mg/kg	0.0282	0.0269	113.	66.2-132	4.76	20	WG702232
Chloroform	mg/kg	0.0266	0.0253	106.	76.7-122	5.34	20	WG702232
Chloromethane	mg/kg	0.0328	0.0304	131.	63.4-131	7.60	20	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0287	0.0266	115.	78.2-119	7.53	20	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0263	0.0281	105.	79.6-120	6.53	20	WG702232
Di-isopropyl ether	mg/kg	0.0294	0.0284	117.	70.4-133	3.41	20	WG702232
Dibromomethane	mg/kg	0.0258	0.0258	103.	79.4-120	0.140	20	WG702232
Dichlorodifluoromethane	mg/kg	0.0294	0.0282	118.	57.1-137	4.31	20	WG702232
Ethylbenzene	mg/kg	0.0268	0.0262	107.	79.7-122	2.39	20	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0258	0.0234	103.	68.2-123	9.61	20	WG702232
Isopropylbenzene	mg/kg	0.0290	0.0274	116.	80-135	5.95	20	WG702232
Methyl tert-butyl ether	mg/kg	0.0266	0.0251	106.	73-129	5.84	20	WG702232
Methylene Chloride	mg/kg	0.0282	0.0252	113.	72.6-120	10.9	20	WG702232
n-Butylbenzene	mg/kg	0.0276	0.0263	110.	77.5-126	4.88	20	WG702232
n-Propylbenzene	mg/kg	0.0264	0.0248	106.	77.9-123	6.22	20	WG702232
Naphthalene	mg/kg	0.0260	0.0256	104.	69.8-128	1.62	20	WG702232
p-Isopropyltoluene	mg/kg	0.0272	0.0251	109.	75.8-129	8.34	20	WG702232
sec-Butylbenzene	mg/kg	0.0265	0.0247	106.	75.8-126	7.33	20	WG702232
Styrene	mg/kg	0.0264	0.0262	106.	82.4-126	0.850	20	WG702232
tert-Butylbenzene	mg/kg	0.0269	0.0253	108.	76.4-126	6.23	20	WG702232
Tetrachloroethene	mg/kg	0.0260	0.0267	104.	73.9-125	2.76	20	WG702232
Toluene	mg/kg	0.0261	0.0259	104.	79.7-118	0.620	20	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0283	0.0258	113.	73.8-122	9.41	20	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0238	0.0267	95.0	75.9-124	11.7	20	WG702232
Trichloroethene	mg/kg	0.0270	0.0260	108.	77.9-118	4.06	20	WG702232
Trichlorofluoromethane	mg/kg	0.0254	0.0234	102.	67.7-131	8.24	20	WG702232
Vinyl chloride	mg/kg	0.0306	0.0297	122.	66.7-130	2.97	20	WG702232
Xylenes, Total	mg/kg	0.0778	0.0768	104.	78.8-121	1.31	20	WG702232
4-Bromofluorobenzene				96.20	71-126			WG702232
Dibromofluoromethane				101.0	78.3-121			WG702232
Toluene-d8				103.0	88.5-111			WG702232
a,a,a-Trifluorotoluene				103.0	85-114			WG702232
TPH (GC/FID) High Fraction	mg/kg	39.7	41.4	66.0	50-150	4.00	20	WG702264
o-Terphenyl				63.40	50-150			WG702264
TPH (GC/FID) Low Fraction	mg/kg	6.40	6.42	116.	63.5-137	0.290	20	WG702244
a,a,a-Trifluorotoluene(FID)				112.0	59-128			WG702244
TPH (GC/FID) Low Fraction	mg/kg	4.91	4.84	89.0	63.5-137	1.41	20	WG702702
a,a,a-Trifluorotoluene(FID)				103.0	59-128			WG702702
1,2,4-Trichlorobenzene	mg/kg	0.250	0.234	75.0	39.8-100	6.54	20	WG702802
2,4,6-Trichlorophenol	mg/kg	0.264	0.270	79.0	44.4-108	2.13	20	WG702802
2,4-Dichlorophenol	mg/kg	0.285	0.268	86.0	46.2-109	5.97	20	WG702802
2,4-Dimethylphenol	mg/kg	0.266	0.284	80.0	42.2-110	6.52	20	WG702802
2,4-Dinitrophenol	mg/kg	0.133	0.144	40.0	10-105	8.46	36.5	WG702802
2,4-Dinitrotoluene	mg/kg	0.321	0.323	96.0	53-112	0.830	20	WG702802

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
2,6-Dinitrotoluene	mg/kg	0.311	0.325	93.0	51.6-110	4.20	20	WG702802
2-Chloronaphthalene	mg/kg	0.249	0.256	75.0	47.1-105	2.80	20	WG702802
2-Chlorophenol	mg/kg	0.252	0.246	76.0	40.8-103	2.13	20	WG702802
2-Nitrophenol	mg/kg	0.281	0.272	84.0	44.2-113	3.17	20.9	WG702802
3,3-Dichlorobenzidine	mg/kg	0.209	0.223	63.0	21-101	6.49	22	WG702802
4,6-Dinitro-2-methylphenol	mg/kg	0.288	0.283	86.0	23.1-119	1.41	23.7	WG702802
4-Bromophenyl-phenylether	mg/kg	0.300	0.291	90.0	51.4-110	3.19	20	WG702802
4-Chloro-3-methylphenol	mg/kg	0.326	0.305	98.0	51.1-113	6.77	20	WG702802
4-Chlorophenyl-phenylether	mg/kg	0.255	0.253	76.0	48.1-108	1.00	20	WG702802
4-Nitrophenol	mg/kg	0.253	0.250	76.0	34.8-109	0.930	20	WG702802
Acenaphthene	mg/kg	0.264	0.274	79.0	48.9-107	3.75	20	WG702802
Acenaphthylene	mg/kg	0.269	0.276	81.0	49.2-111	2.60	20	WG702802
Anthracene	mg/kg	0.294	0.292	88.0	52-112	0.460	20	WG702802
Benzidine	mg/kg	0.00590	0.00588	2.00	0-48	0.320	40	WG702802
Benzo(a)anthracene	mg/kg	0.269	0.265	81.0	52.3-106	1.55	20	WG702802
Benzo(a)pyrene	mg/kg	0.246	0.247	74.0	51.9-106	0.510	20	WG702802
Benzo(b)fluoranthene	mg/kg	0.251	0.259	75.0	51.3-106	3.05	20	WG702802
Benzo(g,h,i)perylene	mg/kg	0.268	0.276	80.0	45.8-108	3.01	20	WG702802
Benzo(k)fluoranthene	mg/kg	0.268	0.272	80.0	52.9-107	1.48	20	WG702802
Benzylbutyl phthalate	mg/kg	0.363	0.348	109.	47.5-115	4.19	20	WG702802
Bis(2-chlorethoxy)methane	mg/kg	0.272	0.268	82.0	44.9-108	1.49	20	WG702802
Bis(2-chloroethyl)ether	mg/kg	0.223	0.221	67.0	32.5-112	0.900	26	WG702802
Bis(2-chloroisopropyl)ether	mg/kg	0.262	0.261	79.0	40.4-99	0.160	20.7	WG702802
Bis(2-ethylhexyl)phthalate	mg/kg	0.314	0.300	94.0	48.1-116	4.57	20.5	WG702802
Chrysene	mg/kg	0.282	0.265	84.0	54.4-110	6.06	20	WG702802
Di-n-butyl phthalate	mg/kg	0.360	0.361	108.	49.7-113	0.260	20	WG702802
Di-n-octyl phthalate	mg/kg	0.308	0.300	92.0	49.6-112	2.59	22	WG702802
Dibenz(a,h)anthracene	mg/kg	0.276	0.280	83.0	45.7-111	1.67	20	WG702802
Diethyl phthalate	mg/kg	0.336	0.344	101.	52-112	2.26	20	WG702802
Dimethyl phthalate	mg/kg	0.304	0.322	91.0	51.4-108	5.83	20	WG702802
Fluoranthene	mg/kg	0.282	0.289	85.0	53.7-110	2.16	20	WG702802
Fluorene	mg/kg	0.272	0.276	82.0	51.1-109	1.42	20	WG702802
Hexachloro-1,3-butadiene	mg/kg	0.282	0.288	85.0	41.5-112	1.83	20	WG702802
Hexachlorobenzene	mg/kg	0.321	0.301	96.0	43.2-104	6.41	20.1	WG702802
Hexachlorocyclopentadiene	mg/kg	0.238	0.236	71.0	13.5-123	0.600	20.7	WG702802
Hexachloroethane	mg/kg	0.265	0.258	80.0	36.2-103	2.60	22.7	WG702802
Indeno(1,2,3-cd)pyrene	mg/kg	0.279	0.285	84.0	47.5-109	2.20	20	WG702802
Isophorone	mg/kg	0.327	0.323	98.0	28.8-104	1.35	20	WG702802
n-Nitrosodi-n-propylamine	mg/kg	0.269	0.267	81.0	43.3-109	0.940	20	WG702802
n-Nitrosodimethylamine	mg/kg	0.238	0.232	72.0	18.1-122	2.87	23.5	WG702802
n-Nitrosodiphenylamine	mg/kg	0.304	0.299	91.0	48.8-107	1.67	20	WG702802
Naphthalene	mg/kg	0.242	0.235	73.0	43.4-103	3.26	20	WG702802
Nitrobenzene	mg/kg	0.281	0.273	84.0	40.7-109	3.05	21	WG702802
Pentachlorophenol	mg/kg	0.262	0.264	79.0	16.2-102	0.500	22.9	WG702802
Phenanthrene	mg/kg	0.272	0.279	82.0	51.6-107	2.70	20	WG702802
Phenol	mg/kg	0.260	0.251	78.0	41.5-106	3.51	20	WG702802
Pyrene	mg/kg	0.280	0.267	84.0	47.1-108	4.81	20	WG702802
2,4,6-Tribromophenol				105.0	21.6-142			WG702802
2-Fluorobiphenyl				72.10	34.9-129			WG702802
2-Fluorophenol				69.80	21.1-116			WG702802
Nitrobenzene-d5				78.20	21.9-129			WG702802
Phenol-d5				76.30	26.3-121			WG702802
p-Terphenyl-d14				71.10	21.5-128			WG702802
2,4,5-T	mg/kg	0.122	0.125	73.0	39.4-109	2.72	26.8	WG702782
2,4,5-TP (Silvex)	mg/kg	0.129	0.131	77.0	45.7-123	2.05	27	WG702782
2,4-D	mg/kg	0.0965	0.110	58.0	39.3-100	13.0	26.2	WG702782
2,4-DB	mg/kg	0.107	0.109	64.0	34.2-120	2.08	28.5	WG702782

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Dalapon	mg/kg	0.139	0.119	83.0	38.6-98	15.2	31.1	WG702782
Dicamba	mg/kg	0.135	0.138	81.0	48.1-111	1.73	23.6	WG702782
Dichloroprop	mg/kg	0.105	0.109	63.0	27.8-124	4.47	29.7	WG702782
Dinoseb	mg/kg	0.115	0.0915	69.0	32.1-121	22.6	35.9	WG702782
MCPA	mg/kg	9.45	11.5	57.0	22.1-130	19.3	32.8	WG702782
MCPP	mg/kg	11.0	11.1	66.0	24.5-186	0.720	26.3	WG702782
2,4-Dichlorophenyl Acetic Acid				87.50	20.1-127			WG702782

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0244	0.0	.025	98.0	64-128	L678924-01	WG702037
1,1,1-Trichloroethane	mg/l	0.0238	0.0	.025	95.0	58.7-134	L678924-01	WG702037
1,1,2,2-Tetrachloroethane	mg/l	0.0239	0.0	.025	96.0	56-132	L678924-01	WG702037
1,1,2-Trichloroethane	mg/l	0.0249	0.0	.025	100.	66.3-125	L678924-01	WG702037
1,1-Dichloroethane	mg/l	0.0238	0.0	.025	95.0	58.5-132	L678924-01	WG702037
1,1-Dichloroethene	mg/l	0.0236	0.0	.025	95.0	51.1-140	L678924-01	WG702037
1,1-Dichloropropene	mg/l	0.0228	0.0	.025	91.0	57.3-136	L678924-01	WG702037
1,2,3-Trichlorobenzene	mg/l	0.0259	0.0	.025	100.	59.1-138	L678924-01	WG702037
1,2,3-Trichloropropane	mg/l	0.0248	0.0	.025	99.0	61.4-128	L678924-01	WG702037
1,2,4-Trichlorobenzene	mg/l	0.0275	0.0	.025	110.	63.6-143	L678924-01	WG702037
1,2,4-Trimethylbenzene	mg/l	0.0239	0.0	.025	96.0	57.4-137	L678924-01	WG702037
1,2-Dibromo-3-Chloropropane	mg/l	0.0266	0.0	.025	110.	57.3-136	L678924-01	WG702037
1,2-Dibromoethane	mg/l	0.0247	0.0	.025	99.0	67.1-125	L678924-01	WG702037
1,2-Dichlorobenzene	mg/l	0.0246	0.0	.025	98.0	68.2-123	L678924-01	WG702037
1,2-Dichloroethane	mg/l	0.0233	0.0	.025	93.0	60-126	L678924-01	WG702037
1,2-Dichloropropane	mg/l	0.0239	0.0	.025	96.0	64.2-123	L678924-01	WG702037
1,3,5-Trimethylbenzene	mg/l	0.0238	0.0	.025	95.0	63.6-132	L678924-01	WG702037
1,3-Dichlorobenzene	mg/l	0.0246	0.0	.025	98.0	63.1-131	L678924-01	WG702037
1,3-Dichloropropane	mg/l	0.0241	0.0	.025	96.0	67.9-121	L678924-01	WG702037
1,4-Dichlorobenzene	mg/l	0.0247	0.0	.025	99.0	68.6-123	L678924-01	WG702037
2,2-Dichloropropane	mg/l	0.0249	0.0	.025	100.	50.5-144	L678924-01	WG702037
2-Butanone (MEK)	mg/l	0.0972	0.000702	.125	77.0	22.4-138	L678924-01	WG702037
2-Chloroethyl vinyl ether	mg/l	0.0599	0.0	.125	48.0	10-155	L678924-01	WG702037
2-Chlorotoluene	mg/l	0.0223	0.0	.025	89.0	63.6-128	L678924-01	WG702037
4-Chlorotoluene	mg/l	0.0242	0.0	.025	97.0	65.7-127	L678924-01	WG702037
4-Methyl-2-pentanone (MIBK)	mg/l	0.131	0.0	.125	100.	60.8-140	L678924-01	WG702037
Acetone	mg/l	0.0625	0.00298	.125	48.0	10-130	L678924-01	WG702037
Acrolein	mg/l	0.125	0.0	.125	100.	10-200	L678924-01	WG702037
Acrylonitrile	mg/l	0.121	0.0	.125	97.0	49.4-133	L678924-01	WG702037
Benzene	mg/l	0.0222	0.0	.025	89.0	54.3-133	L678924-01	WG702037
Bromobenzene	mg/l	0.0233	0.0	.025	93.0	63.9-124	L678924-01	WG702037
Bromodichloromethane	mg/l	0.0234	0.0	.025	94.0	63.9-121	L678924-01	WG702037
Bromoform	mg/l	0.0252	0.0	.025	100.	59.5-134	L678924-01	WG702037
Bromomethane	mg/l	0.0209	0.0	.025	84.0	41.7-155	L678924-01	WG702037
Carbon tetrachloride	mg/l	0.0235	0.0	.025	94.0	55.7-134	L678924-01	WG702037
Chlorobenzene	mg/l	0.0236	0.0	.025	94.0	67-125	L678924-01	WG702037
Chlorodibromomethane	mg/l	0.0245	0.0	.025	98.0	64.3-125	L678924-01	WG702037
Chloroethane	mg/l	0.0212	0.0	.025	85.0	51.5-136	L678924-01	WG702037
Chloroform	mg/l	0.0232	0.0	.025	93.0	63-129	L678924-01	WG702037
Chloromethane	mg/l	0.0186	0.0	.025	74.0	42.4-135	L678924-01	WG702037
cis-1,2-Dichloroethene	mg/l	0.0230	0.0	.025	92.0	59.2-129	L678924-01	WG702037
cis-1,3-Dichloropropene	mg/l	0.0252	0.0	.025	100.	66.4-125	L678924-01	WG702037
Di-isopropyl ether	mg/l	0.0233	0.0	.025	93.0	56.9-136	L678924-01	WG702037
Dibromomethane	mg/l	0.0250	0.0	.025	100.	68.2-124	L678924-01	WG702037
Dichlorodifluoromethane	mg/l	0.0217	0.0	.025	87.0	40.6-144	L678924-01	WG702037
Ethylbenzene	mg/l	0.0239	0.0	.025	95.0	61.4-133	L678924-01	WG702037
Hexachloro-1,3-butadiene	mg/l	0.0239	0.0	.025	96.0	55.1-136	L678924-01	WG702037
Isopropylbenzene	mg/l	0.0251	0.0	.025	100.	66.8-141	L678924-01	WG702037

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Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Methyl tert-butyl ether	mg/l	0.0237	0.0	.025	95.0	57.7-134	L678924-01	WG702037
Methylene Chloride	mg/l	0.0217	0.0	.025	87.0	58.1-122	L678924-01	WG702037
n-Butylbenzene	mg/l	0.0249	0.0	.025	100.	62.7-140	L678924-01	WG702037
n-Propylbenzene	mg/l	0.0237	0.0	.025	95.0	65.9-131	L678924-01	WG702037
Naphthalene	mg/l	0.0262	0.0	.025	100.	58-135	L678924-01	WG702037
p-Isopropyltoluene	mg/l	0.0250	0.0	.025	100.	63.2-139	L678924-01	WG702037
sec-Butylbenzene	mg/l	0.0241	0.0	.025	96.0	62.2-136	L678924-01	WG702037
Styrene	mg/l	0.0244	0.0	.025	98.0	66.8-133	L678924-01	WG702037
tert-Butylbenzene	mg/l	0.0242	0.0	.025	97.0	63.3-134	L678924-01	WG702037
Tetrachloroethene	mg/l	0.0242	0.0	.025	97.0	53-139	L678924-01	WG702037
Toluene	mg/l	0.0232	0.0	.025	93.0	61.4-130	L678924-01	WG702037
trans-1,2-Dichloroethene	mg/l	0.0217	0.0	.025	87.0	56.5-129	L678924-01	WG702037
trans-1,3-Dichloropropene	mg/l	0.0246	0.0	.025	98.0	64.1-128	L678924-01	WG702037
Trichloroethene	mg/l	0.0238	0.0	.025	95.0	44.1-149	L678924-01	WG702037
Trichlorofluoromethane	mg/l	0.0227	0.0	.025	91.0	49.6-145	L678924-01	WG702037
Vinyl chloride	mg/l	0.0207	0.0	.025	83.0	47.8-137	L678924-01	WG702037
Xylenes, Total	mg/l	0.0726	0.0	.075	97.0	63.3-131	L678924-01	WG702037
4-Bromofluorobenzene					101.0	71-126		WG702037
Dibromofluoromethane					98.10	78.3-121		WG702037
Toluene-d8					107.0	88.5-111		WG702037
a,a,a-Trifluorotoluene					106.0	85-114		WG702037
4,4-DDD	mg/kg	0.0535	0.0	.067	80.0	23.4-145	L678793-01	WG702159
4,4-DDE	mg/kg	0.0478	0.0	.067	71.0	16.4-147	L678793-01	WG702159
4,4-DDT	mg/kg	0.0468	0.0	.067	70.0	26.7-129	L678793-01	WG702159
Aldrin	mg/kg	0.0483	0.0	.067	72.0	40.2-116	L678793-01	WG702159
Alpha BHC	mg/kg	0.0704	0.0	.067	100.	53.6-109	L678793-01	WG702159
Beta BHC	mg/kg	0.0698	0.0	.067	100.	38.3-126	L678793-01	WG702159
Delta BHC	mg/kg	0.0707	0.0	.067	110.	44.8-125	L678793-01	WG702159
Dieldrin	mg/kg	0.0603	0.00323	.067	85.0	31.4-137	L678793-01	WG702159
Endosulfan I	mg/kg	0.0559	0.0	.067	84.0	40.3-120	L678793-01	WG702159
Endosulfan II	mg/kg	0.0613	0.0	.067	91.0	29.1-140	L678793-01	WG702159
Endosulfan sulfate	mg/kg	0.0627	0.0	.067	94.0	43.3-129	L678793-01	WG702159
Endrin	mg/kg	0.0588	0.0	.067	88.0	34.9-125	L678793-01	WG702159
Endrin aldehyde	mg/kg	0.0476	0.0	.067	71.0	15.6-139	L678793-01	WG702159
Endrin ketone	mg/kg	0.0674	0.0	.067	100.	35.4-137	L678793-01	WG702159
Gamma BHC	mg/kg	0.0729	0.0	.067	110.	55.3-110	L678793-01	WG702159
Heptachlor	mg/kg	0.0532	0.0	.067	79.0	41.6-115	L678793-01	WG702159
Heptachlor epoxide	mg/kg	0.0585	0.0	.067	87.0	34.8-128	L678793-01	WG702159
Hexachlorobenzene	mg/kg	0.0609	0.0	.067	91.0	40.2-119	L678793-01	WG702159
Methoxychlor	mg/kg	0.0484	0.0	.067	72.0	16-134	L678793-01	WG702159
Decachlorobiphenyl					51.50	10-145		WG702159
Tetrachloro-m-xylene					88.00	21.1-148		WG702159
TPH (GC/FID) Low Fraction	mg/kg	118.	0.0	5.5	110.	28.5-138	L678922-05	WG702495
a,a,a-Trifluorotoluene(FID)					105.0	59-128		WG702495
1,1,1,2-Tetrachloroethane	mg/kg	0.0115	0.0	.025	46.0*	64-128	L678902-01	WG702232
1,1,1-Trichloroethane	mg/kg	0.0122	0.0	.025	49.0*	58.7-134	L678902-01	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0113	0.0	.025	45.0*	56-132	L678902-01	WG702232
1,1,2-Trichloroethane	mg/kg	0.0123	0.0	.025	49.0*	66.3-125	L678902-01	WG702232
1,1-Dichloroethane	mg/kg	0.0129	0.0	.025	52.0*	58.5-132	L678902-01	WG702232
1,1-Dichloroethene	mg/kg	0.0115	0.0	.025	46.0*	51.1-140	L678902-01	WG702232
1,1-Dichloropropene	mg/kg	0.0127	0.0	.025	51.0*	57.3-136	L678902-01	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0116	0.0	.025	47.0*	59.1-138	L678902-01	WG702232
1,2,3-Trichloropropane	mg/kg	0.0112	0.0	.025	45.0*	61.4-128	L678902-01	WG702232

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Daphne Jones; Matt Flinchum
PO Box 639

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,2,4-Trichlorobenzene	mg/kg	0.0125	0.0	.025	50.0*	63.6-143	L678902-01	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0112	0.0	.025	45.0*	57.4-137	L678902-01	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0113	0.0	.025	45.0*	57.3-136	L678902-01	WG702232
1,2-Dibromoethane	mg/kg	0.0120	0.0	.025	48.0*	67.1-125	L678902-01	WG702232
1,2-Dichlorobenzene	mg/kg	0.0118	0.0	.025	47.0*	68.2-123	L678902-01	WG702232
1,2-Dichloroethane	mg/kg	0.0112	0.0	.025	45.0*	60-126	L678902-01	WG702232
1,2-Dichloropropane	mg/kg	0.0130	0.0	.025	52.0*	64.2-123	L678902-01	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0117	0.0	.025	47.0*	63.6-132	L678902-01	WG702232
1,3-Dichlorobenzene	mg/kg	0.0111	0.0	.025	44.0*	63.1-131	L678902-01	WG702232
1,3-Dichloropropane	mg/kg	0.0121	0.0	.025	48.0*	67.9-121	L678902-01	WG702232
1,4-Dichlorobenzene	mg/kg	0.0115	0.0	.025	46.0*	68.6-123	L678902-01	WG702232
2,2-Dichloropropane	mg/kg	0.0124	0.0	.025	50.0*	50.5-144	L678902-01	WG702232
2-Butanone (MEK)	mg/kg	0.0558	0.0	.125	45.0	22.4-138	L678902-01	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.0784	0.0	.125	63.0	10-155	L678902-01	WG702232
2-Chlorotoluene	mg/kg	0.0110	0.0	.025	44.0*	63.6-128	L678902-01	WG702232
4-Chlorotoluene	mg/kg	0.0114	0.0	.025	46.0*	65.7-127	L678902-01	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.0644	0.0	.125	52.0*	60.8-140	L678902-01	WG702232
Acetone	mg/kg	0.0379	0.00537	.125	26.0	10-130	L678902-01	WG702232
Acrylonitrile	mg/kg	0.0654	0.0	.125	52.0	49.4-133	L678902-01	WG702232
Benzene	mg/kg	0.0125	0.0	.025	50.0*	54.3-133	L678902-01	WG702232
Bromobenzene	mg/kg	0.0118	0.0	.025	47.0*	63.9-124	L678902-01	WG702232
Bromodichloromethane	mg/kg	0.0109	0.0	.025	44.0*	63.9-121	L678902-01	WG702232
Bromoform	mg/kg	0.0106	0.0	.025	42.0*	59.5-134	L678902-01	WG702232
Bromomethane	mg/kg	0.0129	0.0	.025	52.0	41.7-155	L678902-01	WG702232
Carbon tetrachloride	mg/kg	0.0119	0.0	.025	48.0*	55.7-134	L678902-01	WG702232
Chlorobenzene	mg/kg	0.0122	0.0	.025	49.0*	67-125	L678902-01	WG702232
Chlorodibromomethane	mg/kg	0.0113	0.0	.025	45.0*	64.3-125	L678902-01	WG702232
Chloroethane	mg/kg	0.0135	0.0	.025	54.0	51.5-136	L678902-01	WG702232
Chloroform	mg/kg	0.0120	0.0	.025	48.0*	63-129	L678902-01	WG702232
Chloromethane	mg/kg	0.0143	0.0	.025	57.0	42.4-135	L678902-01	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0121	0.0	.025	48.0*	59.2-129	L678902-01	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0129	0.0	.025	51.0*	66.4-125	L678902-01	WG702232
Di-isopropyl ether	mg/kg	0.0131	0.0	.025	52.0*	56.9-136	L678902-01	WG702232
Dibromomethane	mg/kg	0.0114	0.0	.025	46.0*	68.2-124	L678902-01	WG702232
Dichlorodifluoromethane	mg/kg	0.0131	0.0	.025	53.0	40.6-144	L678902-01	WG702232
Ethylbenzene	mg/kg	0.0122	0.0	.025	49.0*	61.4-133	L678902-01	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0112	0.0	.025	45.0*	55.1-136	L678902-01	WG702232
Isopropylbenzene	mg/kg	0.0131	0.0	.025	52.0*	66.8-141	L678902-01	WG702232
Methyl tert-butyl ether	mg/kg	0.0118	0.0	.025	47.0*	57.7-134	L678902-01	WG702232
Methylene Chloride	mg/kg	0.0122	0.0	.025	49.0*	58.1-122	L678902-01	WG702232
n-Butylbenzene	mg/kg	0.0127	0.0	.025	51.0*	62.7-140	L678902-01	WG702232
n-Propylbenzene	mg/kg	0.0118	0.0	.025	47.0	10-176	L678902-01	WG702232
Naphthalene	mg/kg	0.0111	0.0	.025	44.0*	58-135	L678902-01	WG702232
p-Isopropyltoluene	mg/kg	0.0119	0.0	.025	47.0*	63.2-139	L678902-01	WG702232
sec-Butylbenzene	mg/kg	0.0116	0.0	.025	46.0*	62.2-136	L678902-01	WG702232
Styrene	mg/kg	0.0119	0.0	.025	48.0*	66.8-133	L678902-01	WG702232
tert-Butylbenzene	mg/kg	0.0120	0.0	.025	48.0*	63.3-134	L678902-01	WG702232
Tetrachloroethene	mg/kg	0.0121	0.0	.025	48.0*	53-139	L678902-01	WG702232
Toluene	mg/kg	0.0124	0.0	.025	50.0*	61.4-130	L678902-01	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0124	0.0	.025	49.0*	56.5-129	L678902-01	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0125	0.0	.025	50.0*	64.1-128	L678902-01	WG702232
Trichloroethene	mg/kg	0.0119	0.0	.025	48.0	44.1-149	L678902-01	WG702232
Trichlorofluoromethane	mg/kg	0.0113	0.0	.025	45.0*	49.6-145	L678902-01	WG702232
Vinyl chloride	mg/kg	0.0136	0.0	.025	54.0	47.8-137	L678902-01	WG702232
Xylenes, Total	mg/kg	0.0361	0.0	.075	48.0*	63.3-131	L678902-01	WG702232
4-Bromofluorobenzene					90.40	71-126		WG702232
Dibromofluoromethane					93.80	78.3-121		WG702232
Toluene-d8					103.0	88.5-111		WG702232
a,a,a-Trifluorotoluene					98.20	85-114		WG702232

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
TPH (GC/FID) High Fraction	mg/kg	36.2	0.0	60	60.0	50-150	L678834-02	WG702264
o-Terphenyl					59.50	50-150		WG702264
Mercury	mg/kg	0.291	0.0141	.25	110.	80-120	L678902-02	WG702461
TPH (GC/FID) Low Fraction	mg/kg	144.	0.0	5.5	110.	28.5-138	L678839-11	WG702244
a,a,a-Trifluorotoluene(FID)					116.0	59-128		WG702244
Antimony	mg/kg	33.8	5.19	50	57.0*	75-125	L678779-03	WG702286
Arsenic	mg/kg	70.7	12.8	50	120.	75-125	L678779-03	WG702286
Beryllium	mg/kg	55.1	0.638	50	110.	75-125	L678779-03	WG702286
Cadmium	mg/kg	52.0	0.364	50	100.	75-125	L678779-03	WG702286
Chromium	mg/kg	166.	68.0	50	200.*	75-125	L678779-03	WG702286
Copper	mg/kg	58.4	2.08	50	110.	75-125	L678779-03	WG702286
Lead	mg/kg	57.6	4.72	50	110.	75-125	L678779-03	WG702286
Nickel	mg/kg	53.5	3.36	50	100.	75-125	L678779-03	WG702286
Silver	mg/kg	55.2	0.565	50	110.	75-125	L678779-03	WG702286
Thallium	mg/kg	51.2	1.34	50	100.	75-125	L678779-03	WG702286
Zinc	mg/kg	78.9	19.6	50	120.	75-125	L678779-03	WG702286
Selenium	mg/kg	52.3	-4.87	10	100.	75-125	L678779-03	WG702286
TPH (GC/FID) Low Fraction	mg/kg	22.6	0.0190	5.5	82.0	28.5-138	L679112-05	WG702702
a,a,a-Trifluorotoluene(FID)					105.0	59-128		WG702702
2,4,5-T	mg/kg	0.124	0.0	.1667	75.0	20.3-119	L678922-01	WG702782
2,4,5-TP (Silvex)	mg/kg	0.125	0.0	.1667	75.0	23.6-133	L678922-01	WG702782
2,4-D	mg/kg	0.112	0.0	.1667	67.0	10-141	L678922-01	WG702782
2,4-DB	mg/kg	0.134	0.0	.1667	80.0	24.8-132	L678922-01	WG702782
Dalapon	mg/kg	0.116	0.0	.1667	69.0	10-115	L678922-01	WG702782
Dicamba	mg/kg	0.139	0.0	.1667	83.0	23-124	L678922-01	WG702782
Dichloroprop	mg/kg	0.111	0.0	.1667	67.0	17.5-129	L678922-01	WG702782
Dinoseb	mg/kg	0.0768	0.0	.1667	46.0	26.2-129	L678922-01	WG702782
MCPA	mg/kg	10.6	0.0	16.666	63.0	10-159	L678922-01	WG702782
MCPP	mg/kg	11.8	0.0	16.666	71.0	10-200	L678922-01	WG702782
2,4-Dichlorophenyl Acetic Acid					90.10	20.1-127		WG702782

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0276	0.0244	110.	64-128	12.1	20	L678924-01	WG702037
1,1,1-Trichloroethane	mg/l	0.0255	0.0238	102.	58.7-134	7.14	20	L678924-01	WG702037
1,1,2,2-Tetrachloroethane	mg/l	0.0280	0.0239	112.	56-132	15.7	22.2	L678924-01	WG702037
1,1,2-Trichloroethane	mg/l	0.0270	0.0249	108.	66.3-125	7.90	20	L678924-01	WG702037
1,1-Dichloroethane	mg/l	0.0255	0.0238	102.	58.5-132	6.99	20	L678924-01	WG702037
1,1-Dichloroethene	mg/l	0.0255	0.0236	102.	51.1-140	7.49	20.2	L678924-01	WG702037
1,1-Dichloropropene	mg/l	0.0242	0.0228	96.7	57.3-136	5.83	20	L678924-01	WG702037
1,2,3-Trichlorobenzene	mg/l	0.0266	0.0259	106.	59.1-138	2.59	23.7	L678924-01	WG702037
1,2,3-Trichloropropane	mg/l	0.0282	0.0248	113.	61.4-128	12.9	22.4	L678924-01	WG702037
1,2,4-Trichlorobenzene	mg/l	0.0283	0.0275	113.	63.6-143	2.65	21.9	L678924-01	WG702037
1,2,4-Trimethylbenzene	mg/l	0.0269	0.0239	108.	57.4-137	11.8	20	L678924-01	WG702037
1,2-Dibromo-3-Chloropropane	mg/l	0.0301	0.0266	120.	57.3-136	12.4	27	L678924-01	WG702037
1,2-Dibromoethane	mg/l	0.0272	0.0247	109.	67.1-125	9.53	20	L678924-01	WG702037
1,2-Dichlorobenzene	mg/l	0.0273	0.0246	109.	68.2-123	10.5	20	L678924-01	WG702037
1,2-Dichloroethane	mg/l	0.0249	0.0233	99.7	60-126	6.66	20	L678924-01	WG702037

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Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,2-Dichloropropane	mg/l	0.0258	0.0239	103.	64.2-123	7.65	20	L678924-01	WG702037
1,3,5-Trimethylbenzene	mg/l	0.0267	0.0238	107.	63.6-132	11.6	20.5	L678924-01	WG702037
1,3-Dichlorobenzene	mg/l	0.0272	0.0246	109.	63.1-131	10.3	20	L678924-01	WG702037
1,3-Dichloropropane	mg/l	0.0264	0.0241	106.	67.9-121	9.26	20	L678924-01	WG702037
1,4-Dichlorobenzene	mg/l	0.0268	0.0247	107.	68.6-123	8.13	20	L678924-01	WG702037
2,2-Dichloropropane	mg/l	0.0275	0.0249	110.	50.5-144	9.72	21.9	L678924-01	WG702037
2-Butanone (MEK)	mg/l	0.102	0.0972	81.2	22.4-138	5.05	27	L678924-01	WG702037
2-Chloroethyl vinyl ether	mg/l	0.0165	0.0599	13.2	10-155	114.*	20	L678924-01	WG702037
2-Chlorotoluene	mg/l	0.0251	0.0223	100.	63.6-128	11.9	20	L678924-01	WG702037
4-Chlorotoluene	mg/l	0.0272	0.0242	109.	65.7-127	12.0	20	L678924-01	WG702037
4-Methyl-2-pentanone (MIBK)	mg/l	0.147	0.131	117.	60.8-140	11.0	25.1	L678924-01	WG702037
Acetone	mg/l	0.0652	0.0625	49.8	10-130	4.27	27.9	L678924-01	WG702037
Acrolein	mg/l	0.136	0.125	108.	10-200	7.75	27.7	L678924-01	WG702037
Acrylonitrile	mg/l	0.130	0.121	104.	49.4-133	7.21	25.3	L678924-01	WG702037
Benzene	mg/l	0.0236	0.0222	94.5	54.3-133	6.12	20	L678924-01	WG702037
Bromobenzene	mg/l	0.0271	0.0233	108.	63.9-124	15.1	20	L678924-01	WG702037
Bromodichloromethane	mg/l	0.0252	0.0234	101.	63.9-121	7.56	20	L678924-01	WG702037
Bromoform	mg/l	0.0291	0.0252	116.	59.5-134	14.4	20.5	L678924-01	WG702037
Bromomethane	mg/l	0.0259	0.0209	104.	41.7-155	21.5	21.9	L678924-01	WG702037
Carbon tetrachloride	mg/l	0.0256	0.0235	102.	55.7-134	8.66	20	L678924-01	WG702037
Chlorobenzene	mg/l	0.0261	0.0236	104.	67-125	9.86	20	L678924-01	WG702037
Chlorodibromomethane	mg/l	0.0272	0.0245	109.	64.3-125	10.7	20.8	L678924-01	WG702037
Chloroethane	mg/l	0.0227	0.0212	90.9	51.5-136	6.95	40	L678924-01	WG702037
Chloroform	mg/l	0.0249	0.0232	99.8	63-129	7.09	20	L678924-01	WG702037
Chloromethane	mg/l	0.0197	0.0186	78.8	42.4-135	5.86	20	L678924-01	WG702037
cis-1,2-Dichloroethene	mg/l	0.0251	0.0230	100.	59.2-129	8.70	20	L678924-01	WG702037
cis-1,3-Dichloropropene	mg/l	0.0263	0.0252	105.	66.4-125	4.18	20	L678924-01	WG702037
Di-isopropyl ether	mg/l	0.0250	0.0233	100.	56.9-136	6.87	20	L678924-01	WG702037
Dibromomethane	mg/l	0.0263	0.0250	105.	68.2-124	5.20	20	L678924-01	WG702037
Dichlorodifluoromethane	mg/l	0.0232	0.0217	92.7	40.6-144	6.77	20.2	L678924-01	WG702037
Ethylbenzene	mg/l	0.0266	0.0239	106.	61.4-133	11.0	20	L678924-01	WG702037
Hexachloro-1,3-butadiene	mg/l	0.0231	0.0239	92.4	55.1-136	3.22	23.6	L678924-01	WG702037
Isopropylbenzene	mg/l	0.0283	0.0251	113.	66.8-141	12.0	20	L678924-01	WG702037
Methyl tert-butyl ether	mg/l	0.0259	0.0237	104.	57.7-134	8.72	20	L678924-01	WG702037
Methylene Chloride	mg/l	0.0235	0.0217	93.9	58.1-122	7.75	20	L678924-01	WG702037
n-Butylbenzene	mg/l	0.0265	0.0249	106.	62.7-140	6.20	20.3	L678924-01	WG702037
n-Propylbenzene	mg/l	0.0269	0.0237	107.	65.9-131	12.6	20	L678924-01	WG702037
Naphthalene	mg/l	0.0284	0.0262	113.	58-135	8.07	25.5	L678924-01	WG702037
p-Isopropyltoluene	mg/l	0.0274	0.0250	110.	63.2-139	9.37	20.4	L678924-01	WG702037
sec-Butylbenzene	mg/l	0.0266	0.0241	106.	62.2-136	9.79	20.3	L678924-01	WG702037
Styrene	mg/l	0.0278	0.0244	111.	66.8-133	13.1	20	L678924-01	WG702037
tert-Butylbenzene	mg/l	0.0269	0.0242	108.	63.3-134	10.8	21	L678924-01	WG702037
Tetrachloroethene	mg/l	0.0256	0.0242	102.	53-139	5.67	20	L678924-01	WG702037
Toluene	mg/l	0.0248	0.0232	99.0	61.4-130	6.29	20	L678924-01	WG702037
trans-1,2-Dichloroethene	mg/l	0.0239	0.0217	95.8	56.5-129	9.65	20	L678924-01	WG702037
trans-1,3-Dichloropropene	mg/l	0.0258	0.0246	103.	64.1-128	4.97	20	L678924-01	WG702037
Trichloroethene	mg/l	0.0252	0.0238	101.	44.1-149	5.74	20	L678924-01	WG702037
Trichlorofluoromethane	mg/l	0.0246	0.0227	98.4	49.6-145	8.00	21.2	L678924-01	WG702037
Vinyl chloride	mg/l	0.0219	0.0207	87.7	47.8-137	5.90	20	L678924-01	WG702037
Xylenes, Total	mg/l	0.0803	0.0726	107.	63.3-131	10.0	20	L678924-01	WG702037
4-Bromofluorobenzene				106.0	71-126				WG702037
Dibromofluoromethane				99.80	78.3-121				WG702037
Toluene-d8				106.0	88.5-111				WG702037
a,a,a-Trifluorotoluene				107.0	85-114				WG702037
4,4-DDD	mg/kg	0.0537	0.0535	80.1	23.4-145	0.230	20	L678793-01	WG702159
4,4-DDE	mg/kg	0.0493	0.0478	73.6	16.4-147	3.17	20	L678793-01	WG702159
4,4-DDT	mg/kg	0.0481	0.0468	71.8	26.7-129	2.70	23.8	L678793-01	WG702159

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Quality Assurance Report
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Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Aldrin	mg/kg	0.0489	0.0483	73.0	40.2-116	1.35	20	L678793-01	WG702159
Alpha BHC	mg/kg	0.0681	0.0704	102.	53.6-109	3.34	20	L678793-01	WG702159
Beta BHC	mg/kg	0.0696	0.0698	104.	38.3-126	0.300	20	L678793-01	WG702159
Delta BHC	mg/kg	0.0706	0.0707	105.	44.8-125	0.200	20	L678793-01	WG702159
Dieldrin	mg/kg	0.0598	0.0603	84.4	31.4-137	0.970	20	L678793-01	WG702159
Endosulfan I	mg/kg	0.0549	0.0559	82.0	40.3-120	1.78	20	L678793-01	WG702159
Endosulfan II	mg/kg	0.0605	0.0613	90.3	29.1-140	1.24	20	L678793-01	WG702159
Endosulfan sulfate	mg/kg	0.0619	0.0627	92.4	43.3-129	1.21	21.5	L678793-01	WG702159
Endrin	mg/kg	0.0583	0.0588	87.0	34.9-125	0.870	21.2	L678793-01	WG702159
Endrin aldehyde	mg/kg	0.0464	0.0476	69.2	15.6-139	2.50	20	L678793-01	WG702159
Endrin ketone	mg/kg	0.0664	0.0674	99.1	35.4-137	1.46	20	L678793-01	WG702159
Gamma BHC	mg/kg	0.0710	0.0729	106.	55.3-110	2.59	20	L678793-01	WG702159
Heptachlor	mg/kg	0.0528	0.0532	78.8	41.6-115	0.790	20	L678793-01	WG702159
Heptachlor epoxide	mg/kg	0.0575	0.0585	85.8	34.8-128	1.67	20	L678793-01	WG702159
Hexachlorobenzene	mg/kg	0.0612	0.0609	91.3	40.2-119	0.510	20	L678793-01	WG702159
Methoxychlor	mg/kg	0.0491	0.0484	73.3	16-134	1.59	25.4	L678793-01	WG702159
Decachlorobiphenyl				61.30	10-145				WG702159
Tetrachloro-m-xylene				89.20	21.1-148				WG702159
TPH (GC/FID) Low Fraction	mg/kg	113.	118.	105.	28.5-138	4.19	23.6	L678922-05	WG702495
a,a,a-Trifluorotoluene(FID)				105.0	59-128				WG702495
1,1,1,2-Tetrachloroethane	mg/kg	0.0212	0.0115	84.8	64-128	59.3*	20	L678902-01	WG702232
1,1,1-Trichloroethane	mg/kg	0.0241	0.0122	96.2	58.7-134	65.2*	20	L678902-01	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0216	0.0113	86.4	56-132	62.7*	22.2	L678902-01	WG702232
1,1,2-Trichloroethane	mg/kg	0.0237	0.0123	94.6	66.3-125	62.8*	20	L678902-01	WG702232
1,1-Dichloroethane	mg/kg	0.0259	0.0129	104.	58.5-132	67.1*	20	L678902-01	WG702232
1,1-Dichloroethene	mg/kg	0.0236	0.0115	94.3	51.1-140	69.1*	20.2	L678902-01	WG702232
1,1-Dichloropropene	mg/kg	0.0250	0.0127	100.	57.3-136	65.1*	20	L678902-01	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0209	0.0116	83.8	59.1-138	57.1*	23.7	L678902-01	WG702232
1,2,3-Trichloropropane	mg/kg	0.0207	0.0112	82.7	61.4-128	59.5*	22.4	L678902-01	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0216	0.0125	86.6	63.6-143	53.8*	21.9	L678902-01	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0202	0.0112	81.0	57.4-137	57.8*	20	L678902-01	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0244	0.0113	97.5	57.3-136	73.5*	27	L678902-01	WG702232
1,2-Dibromoethane	mg/kg	0.0233	0.0120	93.0	67.1-125	63.9*	20	L678902-01	WG702232
1,2-Dichlorobenzene	mg/kg	0.0219	0.0118	87.4	68.2-123	59.6*	20	L678902-01	WG702232
1,2-Dichloroethane	mg/kg	0.0228	0.0112	91.2	60-126	68.1*	20	L678902-01	WG702232
1,2-Dichloropropane	mg/kg	0.0258	0.0130	103.	64.2-123	66.0*	20	L678902-01	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0206	0.0117	82.3	63.6-132	54.6*	20.5	L678902-01	WG702232
1,3-Dichlorobenzene	mg/kg	0.0194	0.0111	77.6	63.1-131	54.7*	20	L678902-01	WG702232
1,3-Dichloropropane	mg/kg	0.0238	0.0121	95.4	67.9-121	65.4*	20	L678902-01	WG702232
1,4-Dichlorobenzene	mg/kg	0.0210	0.0115	83.8	68.6-123	58.6*	20	L678902-01	WG702232
2,2-Dichloropropane	mg/kg	0.0236	0.0124	94.4	50.5-144	62.0*	21.9	L678902-01	WG702232
2-Butanone (MEK)	mg/kg	0.116	0.0558	92.7	22.4-138	70.0*	27	L678902-01	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.161	0.0784	129.	10-155	68.9*	40	L678902-01	WG702232
2-Chlorotoluene	mg/kg	0.0201	0.0110	80.2	63.6-128	58.7*	20	L678902-01	WG702232
4-Chlorotoluene	mg/kg	0.0205	0.0114	82.1	65.7-127	57.2*	20	L678902-01	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.129	0.0644	103.	60.8-140	66.8*	25.1	L678902-01	WG702232
Acetone	mg/kg	0.0684	0.0379	50.4	10-130	57.4*	27.9	L678902-01	WG702232
Acrylonitrile	mg/kg	0.143	0.0654	114.	49.4-133	74.4*	25.3	L678902-01	WG702232
Benzene	mg/kg	0.0248	0.0125	99.4	54.3-133	66.0*	20	L678902-01	WG702232
Bromobenzene	mg/kg	0.0212	0.0118	84.7	63.9-124	57.0*	20	L678902-01	WG702232
Bromodichloromethane	mg/kg	0.0209	0.0109	83.6	63.9-121	62.8*	20	L678902-01	WG702232
Bromoform	mg/kg	0.0211	0.0106	84.3	59.5-134	66.3*	20.8	L678902-01	WG702232
Bromomethane	mg/kg	0.0249	0.0129	99.5	41.7-155	63.7*	20.5	L678902-01	WG702232
Carbon tetrachloride	mg/kg	0.0235	0.0119	94.1	55.7-134	65.9*	20.3	L678902-01	WG702232
Chlorobenzene	mg/kg	0.0223	0.0122	89.1	67-125	58.1*	20	L678902-01	WG702232

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Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Chlorodibromomethane	mg/kg	0.0219	0.0113	87.6	64.3-125	63.9*	20	L678902-01	WG702232
Chloroethane	mg/kg	0.0250	0.0135	100.	51.5-136	59.5*	20.8	L678902-01	WG702232
Chloroform	mg/kg	0.0233	0.0120	93.2	63-129	64.0*	20	L678902-01	WG702232
Chloromethane	mg/kg	0.0278	0.0143	111.	42.4-135	64.3*	20	L678902-01	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0248	0.0121	99.4	59.2-129	68.9*	20	L678902-01	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0248	0.0129	99.4	66.4-125	63.6*	20	L678902-01	WG702232
Di-isopropyl ether	mg/kg	0.0261	0.0131	104.	56.9-136	66.6*	20	L678902-01	WG702232
Dibromomethane	mg/kg	0.0234	0.0114	93.6	68.2-124	68.7*	20	L678902-01	WG702232
Dichlorodifluoromethane	mg/kg	0.0254	0.0131	102.	40.6-144	63.6*	20.2	L678902-01	WG702232
Ethylbenzene	mg/kg	0.0226	0.0122	90.5	61.4-133	59.7*	20	L678902-01	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0194	0.0112	77.4	55.1-136	53.7*	23.6	L678902-01	WG702232
Isopropylbenzene	mg/kg	0.0235	0.0131	93.8	66.8-141	56.7*	20	L678902-01	WG702232
Methyl tert-butyl ether	mg/kg	0.0240	0.0118	95.8	57.7-134	68.3*	20	L678902-01	WG702232
Methylene Chloride	mg/kg	0.0237	0.0122	94.7	58.1-122	63.8*	20	L678902-01	WG702232
n-Butylbenzene	mg/kg	0.0229	0.0127	91.4	62.7-140	57.3*	20	L678902-01	WG702232
n-Propylbenzene	mg/kg	0.0214	0.0118	85.6	10-176	57.7*	26.6	L678902-01	WG702232
Naphthalene	mg/kg	0.0213	0.0111	85.2	58-135	63.0*	25.5	L678902-01	WG702232
p-Isopropyltoluene	mg/kg	0.0212	0.0119	84.9	63.2-139	56.6*	20.4	L678902-01	WG702232
sec-Butylbenzene	mg/kg	0.0210	0.0116	84.0	62.2-136	58.1*	20.3	L678902-01	WG702232
Styrene	mg/kg	0.0222	0.0119	88.9	66.8-133	60.5*	20	L678902-01	WG702232
tert-Butylbenzene	mg/kg	0.0216	0.0120	86.6	63.3-134	57.2*	20.3	L678902-01	WG702232
Tetrachloroethene	mg/kg	0.0225	0.0121	90.1	53-139	60.5*	20	L678902-01	WG702232
Toluene	mg/kg	0.0236	0.0124	94.2	61.4-130	61.8*	20	L678902-01	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0239	0.0124	95.6	56.5-129	63.8*	20	L678902-01	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0235	0.0125	94.2	64.1-128	61.3*	20	L678902-01	WG702232
Trichloroethene	mg/kg	0.0230	0.0119	91.8	44.1-149	63.2*	20	L678902-01	WG702232
Trichlorofluoromethane	mg/kg	0.0219	0.0113	87.8	49.6-145	64.4*	21.2	L678902-01	WG702232
Vinyl chloride	mg/kg	0.0268	0.0136	107.	47.8-137	65.2*	20	L678902-01	WG702232
Xylenes, Total	mg/kg	0.0658	0.0361	87.8	63.3-131	58.5*	20	L678902-01	WG702232
4-Bromofluorobenzene				90.80	71-126				WG702232
Dibromofluoromethane				96.30	78.3-121				WG702232
Toluene-d8				103.0	88.5-111				WG702232
a,a,a-Trifluorotoluene				97.10	85-114				WG702232
TPH (GC/FID) High Fraction	mg/kg	37.0	36.2	61.7	50-150	2.05	20	L678834-02	WG702264
o-Terphenyl				61.00	50-150				WG702264
Mercury	mg/kg	0.270	0.291	102.	80-120	8.00	20	L678902-02	WG702461
TPH (GC/FID) Low Fraction	mg/kg	145.	144.	115.	28.5-138	0.810	23.6	L678839-11	WG702244
a,a,a-Trifluorotoluene(FID)				115.0	59-128				WG702244
Antimony	mg/kg	31.1	33.8	51.8*	75-125	8.00	20	L678779-03	WG702286
Arsenic	mg/kg	67.9	70.7	110.	75-125	4.00	20	L678779-03	WG702286
Beryllium	mg/kg	54.8	55.1	108.	75-125	0.0	20	L678779-03	WG702286
Cadmium	mg/kg	52.1	52.0	104.	75-125	0.0	20	L678779-03	WG702286
Chromium	mg/kg	126.	166.	116.	75-125	28.0*	20	L678779-03	WG702286
Copper	mg/kg	57.6	58.4	111.	75-125	1.00	20	L678779-03	WG702286
Lead	mg/kg	57.0	57.6	105.	75-125	1.00	20	L678779-03	WG702286
Nickel	mg/kg	52.9	53.5	99.1	75-125	1.00	20	L678779-03	WG702286
Silver	mg/kg	55.0	55.2	109.	75-125	0.0	20	L678779-03	WG702286
Thallium	mg/kg	51.5	51.2	100.	75-125	1.00	20	L678779-03	WG702286
Zinc	mg/kg	74.4	78.9	110.	75-125	6.00	20	L678779-03	WG702286
Selenium	mg/kg	56.8	52.3	123.	75-125	8.00	20	L678779-03	WG702286

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678922

January 24, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
TPH (GC/FID) Low Fraction	mg/kg	19.4	22.6	70.4	28.5-138	15.3	23.6	L679112-05	WG702702
a,a,a-Trifluorotoluene(FID)				106.0	59-128				WG702702
2,4,5-T	mg/kg	0.116	0.124	69.7	20.3-119	6.70	30	L678922-01	WG702782
2,4,5-TP (Silvex)	mg/kg	0.115	0.125	68.7	23.6-133	9.08	29.4	L678922-01	WG702782
2,4-D	mg/kg	0.0985	0.112	59.1	10-141	12.7	36	L678922-01	WG702782
2,4-DB	mg/kg	0.116	0.134	69.8	24.8-132	13.7	34.5	L678922-01	WG702782
Dalapon	mg/kg	0.115	0.116	68.7	10-115	0.970	37.4	L678922-01	WG702782
Dicamba	mg/kg	0.129	0.139	77.7	23-124	6.94	27.4	L678922-01	WG702782
Dichloroprop	mg/kg	0.100	0.111	60.1	17.5-129	10.4	31.8	L678922-01	WG702782
Dinoseb	mg/kg	0.0759	0.0768	45.6	26.2-129	1.14	34.1	L678922-01	WG702782
MCPA	mg/kg	10.7	10.6	64.0	10-159	1.14	40	L678922-01	WG702782
MCPP	mg/kg	11.2	11.8	67.4	10-200	5.15	40	L678922-01	WG702782
2,4-Dichlorophenyl Acetic Acid				84.80	20.1-127				WG702782

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

WG702037: R2877600: L678922-06
WG702159: R2877762: L678922-01
WG702495: R2878182: L678922-05
WG702232: R2878186: L678922-01
WG702264: R2878205 R2878748: L678922-01 02 03 04 05
WG702528: R2878262: L678922-01 02

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L678922

January 24, 2014

WG702461: R2878320: L678922-01
WG702244: R2878322: L678922-01
WG702286: R2878381: L678922-01
WG702702: R2878625: L678922-04
WG702529: R2878668: L678922-03 04 05
WG702802: R2878823 R2878861: L678922-01
WG702782: R2879099: L678922-01

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L678922

January 24, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project #: **201336**

Lab Project #

Collected by (print): Daphne Jones

Site/Facility ID #

P.O. #

Collected by (signature): Daphne M Jones

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LABS
L-A-B S-C-I-E-N-C-E-S
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 678922

D002

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH	Herbicides 8151B	Item/Container(s)	Sample # (lab only)
4-SB-A(3.5-4.5)	G	SS	3.5-4.5'	1/17/14	0900	10	X	X	X	X		X	X			X		-01
12-SB-A(2-2.5')	|	|	2-2.5	|	1055	3		X				X			X			-02
12-SB-B(6-6.5')	|	|	6-6.5'	|	1125	3		X				X			X			-03
13-HA(2')	|	|	2'	|	1500	3						X	X					-04
13-SB-P(2.5')	|	|	2.5'	|	1520	3						X	X					-05
Trip Blank	N/A	Lab water			→	1	X											
						MT												

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

Remarks: On sample 4 run all at same time (no TPH holds)
On Samples 12 hold EPH, SVOCs until DRO results ≥ 10mg/kg)

pH ___ Temp ___
Flow ___ Other ___

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Daphne M Jones	1/17/14	17:15	[signature]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/17/14	17:55	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SW

Temp: 2.4 °C Bottles Received: 23

Date: 1-18-14 Time: 1430

Condition: OK (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 4-SB-A 3.5-4.5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678922-01

Date Collected: 1/17/2014

Lab File ID: 0120_29

Date Analyzed: 1/20/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 4-SB-A 3.5-4.5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678922-01

Date Collected: 1/17/2014

Lab File ID: 0121_30

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 4-SB-A 3.5-4.5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678922-01

Date Collected: 1/17/2014

Lab File ID: 0123_18

Date Analyzed: 1/23/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 4-SB-A 3.5-4.5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678922-01

Date Collected: 1/17/2014

Lab File ID: 0121_34

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 4-SB-A 3.5-4.5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678922-01

Date Collected: 1/17/2014

Lab File ID: 0122B_14

Date Analyzed: 1/23/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 3

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.042	78.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.29	0.095	72.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.07	1.09	64.00	J

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 12-SB-A 2-2.5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678922-02

Date Collected: 1/17/2014

Lab File ID: 0121_42

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 12-SB-B 6-6.5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678922-03

Date Collected: 1/17/2014

Lab File ID: 0121_35

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-HAO 2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678922-04

Date Collected: 1/17/2014

Lab File ID: 0121_43

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-P 2.5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678922-05

Date Collected: 1/17/2014

Lab File ID: 0121_44

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Divider
Page

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Tax I.D. 62-0814289

Est. 1970

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Friday January 24, 2014

Report Number: L678609
Samples Received: 01/17/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-B 6-7FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	72.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.028	0.0014	0.028	mg/kg	J	7471	01/18/14	1
Antimony	0.99	0.38	1.4	mg/kg	J	6010C	01/23/14	1
Arsenic	36.	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	1.9	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	U	0.035	0.34	mg/kg		6010C	01/22/14	1
Chromium	29.	0.070	0.69	mg/kg		6010C	01/22/14	1
Copper	160	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	5.6	0.095	0.34	mg/kg		6010C	01/23/14	1
Nickel	22.	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	6.9	mg/kg	O	6010C	01/22/14	5
Silver	0.59	0.14	0.69	mg/kg	J	6010C	01/22/14	1
Thallium	U	1.6	6.9	mg/kg	O	6010C	01/22/14	5
Zinc	91.	0.30	2.1	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	0.023	0.010	0.069	mg/kg	J	8260B	01/18/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg		8260B	01/18/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/18/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/18/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/18/14	1
Bromomethane	U	0.0013	0.0069	mg/kg		8260B	01/18/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/18/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/18/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/18/14	1
Chloroethane	U	0.00095	0.0069	mg/kg		8260B	01/18/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.069	mg/kg		8260B	01/18/14	1
Chloroform	U	0.00023	0.0069	mg/kg		8260B	01/18/14	1
Chloromethane	U	0.00038	0.0034	mg/kg		8260B	01/18/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0069	mg/kg		8260B	01/18/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/18/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/18/14	1

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U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-B 6-7FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0069	mg/kg		8260B	01/18/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/18/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/18/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/18/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/18/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/18/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg		8260B	01/18/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg		8260B	01/18/14	1
Methylene Chloride	U	0.0010	0.0069	mg/kg		8260B	01/18/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/18/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Naphthalene	U	0.0010	0.0069	mg/kg		8260B	01/18/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/18/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/18/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Toluene	U	0.00043	0.0069	mg/kg		8260B	01/18/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/18/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/18/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/18/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Trichlorofluoromethane	U	0.00038	0.0069	mg/kg		8260B	01/18/14	1
1,2,3-Trichloropropane	U	0.00074	0.0034	mg/kg		8260B	01/18/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg		8260B	01/18/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/18/14	1
Xylenes, Total	U	0.00070	0.0041	mg/kg		8260B	01/18/14	1
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260B	01/18/14	1
Dibromofluoromethane	110.			% Rec.		8260B	01/18/14	1
a,a,a-Trifluorotoluene	102.			% Rec.		8260B	01/18/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-B 6-7FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	101.			% Rec.		8260B	01/18/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.023	mg/kg		8082	01/23/14	1
PCB 1221	U	0.0054	0.023	mg/kg		8082	01/23/14	1
PCB 1232	U	0.0042	0.023	mg/kg		8082	01/23/14	1
PCB 1242	U	0.0032	0.023	mg/kg		8082	01/23/14	1
PCB 1248	U	0.0032	0.023	mg/kg		8082	01/23/14	1
PCB 1254	U	0.0047	0.023	mg/kg		8082	01/23/14	1
PCB 1260	U	0.0049	0.023	mg/kg		8082	01/23/14	1
PCBs Surrogates								
Decachlorobiphenyl	80.8			% Rec.		8082	01/23/14	1
Tetrachloro-m-xylene	75.4			% Rec.		8082	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.045	mg/kg		8270D	01/22/14	1
Acenaphthylene	U	0.0067	0.045	mg/kg		8270D	01/22/14	1
Anthracene	U	0.0063	0.045	mg/kg		8270D	01/22/14	1
Benzidine	U	0.064	0.46	mg/kg		8270D	01/22/14	1
Benzo(a)anthracene	U	0.0043	0.045	mg/kg		8270D	01/22/14	1
Benzo(b)fluoranthene	U	0.0070	0.045	mg/kg		8270D	01/22/14	1
Benzo(k)fluoranthene	U	0.0058	0.045	mg/kg		8270D	01/22/14	1
Benzo(g,h,i)perylene	U	0.0072	0.045	mg/kg		8270D	01/22/14	1
Benzo(a)pyrene	U	0.0055	0.045	mg/kg		8270D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.46	mg/kg		8270D	01/22/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.46	mg/kg		8270D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.46	mg/kg		8270D	01/22/14	1
4-Bromophenyl-phenylether	U	0.011	0.46	mg/kg		8270D	01/22/14	1
2-Chloronaphthalene	U	0.0064	0.045	mg/kg		8270D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.46	mg/kg		8270D	01/22/14	1
Chrysene	U	0.0056	0.045	mg/kg		8270D	01/22/14	1
Dibenz(a,h)anthracene	U	0.0082	0.045	mg/kg		8270D	01/22/14	1
3,3-Dichlorobenzidine	U	0.079	0.46	mg/kg		8270D	01/22/14	1
2,4-Dinitrotoluene	U	0.0061	0.46	mg/kg		8270D	01/22/14	1
2,6-Dinitrotoluene	U	0.0074	0.46	mg/kg		8270D	01/22/14	1
Fluoranthene	U	0.0050	0.045	mg/kg		8270D	01/22/14	1
Fluorene	U	0.0068	0.045	mg/kg		8270D	01/22/14	1
Hexachlorobenzene	U	0.0086	0.46	mg/kg		8270D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.010	0.46	mg/kg		8270D	01/22/14	1
Hexachlorocyclopentadiene	U	0.059	0.46	mg/kg	J	8270D	01/22/14	1
Hexachloroethane	U	0.013	0.46	mg/kg		8270D	01/22/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.045	mg/kg		8270D	01/22/14	1
Isophorone	U	0.0052	0.46	mg/kg		8270D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-01

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-B 6-7FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Naphthalene	U	0.0089	0.045	mg/kg		8270D	01/22/14	1
Nitrobenzene	U	0.0070	0.46	mg/kg		8270D	01/22/14	1
n-Nitrosodimethylamine	U	0.065	0.46	mg/kg		8270D	01/22/14	1
n-Nitrosodiphenylamine	U	0.0059	0.46	mg/kg		8270D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.46	mg/kg		8270D	01/22/14	1
Phenanthrene	U	0.0053	0.045	mg/kg		8270D	01/22/14	1
Benzylbutyl phthalate	U	0.010	0.46	mg/kg		8270D	01/22/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.46	mg/kg		8270D	01/22/14	1
Di-n-butyl phthalate	U	0.011	0.46	mg/kg		8270D	01/22/14	1
Diethyl phthalate	U	0.0069	0.46	mg/kg		8270D	01/22/14	1
Dimethyl phthalate	U	0.0054	0.46	mg/kg		8270D	01/22/14	1
Di-n-octyl phthalate	U	0.0091	0.46	mg/kg		8270D	01/22/14	1
Pyrene	U	0.012	0.045	mg/kg		8270D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.46	mg/kg		8270D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.46	mg/kg		8270D	01/22/14	1
2-Chlorophenol	U	0.0083	0.46	mg/kg		8270D	01/22/14	1
2,4-Dichlorophenol	U	0.0075	0.46	mg/kg		8270D	01/22/14	1
2,4-Dimethylphenol	U	0.047	0.46	mg/kg		8270D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.46	mg/kg		8270D	01/22/14	1
2,4-Dinitrophenol	U	0.098	0.46	mg/kg		8270D	01/22/14	1
2-Nitrophenol	U	0.013	0.46	mg/kg		8270D	01/22/14	1
4-Nitrophenol	U	0.052	0.46	mg/kg		8270D	01/22/14	1
Pentachlorophenol	U	0.048	0.46	mg/kg		8270D	01/22/14	1
Phenol	U	0.0070	0.46	mg/kg		8270D	01/22/14	1
2,4,6-Trichlorophenol	U	0.0078	0.46	mg/kg		8270D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	67.7			% Rec.		8270D	01/22/14	1
Phenol-d5	73.4			% Rec.		8270D	01/22/14	1
Nitrobenzene-d5	74.0			% Rec.		8270D	01/22/14	1
2-Fluorobiphenyl	79.2			% Rec.		8270D	01/22/14	1
2,4,6-Tribromophenol	85.7			% Rec.		8270D	01/22/14	1
p-Terphenyl-d14	64.5			% Rec.		8270D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-C 6-7FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 09:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	54.8	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.026	0.0014	0.036	mg/kg	J	7471	01/18/14	1
Antimony	U	0.38	1.8	mg/kg		6010C	01/23/14	1
Arsenic	46.	0.32	1.8	mg/kg		6010C	01/22/14	1
Beryllium	3.1	0.035	0.18	mg/kg		6010C	01/22/14	1
Cadmium	U	0.035	0.46	mg/kg		6010C	01/22/14	1
Chromium	71.	0.070	0.91	mg/kg		6010C	01/22/14	1
Copper	140	0.26	1.8	mg/kg		6010C	01/22/14	1
Lead	7.5	0.095	0.46	mg/kg		6010C	01/23/14	1
Nickel	42.	0.24	1.8	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	9.1	mg/kg	O	6010C	01/22/14	5
Silver	0.97	0.14	0.91	mg/kg		6010C	01/22/14	1
Thallium	U	1.6	9.1	mg/kg	O	6010C	01/22/14	5
Zinc	73.	0.30	2.7	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	0.026	0.010	0.091	mg/kg	J	8260B	01/18/14	1
Acrylonitrile	U	0.0018	0.018	mg/kg		8260B	01/18/14	1
Benzene	U	0.00027	0.0018	mg/kg		8260B	01/18/14	1
Bromobenzene	U	0.00028	0.0018	mg/kg		8260B	01/18/14	1
Bromodichloromethane	U	0.00025	0.0018	mg/kg		8260B	01/18/14	1
Bromoform	U	0.00042	0.0018	mg/kg		8260B	01/18/14	1
Bromomethane	U	0.0013	0.0091	mg/kg		8260B	01/18/14	1
n-Butylbenzene	U	0.00026	0.0018	mg/kg		8260B	01/18/14	1
sec-Butylbenzene	U	0.00020	0.0018	mg/kg		8260B	01/18/14	1
tert-Butylbenzene	U	0.00021	0.0018	mg/kg		8260B	01/18/14	1
Carbon tetrachloride	U	0.00033	0.0018	mg/kg		8260B	01/18/14	1
Chlorobenzene	U	0.00021	0.0018	mg/kg		8260B	01/18/14	1
Chlorodibromomethane	U	0.00037	0.0018	mg/kg		8260B	01/18/14	1
Chloroethane	U	0.00095	0.0091	mg/kg		8260B	01/18/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.091	mg/kg		8260B	01/18/14	1
Chloroform	U	0.00023	0.0091	mg/kg		8260B	01/18/14	1
Chloromethane	U	0.00038	0.0046	mg/kg		8260B	01/18/14	1
2-Chlorotoluene	U	0.00030	0.0018	mg/kg		8260B	01/18/14	1
4-Chlorotoluene	U	0.00024	0.0018	mg/kg		8260B	01/18/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0091	mg/kg		8260B	01/18/14	1
1,2-Dibromoethane	U	0.00034	0.0018	mg/kg		8260B	01/18/14	1
Dibromomethane	U	0.00038	0.0018	mg/kg		8260B	01/18/14	1
1,2-Dichlorobenzene	U	0.00030	0.0018	mg/kg		8260B	01/18/14	1
1,3-Dichlorobenzene	U	0.00024	0.0018	mg/kg		8260B	01/18/14	1
1,4-Dichlorobenzene	U	0.00023	0.0018	mg/kg		8260B	01/18/14	1

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Cary, NC 27512

January 24,2014

ESC Sample # : L678609-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-C 6-7FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 09:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0091	mg/kg		8260B	01/18/14	1
1,1-Dichloroethane	U	0.00020	0.0018	mg/kg		8260B	01/18/14	1
1,2-Dichloroethane	U	0.00026	0.0018	mg/kg		8260B	01/18/14	1
1,1-Dichloroethene	U	0.00030	0.0018	mg/kg		8260B	01/18/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0018	mg/kg		8260B	01/18/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0018	mg/kg		8260B	01/18/14	1
1,2-Dichloropropane	U	0.00036	0.0018	mg/kg		8260B	01/18/14	1
1,1-Dichloropropene	U	0.00032	0.0018	mg/kg		8260B	01/18/14	1
1,3-Dichloropropane	U	0.00021	0.0018	mg/kg		8260B	01/18/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0018	mg/kg		8260B	01/18/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0018	mg/kg		8260B	01/18/14	1
2,2-Dichloropropane	U	0.00028	0.0018	mg/kg		8260B	01/18/14	1
Di-isopropyl ether	U	0.00025	0.0018	mg/kg		8260B	01/18/14	1
Ethylbenzene	U	0.00030	0.0018	mg/kg		8260B	01/18/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0018	mg/kg		8260B	01/18/14	1
Isopropylbenzene	U	0.00024	0.0018	mg/kg		8260B	01/18/14	1
p-Isopropyltoluene	U	0.00020	0.0018	mg/kg		8260B	01/18/14	1
2-Butanone (MEK)	U	0.0047	0.018	mg/kg		8260B	01/18/14	1
Methylene Chloride	U	0.0010	0.0091	mg/kg		8260B	01/18/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.018	mg/kg		8260B	01/18/14	1
Methyl tert-butyl ether	U	0.00021	0.0018	mg/kg		8260B	01/18/14	1
Naphthalene	U	0.0010	0.0091	mg/kg		8260B	01/18/14	1
n-Propylbenzene	U	0.00021	0.0018	mg/kg		8260B	01/18/14	1
Styrene	U	0.00023	0.0018	mg/kg		8260B	01/18/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0018	mg/kg		8260B	01/18/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0018	mg/kg		8260B	01/18/14	1
Tetrachloroethene	U	0.00028	0.0018	mg/kg		8260B	01/18/14	1
Toluene	U	0.00043	0.0091	mg/kg		8260B	01/18/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0018	mg/kg		8260B	01/18/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0018	mg/kg		8260B	01/18/14	1
1,1,1-Trichloroethane	U	0.00029	0.0018	mg/kg		8260B	01/18/14	1
1,1,2-Trichloroethane	U	0.00028	0.0018	mg/kg		8260B	01/18/14	1
Trichloroethene	U	0.00028	0.0018	mg/kg		8260B	01/18/14	1
Trichlorofluoromethane	U	0.00038	0.0091	mg/kg		8260B	01/18/14	1
1,2,3-Trichloropropane	U	0.00074	0.0046	mg/kg		8260B	01/18/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0018	mg/kg		8260B	01/18/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0018	mg/kg		8260B	01/18/14	1
Vinyl chloride	U	0.00029	0.0018	mg/kg		8260B	01/18/14	1
Xylenes, Total	U	0.00070	0.0055	mg/kg		8260B	01/18/14	1
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260B	01/18/14	1
Dibromofluoromethane	113.			% Rec.		8260B	01/18/14	1
a,a,a-Trifluorotoluene	103.			% Rec.		8260B	01/18/14	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-C 6-7FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 09:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	101.			% Rec.		8260B	01/18/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.031	mg/kg		8082	01/23/14	1
PCB 1221	U	0.0054	0.031	mg/kg		8082	01/23/14	1
PCB 1232	U	0.0042	0.031	mg/kg		8082	01/23/14	1
PCB 1242	U	0.0032	0.031	mg/kg		8082	01/23/14	1
PCB 1248	U	0.0032	0.031	mg/kg		8082	01/23/14	1
PCB 1254	U	0.0047	0.031	mg/kg		8082	01/23/14	1
PCB 1260	U	0.0049	0.031	mg/kg		8082	01/23/14	1
PCBs Surrogates								
Decachlorobiphenyl	74.2			% Rec.		8082	01/23/14	1
Tetrachloro-m-xylene	70.6			% Rec.		8082	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.060	mg/kg		8270D	01/22/14	1
Acenaphthylene	U	0.0067	0.060	mg/kg		8270D	01/22/14	1
Anthracene	U	0.0063	0.060	mg/kg		8270D	01/22/14	1
Benzidine	U	0.064	0.61	mg/kg		8270D	01/22/14	1
Benzo(a)anthracene	U	0.0043	0.060	mg/kg		8270D	01/22/14	1
Benzo(b)fluoranthene	U	0.0070	0.060	mg/kg		8270D	01/22/14	1
Benzo(k)fluoranthene	U	0.0058	0.060	mg/kg		8270D	01/22/14	1
Benzo(g,h,i)perylene	U	0.0072	0.060	mg/kg		8270D	01/22/14	1
Benzo(a)pyrene	U	0.0055	0.060	mg/kg		8270D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.61	mg/kg		8270D	01/22/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.61	mg/kg		8270D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.61	mg/kg		8270D	01/22/14	1
4-Bromophenyl-phenylether	U	0.011	0.61	mg/kg		8270D	01/22/14	1
2-Chloronaphthalene	U	0.0064	0.060	mg/kg		8270D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.61	mg/kg		8270D	01/22/14	1
Chrysene	U	0.0056	0.060	mg/kg		8270D	01/22/14	1
Dibenz(a,h)anthracene	U	0.0082	0.060	mg/kg		8270D	01/22/14	1
3,3-Dichlorobenzidine	U	0.079	0.61	mg/kg		8270D	01/22/14	1
2,4-Dinitrotoluene	U	0.0061	0.61	mg/kg		8270D	01/22/14	1
2,6-Dinitrotoluene	U	0.0074	0.61	mg/kg		8270D	01/22/14	1
Fluoranthene	U	0.0050	0.060	mg/kg		8270D	01/22/14	1
Fluorene	U	0.0068	0.060	mg/kg		8270D	01/22/14	1
Hexachlorobenzene	U	0.0086	0.61	mg/kg		8270D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.010	0.61	mg/kg		8270D	01/22/14	1
Hexachlorocyclopentadiene	U	0.059	0.61	mg/kg	J	8270D	01/22/14	1
Hexachloroethane	U	0.013	0.61	mg/kg		8270D	01/22/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.060	mg/kg		8270D	01/22/14	1
Isophorone	U	0.0052	0.61	mg/kg		8270D	01/22/14	1

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Cary, NC 27512

January 24,2014

ESC Sample # : L678609-02

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-C 6-7FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 09:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Naphthalene	U	0.0089	0.060	mg/kg		8270D	01/22/14	1
Nitrobenzene	U	0.0070	0.61	mg/kg		8270D	01/22/14	1
n-Nitrosodimethylamine	U	0.065	0.61	mg/kg		8270D	01/22/14	1
n-Nitrosodiphenylamine	U	0.0059	0.61	mg/kg		8270D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.61	mg/kg		8270D	01/22/14	1
Phenanthrene	U	0.0053	0.060	mg/kg		8270D	01/22/14	1
Benzylbutyl phthalate	U	0.010	0.61	mg/kg		8270D	01/22/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.61	mg/kg		8270D	01/22/14	1
Di-n-butyl phthalate	U	0.011	0.61	mg/kg		8270D	01/22/14	1
Diethyl phthalate	U	0.0069	0.61	mg/kg		8270D	01/22/14	1
Dimethyl phthalate	U	0.0054	0.61	mg/kg		8270D	01/22/14	1
Di-n-octyl phthalate	U	0.0091	0.61	mg/kg		8270D	01/22/14	1
Pyrene	U	0.012	0.060	mg/kg		8270D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.61	mg/kg		8270D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.61	mg/kg		8270D	01/22/14	1
2-Chlorophenol	U	0.0083	0.61	mg/kg		8270D	01/22/14	1
2,4-Dichlorophenol	U	0.0075	0.61	mg/kg		8270D	01/22/14	1
2,4-Dimethylphenol	U	0.047	0.61	mg/kg		8270D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.61	mg/kg		8270D	01/22/14	1
2,4-Dinitrophenol	U	0.098	0.61	mg/kg		8270D	01/22/14	1
2-Nitrophenol	U	0.013	0.61	mg/kg		8270D	01/22/14	1
4-Nitrophenol	U	0.052	0.61	mg/kg		8270D	01/22/14	1
Pentachlorophenol	U	0.048	0.61	mg/kg		8270D	01/22/14	1
Phenol	U	0.0070	0.61	mg/kg		8270D	01/22/14	1
2,4,6-Trichlorophenol	U	0.0078	0.61	mg/kg		8270D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	65.0			% Rec.		8270D	01/22/14	1
Phenol-d5	69.3			% Rec.		8270D	01/22/14	1
Nitrobenzene-d5	67.4			% Rec.		8270D	01/22/14	1
2-Fluorobiphenyl	75.2			% Rec.		8270D	01/22/14	1
2,4,6-Tribromophenol	86.4			% Rec.		8270D	01/22/14	1
p-Terphenyl-d14	64.1			% Rec.		8270D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-03

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-D 5-6FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 11:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	73.0	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.0077	0.0014	0.027	mg/kg	J	7471	01/18/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/23/14	1
Arsenic	33.	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	1.0	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	U	0.18	1.7	mg/kg	O	6010C	01/22/14	5
Chromium	100	0.070	0.68	mg/kg		6010C	01/22/14	1
Copper	130	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	4.2	0.48	1.7	mg/kg		6010C	01/23/14	5
Nickel	34.	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	6.8	mg/kg	O	6010C	01/22/14	5
Silver	0.86	0.14	0.68	mg/kg		6010C	01/22/14	1
Thallium	U	1.6	6.8	mg/kg	O	6010C	01/22/14	5
Zinc	32.	0.30	2.0	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	0.025	0.010	0.068	mg/kg	J	8260B	01/18/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg		8260B	01/18/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/18/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/18/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/18/14	1
Bromomethane	U	0.0013	0.0068	mg/kg		8260B	01/18/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/18/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/18/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/18/14	1
Chloroethane	U	0.00095	0.0068	mg/kg		8260B	01/18/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.068	mg/kg		8260B	01/18/14	1
Chloroform	U	0.00023	0.0068	mg/kg		8260B	01/18/14	1
Chloromethane	U	0.00038	0.0034	mg/kg		8260B	01/18/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0068	mg/kg		8260B	01/18/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/18/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/18/14	1

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January 24,2014

ESC Sample # : L678609-03

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-D 5-6FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 11:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0068	mg/kg		8260B	01/18/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/18/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/18/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/18/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/18/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/18/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg		8260B	01/18/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg		8260B	01/18/14	1
Methylene Chloride	U	0.0010	0.0068	mg/kg		8260B	01/18/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/18/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Naphthalene	U	0.0010	0.0068	mg/kg		8260B	01/18/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/18/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/18/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Toluene	U	0.00043	0.0068	mg/kg		8260B	01/18/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/18/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/18/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/18/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Trichlorofluoromethane	U	0.00038	0.0068	mg/kg		8260B	01/18/14	1
1,2,3-Trichloropropane	U	0.00074	0.0034	mg/kg		8260B	01/18/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg		8260B	01/18/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/18/14	1
Xylenes, Total	U	0.00070	0.0041	mg/kg		8260B	01/18/14	1
Surrogate Recovery								
Toluene-d8	108.			% Rec.		8260B	01/18/14	1
Dibromofluoromethane	113.			% Rec.		8260B	01/18/14	1
a,a,a-Trifluorotoluene	105.			% Rec.		8260B	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-03

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-D 5-6FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 11:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	103.			% Rec.		8260B	01/18/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.023	mg/kg		8082	01/23/14	1
PCB 1221	U	0.0054	0.023	mg/kg		8082	01/23/14	1
PCB 1232	U	0.0042	0.023	mg/kg		8082	01/23/14	1
PCB 1242	U	0.0032	0.023	mg/kg		8082	01/23/14	1
PCB 1248	U	0.0032	0.023	mg/kg		8082	01/23/14	1
PCB 1254	U	0.0047	0.023	mg/kg		8082	01/23/14	1
PCB 1260	U	0.0049	0.023	mg/kg		8082	01/23/14	1
PCBs Surrogates								
Decachlorobiphenyl	89.9			% Rec.		8082	01/23/14	1
Tetrachloro-m-xylene	80.7			% Rec.		8082	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.045	mg/kg		8270D	01/22/14	1
Acenaphthylene	U	0.0067	0.045	mg/kg		8270D	01/22/14	1
Anthracene	U	0.0063	0.045	mg/kg		8270D	01/22/14	1
Benzidine	U	0.064	0.46	mg/kg		8270D	01/22/14	1
Benzo(a)anthracene	U	0.0043	0.045	mg/kg		8270D	01/22/14	1
Benzo(b)fluoranthene	U	0.0070	0.045	mg/kg		8270D	01/22/14	1
Benzo(k)fluoranthene	U	0.0058	0.045	mg/kg		8270D	01/22/14	1
Benzo(g,h,i)perylene	U	0.0072	0.045	mg/kg		8270D	01/22/14	1
Benzo(a)pyrene	U	0.0055	0.045	mg/kg		8270D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.46	mg/kg		8270D	01/22/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.46	mg/kg		8270D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.46	mg/kg		8270D	01/22/14	1
4-Bromophenyl-phenylether	U	0.011	0.46	mg/kg		8270D	01/22/14	1
2-Chloronaphthalene	U	0.0064	0.045	mg/kg		8270D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.46	mg/kg		8270D	01/22/14	1
Chrysene	U	0.0056	0.045	mg/kg		8270D	01/22/14	1
Dibenz(a,h)anthracene	U	0.0082	0.045	mg/kg		8270D	01/22/14	1
3,3-Dichlorobenzidine	U	0.079	0.46	mg/kg		8270D	01/22/14	1
2,4-Dinitrotoluene	U	0.0061	0.46	mg/kg		8270D	01/22/14	1
2,6-Dinitrotoluene	U	0.0074	0.46	mg/kg		8270D	01/22/14	1
Fluoranthene	U	0.0050	0.045	mg/kg		8270D	01/22/14	1
Fluorene	U	0.0068	0.045	mg/kg		8270D	01/22/14	1
Hexachlorobenzene	U	0.0086	0.46	mg/kg		8270D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.010	0.46	mg/kg		8270D	01/22/14	1
Hexachlorocyclopentadiene	U	0.059	0.46	mg/kg	J	8270D	01/22/14	1
Hexachloroethane	U	0.013	0.46	mg/kg		8270D	01/22/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.045	mg/kg		8270D	01/22/14	1
Isophorone	U	0.0052	0.46	mg/kg		8270D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-03

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-D 5-6FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 11:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Naphthalene	U	0.0089	0.045	mg/kg		8270D	01/22/14	1
Nitrobenzene	U	0.0070	0.46	mg/kg		8270D	01/22/14	1
n-Nitrosodimethylamine	U	0.065	0.46	mg/kg		8270D	01/22/14	1
n-Nitrosodiphenylamine	U	0.0059	0.46	mg/kg		8270D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.46	mg/kg		8270D	01/22/14	1
Phenanthrene	U	0.0053	0.045	mg/kg		8270D	01/22/14	1
Benzylbutyl phthalate	U	0.010	0.46	mg/kg		8270D	01/22/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.46	mg/kg		8270D	01/22/14	1
Di-n-butyl phthalate	U	0.011	0.46	mg/kg		8270D	01/22/14	1
Diethyl phthalate	U	0.0069	0.46	mg/kg		8270D	01/22/14	1
Dimethyl phthalate	U	0.0054	0.46	mg/kg		8270D	01/22/14	1
Di-n-octyl phthalate	U	0.0091	0.46	mg/kg		8270D	01/22/14	1
Pyrene	U	0.012	0.045	mg/kg		8270D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.46	mg/kg		8270D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.46	mg/kg		8270D	01/22/14	1
2-Chlorophenol	U	0.0083	0.46	mg/kg		8270D	01/22/14	1
2,4-Dichlorophenol	U	0.0075	0.46	mg/kg		8270D	01/22/14	1
2,4-Dimethylphenol	U	0.047	0.46	mg/kg		8270D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.46	mg/kg		8270D	01/22/14	1
2,4-Dinitrophenol	U	0.098	0.46	mg/kg		8270D	01/22/14	1
2-Nitrophenol	U	0.013	0.46	mg/kg		8270D	01/22/14	1
4-Nitrophenol	U	0.052	0.46	mg/kg		8270D	01/22/14	1
Pentachlorophenol	U	0.048	0.46	mg/kg		8270D	01/22/14	1
Phenol	U	0.0070	0.46	mg/kg		8270D	01/22/14	1
2,4,6-Trichlorophenol	U	0.0078	0.46	mg/kg		8270D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	64.2			% Rec.		8270D	01/22/14	1
Phenol-d5	69.1			% Rec.		8270D	01/22/14	1
Nitrobenzene-d5	64.6			% Rec.		8270D	01/22/14	1
2-Fluorobiphenyl	74.6			% Rec.		8270D	01/22/14	1
2,4,6-Tribromophenol	81.8			% Rec.		8270D	01/22/14	1
p-Terphenyl-d14	63.2			% Rec.		8270D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-04

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-E 7-8FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 12:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	72.9	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.020	0.0014	0.027	mg/kg	J	7471	01/18/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/23/14	1
Arsenic	20.	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	1.3	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	U	0.035	0.34	mg/kg		6010C	01/22/14	1
Chromium	23.	0.070	0.68	mg/kg		6010C	01/22/14	1
Copper	99.	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	4.9	0.095	0.34	mg/kg		6010C	01/23/14	1
Nickel	12.	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	1.9	0.37	1.4	mg/kg		6010C	01/23/14	1
Silver	0.84	0.14	0.68	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.4	mg/kg		6010C	01/22/14	1
Zinc	22.	0.30	2.0	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.068	mg/kg		8260B	01/18/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg		8260B	01/18/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/18/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/18/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/18/14	1
Bromomethane	U	0.0013	0.0068	mg/kg		8260B	01/18/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/18/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/18/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/18/14	1
Chloroethane	U	0.00095	0.0068	mg/kg		8260B	01/18/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.068	mg/kg		8260B	01/18/14	1
Chloroform	U	0.00023	0.0068	mg/kg		8260B	01/18/14	1
Chloromethane	U	0.00038	0.0034	mg/kg		8260B	01/18/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0068	mg/kg		8260B	01/18/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/18/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/18/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-04

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-E 7-8FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 12:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0068	mg/kg		8260B	01/18/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/18/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/18/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/18/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/18/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/18/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/18/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/18/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg		8260B	01/18/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg		8260B	01/18/14	1
Methylene Chloride	U	0.0010	0.0068	mg/kg		8260B	01/18/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/18/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Naphthalene	U	0.0010	0.0068	mg/kg		8260B	01/18/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/18/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/18/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/18/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Toluene	U	0.00043	0.0068	mg/kg		8260B	01/18/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/18/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/18/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/18/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/18/14	1
Trichlorofluoromethane	U	0.00038	0.0068	mg/kg		8260B	01/18/14	1
1,2,3-Trichloropropane	U	0.00074	0.0034	mg/kg		8260B	01/18/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/18/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg		8260B	01/18/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/18/14	1
Xylenes, Total	U	0.00070	0.0041	mg/kg		8260B	01/18/14	1
Surrogate Recovery								
Toluene-d8	108.			% Rec.		8260B	01/18/14	1
Dibromofluoromethane	112.			% Rec.		8260B	01/18/14	1
a,a,a-Trifluorotoluene	103.			% Rec.		8260B	01/18/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-04

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-E 7-8FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 12:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	104.			% Rec.		8260B	01/18/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.023	mg/kg		8082	01/23/14	1
PCB 1221	U	0.0054	0.023	mg/kg		8082	01/23/14	1
PCB 1232	U	0.0042	0.023	mg/kg		8082	01/23/14	1
PCB 1242	U	0.0032	0.023	mg/kg		8082	01/23/14	1
PCB 1248	U	0.0032	0.023	mg/kg		8082	01/23/14	1
PCB 1254	U	0.0047	0.023	mg/kg		8082	01/23/14	1
PCB 1260	U	0.0049	0.023	mg/kg		8082	01/23/14	1
PCBs Surrogates								
Decachlorobiphenyl	71.4			% Rec.		8082	01/23/14	1
Tetrachloro-m-xylene	65.4			% Rec.		8082	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.045	mg/kg		8270D	01/22/14	1
Acenaphthylene	U	0.0067	0.045	mg/kg		8270D	01/22/14	1
Anthracene	U	0.0063	0.045	mg/kg		8270D	01/22/14	1
Benzidine	U	0.064	0.46	mg/kg		8270D	01/22/14	1
Benzo(a)anthracene	U	0.0043	0.045	mg/kg		8270D	01/22/14	1
Benzo(b)fluoranthene	U	0.0070	0.045	mg/kg		8270D	01/22/14	1
Benzo(k)fluoranthene	U	0.0058	0.045	mg/kg		8270D	01/22/14	1
Benzo(g,h,i)perylene	U	0.0072	0.045	mg/kg		8270D	01/22/14	1
Benzo(a)pyrene	U	0.0055	0.045	mg/kg		8270D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.46	mg/kg		8270D	01/22/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.46	mg/kg		8270D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.46	mg/kg		8270D	01/22/14	1
4-Bromophenyl-phenylether	U	0.011	0.46	mg/kg		8270D	01/22/14	1
2-Chloronaphthalene	U	0.0064	0.045	mg/kg		8270D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.46	mg/kg		8270D	01/22/14	1
Chrysene	U	0.0056	0.045	mg/kg		8270D	01/22/14	1
Dibenz(a,h)anthracene	U	0.0082	0.045	mg/kg		8270D	01/22/14	1
3,3-Dichlorobenzidine	U	0.079	0.46	mg/kg		8270D	01/22/14	1
2,4-Dinitrotoluene	U	0.0061	0.46	mg/kg		8270D	01/22/14	1
2,6-Dinitrotoluene	U	0.0074	0.46	mg/kg		8270D	01/22/14	1
Fluoranthene	U	0.0050	0.045	mg/kg		8270D	01/22/14	1
Fluorene	U	0.0068	0.045	mg/kg		8270D	01/22/14	1
Hexachlorobenzene	U	0.0086	0.46	mg/kg		8270D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.010	0.46	mg/kg		8270D	01/22/14	1
Hexachlorocyclopentadiene	U	0.059	0.46	mg/kg	J	8270D	01/22/14	1
Hexachloroethane	U	0.013	0.46	mg/kg		8270D	01/22/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.045	mg/kg		8270D	01/22/14	1
Isophorone	U	0.0052	0.46	mg/kg		8270D	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678609-04

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-E 7-8FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 12:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Naphthalene	U	0.0089	0.045	mg/kg		8270D	01/22/14	1
Nitrobenzene	U	0.0070	0.46	mg/kg		8270D	01/22/14	1
n-Nitrosodimethylamine	U	0.065	0.46	mg/kg		8270D	01/22/14	1
n-Nitrosodiphenylamine	U	0.0059	0.46	mg/kg		8270D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.46	mg/kg		8270D	01/22/14	1
Phenanthrene	U	0.0053	0.045	mg/kg		8270D	01/22/14	1
Benzylbutyl phthalate	U	0.010	0.46	mg/kg		8270D	01/22/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.46	mg/kg		8270D	01/22/14	1
Di-n-butyl phthalate	U	0.011	0.46	mg/kg		8270D	01/22/14	1
Diethyl phthalate	U	0.0069	0.46	mg/kg		8270D	01/22/14	1
Dimethyl phthalate	U	0.0054	0.46	mg/kg		8270D	01/22/14	1
Di-n-octyl phthalate	U	0.0091	0.46	mg/kg		8270D	01/22/14	1
Pyrene	U	0.012	0.045	mg/kg		8270D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.46	mg/kg		8270D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.46	mg/kg		8270D	01/22/14	1
2-Chlorophenol	U	0.0083	0.46	mg/kg		8270D	01/22/14	1
2,4-Dichlorophenol	U	0.0075	0.46	mg/kg		8270D	01/22/14	1
2,4-Dimethylphenol	U	0.047	0.46	mg/kg		8270D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.46	mg/kg		8270D	01/22/14	1
2,4-Dinitrophenol	U	0.098	0.46	mg/kg		8270D	01/22/14	1
2-Nitrophenol	U	0.013	0.46	mg/kg		8270D	01/22/14	1
4-Nitrophenol	U	0.052	0.46	mg/kg		8270D	01/22/14	1
Pentachlorophenol	U	0.048	0.46	mg/kg		8270D	01/22/14	1
Phenol	U	0.0070	0.46	mg/kg		8270D	01/22/14	1
2,4,6-Trichlorophenol	U	0.0078	0.46	mg/kg		8270D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	64.6			% Rec.		8270D	01/22/14	1
Phenol-d5	69.3			% Rec.		8270D	01/22/14	1
Nitrobenzene-d5	64.3			% Rec.		8270D	01/22/14	1
2-Fluorobiphenyl	72.2			% Rec.		8270D	01/22/14	1
2,4,6-Tribromophenol	85.0			% Rec.		8270D	01/22/14	1
p-Terphenyl-d14	60.9			% Rec.		8270D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678609-05

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-D 10.5-11.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 14:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	85.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.0019	0.0014	0.023	mg/kg	J	7471	01/18/14	1
Antimony	0.79	0.38	1.2	mg/kg	J	6010C	01/23/14	1
Arsenic	6.3	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.33	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	U	0.035	0.29	mg/kg		6010C	01/22/14	1
Chromium	2.4	0.070	0.58	mg/kg		6010C	01/22/14	1
Copper	48.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	2.7	0.095	0.29	mg/kg		6010C	01/23/14	1
Nickel	16.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.2	mg/kg		6010C	01/23/14	1
Silver	U	0.14	0.58	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	48.	0.30	1.8	mg/kg		6010C	01/22/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.020	mg/kg		8082	01/23/14	1
PCB 1221	U	0.0054	0.020	mg/kg		8082	01/23/14	1
PCB 1232	U	0.0042	0.020	mg/kg		8082	01/23/14	1
PCB 1242	U	0.0032	0.020	mg/kg		8082	01/23/14	1
PCB 1248	U	0.0032	0.020	mg/kg		8082	01/23/14	1
PCB 1254	U	0.0047	0.020	mg/kg		8082	01/23/14	1
PCB 1260	U	0.0049	0.020	mg/kg		8082	01/23/14	1
PCBs Surrogates								
Decachlorobiphenyl	92.8			% Rec.		8082	01/23/14	1
Tetrachloro-m-xylene	79.2			% Rec.		8082	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.038	mg/kg		8270D	01/22/14	1
Acenaphthylene	U	0.0067	0.038	mg/kg		8270D	01/22/14	1
Anthracene	U	0.0063	0.038	mg/kg		8270D	01/22/14	1
Benzidine	U	0.064	0.39	mg/kg		8270D	01/22/14	1
Benzo(a)anthracene	U	0.0043	0.038	mg/kg		8270D	01/22/14	1
Benzo(b)fluoranthene	U	0.0070	0.038	mg/kg		8270D	01/22/14	1
Benzo(k)fluoranthene	U	0.0058	0.038	mg/kg		8270D	01/22/14	1
Benzo(g,h,i)perylene	U	0.0072	0.038	mg/kg		8270D	01/22/14	1
Benzo(a)pyrene	U	0.0055	0.038	mg/kg		8270D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.39	mg/kg		8270D	01/22/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.39	mg/kg		8270D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.39	mg/kg		8270D	01/22/14	1
4-Bromophenyl-phenylether	U	0.011	0.39	mg/kg		8270D	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678609-05

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-D 10.5-11.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 14:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
2-Chloronaphthalene	U	0.0064	0.038	mg/kg		8270D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.39	mg/kg		8270D	01/22/14	1
Chrysene	U	0.0056	0.038	mg/kg		8270D	01/22/14	1
Dibenz(a,h)anthracene	U	0.0082	0.038	mg/kg		8270D	01/22/14	1
3,3-Dichlorobenzidine	U	0.079	0.39	mg/kg		8270D	01/22/14	1
2,4-Dinitrotoluene	U	0.0061	0.39	mg/kg		8270D	01/22/14	1
2,6-Dinitrotoluene	U	0.0074	0.39	mg/kg		8270D	01/22/14	1
Fluoranthene	U	0.0050	0.038	mg/kg		8270D	01/22/14	1
Fluorene	U	0.0068	0.038	mg/kg		8270D	01/22/14	1
Hexachlorobenzene	U	0.0086	0.39	mg/kg		8270D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.010	0.39	mg/kg		8270D	01/22/14	1
Hexachlorocyclopentadiene	U	0.059	0.39	mg/kg	J	8270D	01/22/14	1
Hexachloroethane	U	0.013	0.39	mg/kg		8270D	01/22/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.038	mg/kg		8270D	01/22/14	1
Isophorone	U	0.0052	0.39	mg/kg		8270D	01/22/14	1
Naphthalene	U	0.0089	0.038	mg/kg		8270D	01/22/14	1
Nitrobenzene	U	0.0070	0.39	mg/kg		8270D	01/22/14	1
n-Nitrosodimethylamine	U	0.065	0.39	mg/kg		8270D	01/22/14	1
n-Nitrosodiphenylamine	U	0.0059	0.39	mg/kg		8270D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.39	mg/kg		8270D	01/22/14	1
Phenanthrene	U	0.0053	0.038	mg/kg		8270D	01/22/14	1
Benzylbutyl phthalate	U	0.010	0.39	mg/kg		8270D	01/22/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.39	mg/kg		8270D	01/22/14	1
Di-n-butyl phthalate	U	0.011	0.39	mg/kg		8270D	01/22/14	1
Diethyl phthalate	U	0.0069	0.39	mg/kg		8270D	01/22/14	1
Dimethyl phthalate	U	0.0054	0.39	mg/kg		8270D	01/22/14	1
Di-n-octyl phthalate	U	0.0091	0.39	mg/kg		8270D	01/22/14	1
Pyrene	U	0.012	0.038	mg/kg		8270D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.39	mg/kg		8270D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.39	mg/kg		8270D	01/22/14	1
2-Chlorophenol	U	0.0083	0.39	mg/kg		8270D	01/22/14	1
2,4-Dichlorophenol	U	0.0075	0.39	mg/kg		8270D	01/22/14	1
2,4-Dimethylphenol	U	0.047	0.39	mg/kg		8270D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.39	mg/kg		8270D	01/22/14	1
2,4-Dinitrophenol	U	0.098	0.39	mg/kg		8270D	01/22/14	1
2-Nitrophenol	U	0.013	0.39	mg/kg		8270D	01/22/14	1
4-Nitrophenol	U	0.052	0.39	mg/kg		8270D	01/22/14	1
Pentachlorophenol	U	0.048	0.39	mg/kg		8270D	01/22/14	1
Phenol	U	0.0070	0.39	mg/kg		8270D	01/22/14	1
2,4,6-Trichlorophenol	U	0.0078	0.39	mg/kg		8270D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	61.9			% Rec.		8270D	01/22/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678609-05

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-D 10.5-11.5FT

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 14:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Phenol-d5	66.2			% Rec.		8270D	01/22/14	1
Nitrobenzene-d5	58.2			% Rec.		8270D	01/22/14	1
2-Fluorobiphenyl	69.3			% Rec.		8270D	01/22/14	1
2,4,6-Tribromophenol	79.9			% Rec.		8270D	01/22/14	1
p-Terphenyl-d14	59.3			% Rec.		8270D	01/22/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678609-06

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	21.	10.	50.	ug/l	J	8260B	01/19/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/19/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/19/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/19/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/19/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/19/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/19/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/19/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/19/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/19/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/19/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/19/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/19/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/19/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/19/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/19/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/19/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/19/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/19/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/19/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/19/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/19/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/19/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/19/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/19/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/19/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/19/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/19/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/19/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/19/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/19/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/19/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/19/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/19/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/19/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/19/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/19/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/19/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/19/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/19/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/19/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/19/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 01/24/14 12:21 Printed: 01/24/14 12:22

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678609-06

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/19/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/19/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/19/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/19/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/19/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/19/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/19/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/19/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/19/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	01/19/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/19/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/19/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/19/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/19/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/19/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/19/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/19/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/19/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/19/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/19/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	01/19/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/19/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/19/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/19/14	1
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260B	01/19/14	1
Dibromofluoromethane	104.			% Rec.		8260B	01/19/14	1
4-Bromofluorobenzene	106.			% Rec.		8260B	01/19/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678609-01	WG702044	SAMP	Mercury	R2877507	J
	WG702394	SAMP	Hexachlorocyclopentadiene	R2878290	J
	WG702041	SAMP	Acetone	R2877584	J
	WG702129	SAMP	Antimony	R2878933	J
	WG702129	SAMP	Selenium	R2878609	O
	WG702129	SAMP	Silver	R2878609	J
	WG702129	SAMP	Thallium	R2878609	O
L678609-02	WG702044	SAMP	Mercury	R2877507	J
	WG702394	SAMP	Hexachlorocyclopentadiene	R2878290	J
	WG702041	SAMP	Acetone	R2877584	J
	WG702129	SAMP	Selenium	R2878609	O
	WG702129	SAMP	Thallium	R2878609	O
L678609-03	WG702044	SAMP	Mercury	R2877507	J
	WG702394	SAMP	Hexachlorocyclopentadiene	R2878290	J
	WG702041	SAMP	Acetone	R2877584	J
	WG702129	SAMP	Cadmium	R2878609	O
	WG702129	SAMP	Selenium	R2878609	O
	WG702129	SAMP	Thallium	R2878609	O
L678609-04	WG702044	SAMP	Mercury	R2877507	J
	WG702394	SAMP	Hexachlorocyclopentadiene	R2878290	J
L678609-05	WG702044	SAMP	Mercury	R2877507	J
	WG702394	SAMP	Hexachlorocyclopentadiene	R2878290	J
	WG702129	SAMP	Antimony	R2878933	J
L678609-06	WG702037	SAMP	Acetone	R2877600	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/24/14 at 12:22:53

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678609-01 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:21

Sample: L678609-02 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:21

Sample: L678609-03 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:21

Sample: L678609-04 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:21

Sample: L678609-05 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:21

Sample: L678609-06 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 12:21

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Cary, NC 27512

Quality Assurance Report
Level II

L678609

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG702085	01/18/14 08:54
Mercury	< .02	mg/kg			WG702044	01/18/14 18:57
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1,1-Trichloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1,2-Trichloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1-Dichloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,1-Dichloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
1,1-Dichloropropene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2,3-Trichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2,3-Trichloropropane	< .0025	mg/kg			WG702041	01/18/14 12:20
1,2,4-Trichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2,4-Trimethylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG702041	01/18/14 12:20
1,2-Dibromoethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,2-Dichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,2-Dichloroethane	< .001	mg/kg			WG702041	01/18/14 12:20
1,2-Dichloropropane	< .001	mg/kg			WG702041	01/18/14 12:20
1,3,5-Trimethylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,3-Dichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
1,3-Dichloropropane	< .001	mg/kg			WG702041	01/18/14 12:20
1,4-Dichlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
2,2-Dichloropropane	< .001	mg/kg			WG702041	01/18/14 12:20
2-Butanone (MEK)	< .01	mg/kg			WG702041	01/18/14 12:20
2-Chloroethyl vinyl ether	< .05	mg/kg			WG702041	01/18/14 12:20
2-Chlorotoluene	< .001	mg/kg			WG702041	01/18/14 12:20
4-Chlorotoluene	< .001	mg/kg			WG702041	01/18/14 12:20
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG702041	01/18/14 12:20
Acetone	< .05	mg/kg			WG702041	01/18/14 12:20
Acrylonitrile	< .01	mg/kg			WG702041	01/18/14 12:20
Benzene	< .001	mg/kg			WG702041	01/18/14 12:20
Bromobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Bromodichloromethane	< .001	mg/kg			WG702041	01/18/14 12:20
Bromoform	< .001	mg/kg			WG702041	01/18/14 12:20
Bromomethane	< .005	mg/kg			WG702041	01/18/14 12:20
Carbon tetrachloride	< .001	mg/kg			WG702041	01/18/14 12:20
Chlorobenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Chlorodibromomethane	< .001	mg/kg			WG702041	01/18/14 12:20
Chloroethane	< .005	mg/kg			WG702041	01/18/14 12:20
Chloroform	< .005	mg/kg			WG702041	01/18/14 12:20
Chloromethane	< .0025	mg/kg			WG702041	01/18/14 12:20
cis-1,2-Dichloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
cis-1,3-Dichloropropene	< .001	mg/kg			WG702041	01/18/14 12:20
Di-isopropyl ether	< .001	mg/kg			WG702041	01/18/14 12:20
Dibromomethane	< .001	mg/kg			WG702041	01/18/14 12:20
Dichlorodifluoromethane	< .005	mg/kg			WG702041	01/18/14 12:20
Ethylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Hexachloro-1,3-butadiene	< .001	mg/kg			WG702041	01/18/14 12:20
Isopropylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Methyl tert-butyl ether	< .001	mg/kg			WG702041	01/18/14 12:20
Methylene Chloride	< .005	mg/kg			WG702041	01/18/14 12:20
n-Butylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
n-Propylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Naphthalene	< .005	mg/kg			WG702041	01/18/14 12:20
p-Isopropyltoluene	< .001	mg/kg			WG702041	01/18/14 12:20

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678609

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
sec-Butylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Styrene	< .001	mg/kg			WG702041	01/18/14 12:20
tert-Butylbenzene	< .001	mg/kg			WG702041	01/18/14 12:20
Tetrachloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
Toluene	< .005	mg/kg			WG702041	01/18/14 12:20
trans-1,2-Dichloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
trans-1,3-Dichloropropene	< .001	mg/kg			WG702041	01/18/14 12:20
Trichloroethene	< .001	mg/kg			WG702041	01/18/14 12:20
Trichlorofluoromethane	< .005	mg/kg			WG702041	01/18/14 12:20
Vinyl chloride	< .001	mg/kg			WG702041	01/18/14 12:20
Xylenes, Total	< .003	mg/kg			WG702041	01/18/14 12:20
4-Bromofluorobenzene		% Rec.	102.0	71-126	WG702041	01/18/14 12:20
Dibromofluoromethane		% Rec.	100.0	78.3-121	WG702041	01/18/14 12:20
Toluene-d8		% Rec.	108.0	88.5-111	WG702041	01/18/14 12:20
a,a,a-Trifluorotoluene		% Rec.	105.0	85-114	WG702041	01/18/14 12:20
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1,1-Trichloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1,2-Trichloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1-Dichloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,1-Dichloroethene	< .001	mg/l			WG702037	01/19/14 12:20
1,1-Dichloropropene	< .001	mg/l			WG702037	01/19/14 12:20
1,2,3-Trichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,2,3-Trichloropropane	< .001	mg/l			WG702037	01/19/14 12:20
1,2,3-Trimethylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,2,4-Trichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,2,4-Trimethylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG702037	01/19/14 12:20
1,2-Dibromoethane	< .001	mg/l			WG702037	01/19/14 12:20
1,2-Dichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,2-Dichloroethane	< .001	mg/l			WG702037	01/19/14 12:20
1,2-Dichloropropane	< .001	mg/l			WG702037	01/19/14 12:20
1,3,5-Trimethylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,3-Dichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
1,3-Dichloropropane	< .001	mg/l			WG702037	01/19/14 12:20
1,4-Dichlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
2,2-Dichloropropane	< .001	mg/l			WG702037	01/19/14 12:20
2-Butanone (MEK)	< .01	mg/l			WG702037	01/19/14 12:20
2-Chloroethyl vinyl ether	< .05	mg/l			WG702037	01/19/14 12:20
2-Chlorotoluene	< .001	mg/l			WG702037	01/19/14 12:20
4-Chlorotoluene	< .001	mg/l			WG702037	01/19/14 12:20
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG702037	01/19/14 12:20
Acetone	< .05	mg/l			WG702037	01/19/14 12:20
Acrolein	< .025	mg/l			WG702037	01/19/14 12:20
Acrylonitrile	< .01	mg/l			WG702037	01/19/14 12:20
Benzene	< .001	mg/l			WG702037	01/19/14 12:20
Bromobenzene	< .001	mg/l			WG702037	01/19/14 12:20
Bromodichloromethane	< .001	mg/l			WG702037	01/19/14 12:20
Bromoform	< .001	mg/l			WG702037	01/19/14 12:20
Bromomethane	< .005	mg/l			WG702037	01/19/14 12:20
Carbon tetrachloride	< .001	mg/l			WG702037	01/19/14 12:20
Chlorobenzene	< .001	mg/l			WG702037	01/19/14 12:20
Chlorodibromomethane	< .001	mg/l			WG702037	01/19/14 12:20
Chloroethane	< .005	mg/l			WG702037	01/19/14 12:20
Chloroform	< .005	mg/l			WG702037	01/19/14 12:20
Chloromethane	< .0025	mg/l			WG702037	01/19/14 12:20

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678609

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
cis-1,2-Dichloroethene	< .001	mg/l			WG702037	01/19/14 12:20
cis-1,3-Dichloropropene	< .001	mg/l			WG702037	01/19/14 12:20
Di-isopropyl ether	< .001	mg/l			WG702037	01/19/14 12:20
Dibromomethane	< .001	mg/l			WG702037	01/19/14 12:20
Dichlorodifluoromethane	< .005	mg/l			WG702037	01/19/14 12:20
Ethylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Hexachloro-1,3-butadiene	< .001	mg/l			WG702037	01/19/14 12:20
Isopropylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Methyl tert-butyl ether	< .001	mg/l			WG702037	01/19/14 12:20
Methylene Chloride	< .005	mg/l			WG702037	01/19/14 12:20
n-Butylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
n-Propylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Naphthalene	< .005	mg/l			WG702037	01/19/14 12:20
p-Isopropyltoluene	< .001	mg/l			WG702037	01/19/14 12:20
sec-Butylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Styrene	< .001	mg/l			WG702037	01/19/14 12:20
tert-Butylbenzene	< .001	mg/l			WG702037	01/19/14 12:20
Tetrachloroethene	< .001	mg/l			WG702037	01/19/14 12:20
Toluene	< .005	mg/l			WG702037	01/19/14 12:20
trans-1,2-Dichloroethene	< .001	mg/l			WG702037	01/19/14 12:20
trans-1,3-Dichloropropene	< .001	mg/l			WG702037	01/19/14 12:20
Trichloroethene	< .001	mg/l			WG702037	01/19/14 12:20
Trichlorofluoromethane	< .005	mg/l			WG702037	01/19/14 12:20
Vinyl chloride	< .001	mg/l			WG702037	01/19/14 12:20
Xylenes, Total	< .003	mg/l			WG702037	01/19/14 12:20
4-Bromofluorobenzene		% Rec.	106.0	71-126	WG702037	01/19/14 12:20
Dibromofluoromethane		% Rec.	102.0	78.3-121	WG702037	01/19/14 12:20
Toluene-d8		% Rec.	106.0	88.5-111	WG702037	01/19/14 12:20
a,a,a-Trifluorotoluene		% Rec.	105.0	85-114	WG702037	01/19/14 12:20
1,2,4-Trichlorobenzene	< .333	mg/kg			WG702394	01/22/14 03:04
2,4,6-Trichlorophenol	< .333	mg/kg			WG702394	01/22/14 03:04
2,4-Dichlorophenol	< .333	mg/kg			WG702394	01/22/14 03:04
2,4-Dimethylphenol	< .333	mg/kg			WG702394	01/22/14 03:04
2,4-Dinitrophenol	< .333	mg/kg			WG702394	01/22/14 03:04
2,4-Dinitrotoluene	< .333	mg/kg			WG702394	01/22/14 03:04
2,6-Dinitrotoluene	< .333	mg/kg			WG702394	01/22/14 03:04
2-Chloronaphthalene	< .033	mg/kg			WG702394	01/22/14 03:04
2-Chlorophenol	< .333	mg/kg			WG702394	01/22/14 03:04
2-Nitrophenol	< .333	mg/kg			WG702394	01/22/14 03:04
3,3-Dichlorobenzidine	< .333	mg/kg			WG702394	01/22/14 03:04
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG702394	01/22/14 03:04
4-Bromophenyl-phenylether	< .333	mg/kg			WG702394	01/22/14 03:04
4-Chloro-3-methylphenol	< .333	mg/kg			WG702394	01/22/14 03:04
4-Chlorophenyl-phenylether	< .333	mg/kg			WG702394	01/22/14 03:04
4-Nitrophenol	< .333	mg/kg			WG702394	01/22/14 03:04
Acenaphthene	< .033	mg/kg			WG702394	01/22/14 03:04
Acenaphthylene	< .033	mg/kg			WG702394	01/22/14 03:04
Anthracene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzidine	< .333	mg/kg			WG702394	01/22/14 03:04
Benzo(a)anthracene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzo(a)pyrene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzo(b)fluoranthene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzo(g,h,i)perylene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzo(k)fluoranthene	< .033	mg/kg			WG702394	01/22/14 03:04
Benzylbutyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG702394	01/22/14 03:04
Bis(2-chloroethyl)ether	< .333	mg/kg			WG702394	01/22/14 03:04

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Quality Assurance Report
Level II

L678609

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG702394	01/22/14 03:04
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Chrysene	< .033	mg/kg			WG702394	01/22/14 03:04
Di-n-butyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Di-n-octyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Dibenz(a,h)anthracene	< .033	mg/kg			WG702394	01/22/14 03:04
Diethyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Dimethyl phthalate	< .333	mg/kg			WG702394	01/22/14 03:04
Fluoranthene	< .033	mg/kg			WG702394	01/22/14 03:04
Fluorene	< .033	mg/kg			WG702394	01/22/14 03:04
Hexachloro-1,3-butadiene	< .333	mg/kg			WG702394	01/22/14 03:04
Hexachlorobenzene	< .333	mg/kg			WG702394	01/22/14 03:04
Hexachlorocyclopentadiene	< .333	mg/kg			WG702394	01/22/14 03:04
Hexachloroethane	< .333	mg/kg			WG702394	01/22/14 03:04
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG702394	01/22/14 03:04
Isophorone	< .333	mg/kg			WG702394	01/22/14 03:04
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG702394	01/22/14 03:04
n-Nitrosodimethylamine	< .333	mg/kg			WG702394	01/22/14 03:04
n-Nitrosodiphenylamine	< .333	mg/kg			WG702394	01/22/14 03:04
Naphthalene	< .033	mg/kg			WG702394	01/22/14 03:04
Nitrobenzene	< .333	mg/kg			WG702394	01/22/14 03:04
Pentachlorophenol	< .333	mg/kg			WG702394	01/22/14 03:04
Phenanthrene	< .033	mg/kg			WG702394	01/22/14 03:04
Phenol	< .333	mg/kg			WG702394	01/22/14 03:04
Pyrene	< .033	mg/kg			WG702394	01/22/14 03:04
2,4,6-Tribromophenol		% Rec.	85.00	21.6-142	WG702394	01/22/14 03:04
2-Fluorobiphenyl		% Rec.	78.00	34.9-129	WG702394	01/22/14 03:04
2-Fluorophenol		% Rec.	67.80	21.1-116	WG702394	01/22/14 03:04
Nitrobenzene-d5		% Rec.	67.20	21.9-129	WG702394	01/22/14 03:04
Phenol-d5		% Rec.	72.90	26.3-121	WG702394	01/22/14 03:04
p-Terphenyl-d14		% Rec.	72.60	21.5-128	WG702394	01/22/14 03:04
Antimony	< 1	mg/kg			WG702129	01/22/14 14:49
Arsenic	< 1	mg/kg			WG702129	01/22/14 14:49
Beryllium	< .1	mg/kg			WG702129	01/22/14 14:49
Cadmium	< .25	mg/kg			WG702129	01/22/14 14:49
Chromium	< .5	mg/kg			WG702129	01/22/14 14:49
Copper	< 1	mg/kg			WG702129	01/22/14 14:49
Lead	< .25	mg/kg			WG702129	01/22/14 14:49
Nickel	< 1	mg/kg			WG702129	01/22/14 14:49
Silver	< .5	mg/kg			WG702129	01/22/14 14:49
Thallium	< 1	mg/kg			WG702129	01/22/14 14:49
Zinc	< 1.5	mg/kg			WG702129	01/22/14 14:49
Selenium	< 1	mg/kg			WG702129	01/23/14 10:16
PCB 1016	< .017	mg/kg			WG702070	01/23/14 08:52
PCB 1221	< .017	mg/kg			WG702070	01/23/14 08:52
PCB 1232	< .017	mg/kg			WG702070	01/23/14 08:52
PCB 1242	< .017	mg/kg			WG702070	01/23/14 08:52
PCB 1248	< .017	mg/kg			WG702070	01/23/14 08:52
PCB 1254	< .017	mg/kg			WG702070	01/23/14 08:52
PCB 1260	< .017	mg/kg			WG702070	01/23/14 08:52
Decachlorobiphenyl		% Rec.	87.90	21-147	WG702070	01/23/14 08:52
Tetrachloro-m-xylene		% Rec.	72.30	35-130	WG702070	01/23/14 08:52

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Quality Assurance Report
Level II

L678609

January 24, 2014

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Total Solids	%	83.7	87.9	4.95	5	L678615-02	WG702085
Mercury	mg/kg	0.0330	0.0330	1.00	20	L678607-05	WG702044
Antimony	mg/kg	0.0	-1.72	49.0*	20	L678618-01	WG702129
Arsenic	mg/kg	5.80	8.21	34.0*	20	L678618-01	WG702129
Beryllium	mg/kg	0.0	0.0926	18.0	20	L678618-01	WG702129
Cadmium	mg/kg	0.680	0.877	26.0*	20	L678618-01	WG702129
Chromium	mg/kg	3.40	4.15	19.0	20	L678618-01	WG702129
Copper	mg/kg	37.0	37.4	2.00	20	L678618-01	WG702129
Lead	mg/kg	3.10	3.32	6.00	20	L678618-01	WG702129
Nickel	mg/kg	1.40	1.50	4.00	20	L678618-01	WG702129
Silver	mg/kg	0.0	0.0786	104.*	20	L678618-01	WG702129
Thallium	mg/kg	0.0	-0.534	759.*	20	L678618-01	WG702129
Zinc	mg/kg	130.	132.	3.00	20	L678618-01	WG702129
Selenium	mg/kg	1.10	1.20	9.00	20	L678618-01	WG702129

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
		Laboratory Control Sample				
Total Solids	%	50	49.9	99.8	85-115	WG702085
Mercury	mg/kg	12.4	15.0	121.	71.6-128	WG702044
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0257	103.	72.9-124	WG702041
1,1,1-Trichloroethane	mg/kg	.025	0.0269	108.	73.7-124	WG702041
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0250	100.	69.4-122	WG702041
1,1,2-Trichloroethane	mg/kg	.025	0.0253	101.	79.1-118	WG702041
1,1-Dichloroethane	mg/kg	.025	0.0280	112.	75-124	WG702041
1,1-Dichloroethene	mg/kg	.025	0.0296	118.	70.4-129	WG702041
1,1-Dichloropropene	mg/kg	.025	0.0273	109.	74.9-124	WG702041
1,2,3-Trichlorobenzene	mg/kg	.025	0.0258	103.	69.3-131	WG702041
1,2,3-Trichloropropane	mg/kg	.025	0.0253	101.	71.4-123	WG702041
1,2,4-Trichlorobenzene	mg/kg	.025	0.0276	110.	71.9-137	WG702041
1,2,4-Trimethylbenzene	mg/kg	.025	0.0261	104.	75.5-122	WG702041
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0256	102.	62.8-133	WG702041
1,2-Dibromoethane	mg/kg	.025	0.0252	101.	78.6-120	WG702041
1,2-Dichlorobenzene	mg/kg	.025	0.0260	104.	78.3-118	WG702041
1,2-Dichloroethane	mg/kg	.025	0.0265	106.	70.1-124	WG702041
1,2-Dichloropropane	mg/kg	.025	0.0267	107.	77.9-119	WG702041
1,3,5-Trimethylbenzene	mg/kg	.025	0.0263	105.	75.9-124	WG702041
1,3-Dichlorobenzene	mg/kg	.025	0.0257	103.	72-126	WG702041
1,3-Dichloropropane	mg/kg	.025	0.0251	100.	79.1-117	WG702041
1,4-Dichlorobenzene	mg/kg	.025	0.0257	103.	78.3-117	WG702041
2,2-Dichloropropane	mg/kg	.025	0.0287	115.	61.3-136	WG702041
2-Butanone (MEK)	mg/kg	.125	0.107	85.7	53.7-153	WG702041
2-Chloroethyl vinyl ether	mg/kg	.125	0.140	112.	37.7-157	WG702041
2-Chlorotoluene	mg/kg	.025	0.0244	97.5	75.6-121	WG702041
4-Chlorotoluene	mg/kg	.025	0.0260	104.	77.3-120	WG702041
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.135	108.	70.4-137	WG702041
Acetone	mg/kg	.125	0.0855	68.4	35.1-175	WG702041
Acrylonitrile	mg/kg	.125	0.132	105.	56.4-128	WG702041
Benzene	mg/kg	.025	0.0258	103.	77.1-121	WG702041
Bromobenzene	mg/kg	.025	0.0258	103.	78.2-115	WG702041
Bromodichloromethane	mg/kg	.025	0.0256	103.	74.9-115	WG702041
Bromoform	mg/kg	.025	0.0256	103.	65.9-132	WG702041

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Quality Assurance Report
Level II

L678609

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Bromomethane	mg/kg	.025	0.0286	114.	48.7-165	WG702041
Carbon tetrachloride	mg/kg	.025	0.0274	110.	70-124	WG702041
Chlorobenzene	mg/kg	.025	0.0255	102.	79.1-119	WG702041
Chlorodibromomethane	mg/kg	.025	0.0248	99.1	73.5-121	WG702041
Chloroethane	mg/kg	.025	0.0271	108.	66.2-132	WG702041
Chloroform	mg/kg	.025	0.0264	106.	76.7-122	WG702041
Chloromethane	mg/kg	.025	0.0249	99.7	63.4-131	WG702041
cis-1,2-Dichloroethene	mg/kg	.025	0.0264	105.	78.2-119	WG702041
cis-1,3-Dichloropropene	mg/kg	.025	0.0269	108.	79.6-120	WG702041
Di-isopropyl ether	mg/kg	.025	0.0273	109.	70.4-133	WG702041
Dibromomethane	mg/kg	.025	0.0267	107.	79.4-120	WG702041
Dichlorodifluoromethane	mg/kg	.025	0.0263	105.	57.1-137	WG702041
Ethylbenzene	mg/kg	.025	0.0260	104.	79.7-122	WG702041
Hexachloro-1,3-butadiene	mg/kg	.025	0.0244	97.6	68.2-123	WG702041
Isopropylbenzene	mg/kg	.025	0.0278	111.	80-135	WG702041
Methyl tert-butyl ether	mg/kg	.025	0.0257	103.	73-129	WG702041
Methylene Chloride	mg/kg	.025	0.0259	104.	72.6-120	WG702041
n-Butylbenzene	mg/kg	.025	0.0277	111.	77.5-126	WG702041
n-Propylbenzene	mg/kg	.025	0.0263	105.	77.9-123	WG702041
Naphthalene	mg/kg	.025	0.0257	103.	69.8-128	WG702041
p-Isopropyltoluene	mg/kg	.025	0.0271	109.	75.8-129	WG702041
sec-Butylbenzene	mg/kg	.025	0.0264	106.	75.8-126	WG702041
Styrene	mg/kg	.025	0.0265	106.	82.4-126	WG702041
tert-Butylbenzene	mg/kg	.025	0.0260	104.	76.4-126	WG702041
Tetrachloroethene	mg/kg	.025	0.0256	102.	73.9-125	WG702041
Toluene	mg/kg	.025	0.0258	103.	79.7-118	WG702041
trans-1,2-Dichloroethene	mg/kg	.025	0.0264	106.	73.8-122	WG702041
trans-1,3-Dichloropropene	mg/kg	.025	0.0253	101.	75.9-124	WG702041
Trichloroethene	mg/kg	.025	0.0257	103.	77.9-118	WG702041
Trichlorofluoromethane	mg/kg	.025	0.0273	109.	67.7-131	WG702041
Vinyl chloride	mg/kg	.025	0.0263	105.	66.7-130	WG702041
Xylenes, Total	mg/kg	.075	0.0780	104.	78.8-121	WG702041
4-Bromofluorobenzene				104.0	71-126	WG702041
Dibromofluoromethane				103.0	78.3-121	WG702041
Toluene-d8				108.0	88.5-111	WG702041
a,a,a-Trifluorotoluene				105.0	85-114	WG702041
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0278	111.	74.2-124	WG702037
1,1,1-Trichloroethane	mg/l	.025	0.0266	106.	73.2-123	WG702037
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0266	106.	70.7-122	WG702037
1,1,2-Trichloroethane	mg/l	.025	0.0268	107.	77.7-118	WG702037
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0282	113.	67.2-143	WG702037
1,1-Dichloroethane	mg/l	.025	0.0269	107.	70.7-126	WG702037
1,1-Dichloroethene	mg/l	.025	0.0276	110.	67.8-129	WG702037
1,1-Dichloropropene	mg/l	.025	0.0258	103.	73.1-125	WG702037
1,2,3-Trichlorobenzene	mg/l	.025	0.0293	117.	64.9-135	WG702037
1,2,3-Trichloropropane	mg/l	.025	0.0270	108.	71.8-121	WG702037
1,2,3-Trimethylbenzene	mg/l	.025	0.0232	92.8	72.3-116	WG702037
1,2,4-Trichlorobenzene	mg/l	.025	0.0305	122.	69.7-136	WG702037
1,2,4-Trimethylbenzene	mg/l	.025	0.0277	111.	75-123	WG702037
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0282	113.	65.4-128	WG702037
1,2-Dibromoethane	mg/l	.025	0.0269	108.	76.6-121	WG702037
1,2-Dichlorobenzene	mg/l	.025	0.0269	108.	78.4-117	WG702037
1,2-Dichloroethane	mg/l	.025	0.0255	102.	68.8-124	WG702037
1,2-Dichloropropane	mg/l	.025	0.0265	106.	76.5-119	WG702037
1,3,5-Trimethylbenzene	mg/l	.025	0.0276	110.	75.6-124	WG702037
1,3-Dichlorobenzene	mg/l	.025	0.0277	111.	70.8-128	WG702037
1,3-Dichloropropane	mg/l	.025	0.0265	106.	77.4-117	WG702037

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Quality Assurance Report
Level II

L678609

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,4-Dichlorobenzene	mg/l	.025	0.0267	107.	78.8-115	WG702037
2,2-Dichloropropane	mg/l	.025	0.0286	114.	62.4-133	WG702037
2-Butanone (MEK)	mg/l	.125	0.107	85.3	55-149	WG702037
2-Chloroethyl vinyl ether	mg/l	.125	0.143	114.	43.8-150	WG702037
2-Chlorotoluene	mg/l	.025	0.0257	103.	74.7-122	WG702037
4-Chlorotoluene	mg/l	.025	0.0274	110.	77.5-120	WG702037
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.140	112.	70.5-133	WG702037
Acetone	mg/l	.125	0.0798	63.8	35.6-163	WG702037
Acrolein	mg/l	.125	0.118	94.6	10-190	WG702037
Acrylonitrile	mg/l	.125	0.132	106.	55.2-130	WG702037
Benzene	mg/l	.025	0.0245	98.1	74.8-121	WG702037
Bromobenzene	mg/l	.025	0.0267	107.	77.5-116	WG702037
Bromodichloromethane	mg/l	.025	0.0257	103.	75.1-116	WG702037
Bromoform	mg/l	.025	0.0278	111.	67.5-130	WG702037
Bromomethane	mg/l	.025	0.0234	93.5	49.9-162	WG702037
Carbon tetrachloride	mg/l	.025	0.0270	108.	70.2-123	WG702037
Chlorobenzene	mg/l	.025	0.0268	107.	78.1-119	WG702037
Chlorodibromomethane	mg/l	.025	0.0268	107.	74-121	WG702037
Chloroethane	mg/l	.025	0.0246	98.5	61.7-135	WG702037
Chloroform	mg/l	.025	0.0259	104.	76-121	WG702037
Chloromethane	mg/l	.025	0.0220	87.9	61.5-129	WG702037
cis-1,2-Dichloroethene	mg/l	.025	0.0264	106.	76-119	WG702037
cis-1,3-Dichloropropene	mg/l	.025	0.0275	110.	78.2-120	WG702037
Di-isopropyl ether	mg/l	.025	0.0262	105.	65.6-132	WG702037
Dibromomethane	mg/l	.025	0.0273	109.	79.5-118	WG702037
Dichlorodifluoromethane	mg/l	.025	0.0230	91.9	54.8-135	WG702037
Ethylbenzene	mg/l	.025	0.0277	111.	78.8-122	WG702037
Hexachloro-1,3-butadiene	mg/l	.025	0.0272	109.	64.7-129	WG702037
Isopropylbenzene	mg/l	.025	0.0291	117.	78.6-132	WG702037
Methyl tert-butyl ether	mg/l	.025	0.0258	103.	71.2-126	WG702037
Methylene Chloride	mg/l	.025	0.0245	98.2	70.3-120	WG702037
n-Butylbenzene	mg/l	.025	0.0281	112.	76.2-126	WG702037
n-Propylbenzene	mg/l	.025	0.0277	111.	78.2-122	WG702037
Naphthalene	mg/l	.025	0.0289	115.	68.4-128	WG702037
p-Isopropyltoluene	mg/l	.025	0.0286	115.	74-131	WG702037
sec-Butylbenzene	mg/l	.025	0.0282	113.	74.4-127	WG702037
Styrene	mg/l	.025	0.0285	114.	80.4-126	WG702037
tert-Butylbenzene	mg/l	.025	0.0284	114.	75.3-126	WG702037
Tetrachloroethene	mg/l	.025	0.0270	108.	72.6-126	WG702037
Toluene	mg/l	.025	0.0261	104.	79.7-116	WG702037
trans-1,2-Dichloroethene	mg/l	.025	0.0251	100.	72.6-121	WG702037
trans-1,3-Dichloropropene	mg/l	.025	0.0262	105.	74.3-123	WG702037
Trichloroethene	mg/l	.025	0.0265	106.	77.7-118	WG702037
Trichlorofluoromethane	mg/l	.025	0.0260	104.	63.5-135	WG702037
Vinyl chloride	mg/l	.025	0.0235	94.0	65.9-128	WG702037
Xylenes, Total	mg/l	.075	0.0818	109.	78.7-121	WG702037
4-Bromofluorobenzene				106.0	71-126	WG702037
Dibromofluoromethane				100.0	78.3-121	WG702037
Toluene-d8				107.0	88.5-111	WG702037
a,a,a-Trifluorotoluene				109.0	85-114	WG702037
1,2,4-Trichlorobenzene	mg/kg	.333	0.229	68.7	39.8-100	WG702394
2,4,6-Trichlorophenol	mg/kg	.333	0.266	79.8	44.4-108	WG702394
2,4-Dichlorophenol	mg/kg	.333	0.247	74.3	46.2-109	WG702394
2,4-Dimethylphenol	mg/kg	.333	0.246	73.8	42.2-110	WG702394
2,4-Dinitrophenol	mg/kg	.333	0.171	51.3	10-105	WG702394
2,4-Dinitrotoluene	mg/kg	.333	0.294	88.3	53-112	WG702394
2,6-Dinitrotoluene	mg/kg	.333	0.302	90.8	51.6-110	WG702394

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
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Quality Assurance Report
Level II

L678609

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
2-Chloronaphthalene	mg/kg	.333	0.270	81.2	47.1-105	WG702394
2-Chlorophenol	mg/kg	.333	0.257	77.1	40.8-103	WG702394
2-Nitrophenol	mg/kg	.333	0.293	87.9	44.2-113	WG702394
3,3-Dichlorobenzidine	mg/kg	.333	0.203	61.0	21-101	WG702394
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.241	72.3	23.1-119	WG702394
4-Bromophenyl-phenylether	mg/kg	.333	0.268	80.6	51.4-110	WG702394
4-Chloro-3-methylphenol	mg/kg	.333	0.272	81.8	51.1-113	WG702394
4-Chlorophenyl-phenylether	mg/kg	.333	0.262	78.7	48.1-108	WG702394
4-Nitrophenol	mg/kg	.333	0.266	79.9	34.8-109	WG702394
Acenaphthene	mg/kg	.333	0.269	80.8	48.9-107	WG702394
Acenaphthylene	mg/kg	.333	0.274	82.2	49.2-111	WG702394
Anthracene	mg/kg	.333	0.275	82.6	52-112	WG702394
Benzidine	mg/kg	.333	0.00427	1.28	0-48	WG702394
Benzo(a)anthracene	mg/kg	.333	0.259	77.7	52.3-106	WG702394
Benzo(a)pyrene	mg/kg	.333	0.253	76.1	51.9-106	WG702394
Benzo(b)fluoranthene	mg/kg	.333	0.280	84.2	51.3-106	WG702394
Benzo(g,h,i)perylene	mg/kg	.333	0.283	85.1	45.8-108	WG702394
Benzo(k)fluoranthene	mg/kg	.333	0.282	84.6	52.9-107	WG702394
Benzylbutyl phthalate	mg/kg	.333	0.279	83.8	47.5-115	WG702394
Bis(2-chlorethoxy)methane	mg/kg	.333	0.239	71.9	44.9-108	WG702394
Bis(2-chloroethyl)ether	mg/kg	.333	0.241	72.2	32.5-112	WG702394
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.243	73.0	40.4-99	WG702394
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.277	83.2	48.1-116	WG702394
Chrysene	mg/kg	.333	0.271	81.5	54.4-110	WG702394
Di-n-butyl phthalate	mg/kg	.333	0.263	78.9	49.7-113	WG702394
Di-n-octyl phthalate	mg/kg	.333	0.292	87.7	49.6-112	WG702394
Dibenz(a,h)anthracene	mg/kg	.333	0.283	85.1	45.7-111	WG702394
Diethyl phthalate	mg/kg	.333	0.277	83.2	52-112	WG702394
Dimethyl phthalate	mg/kg	.333	0.281	84.5	51.4-108	WG702394
Fluoranthene	mg/kg	.333	0.249	74.7	53.7-110	WG702394
Fluorene	mg/kg	.333	0.267	80.1	51.1-109	WG702394
Hexachloro-1,3-butadiene	mg/kg	.333	0.233	70.1	41.5-112	WG702394
Hexachlorobenzene	mg/kg	.333	0.264	79.1	43.2-104	WG702394
Hexachlorocyclopentadiene	mg/kg	.333	0.184	55.3	13.5-123	WG702394
Hexachloroethane	mg/kg	.333	0.250	75.2	36.2-103	WG702394
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.281	84.4	47.5-109	WG702394
Isophorone	mg/kg	.333	0.270	81.0	28.8-104	WG702394
n-Nitrosodi-n-propylamine	mg/kg	.333	0.239	71.6	43.3-109	WG702394
n-Nitrosodimethylamine	mg/kg	.333	0.216	64.9	18.1-122	WG702394
n-Nitrosodiphenylamine	mg/kg	.333	0.255	76.7	48.8-107	WG702394
Naphthalene	mg/kg	.333	0.241	72.3	43.4-103	WG702394
Nitrobenzene	mg/kg	.333	0.265	79.5	40.7-109	WG702394
Pentachlorophenol	mg/kg	.333	0.229	68.7	16.2-102	WG702394
Phenanthrene	mg/kg	.333	0.287	86.1	51.6-107	WG702394
Phenol	mg/kg	.333	0.256	76.9	41.5-106	WG702394
Pyrene	mg/kg	.333	0.268	80.6	47.1-108	WG702394
2,4,6-Tribromophenol				94.70	21.6-142	WG702394
2-Fluorobiphenyl				80.20	34.9-129	WG702394
2-Fluorophenol				76.20	21.1-116	WG702394
Nitrobenzene-d5				76.00	21.9-129	WG702394
Phenol-d5				76.90	26.3-121	WG702394
p-Terphenyl-d14				69.40	21.5-128	WG702394
Antimony	mg/kg	113	68.1	60.0	0.88-223	WG702129
Arsenic	mg/kg	237	243.	103.	83.1-117	WG702129
Beryllium	mg/kg	93.3	101.	108.	83.3-117	WG702129
Cadmium	mg/kg	191	193.	101.	83.2-117	WG702129
Chromium	mg/kg	128	127.	99.0	81.3-118	WG702129

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Quality Assurance Report
Level II

L678609

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Copper	mg/kg	123	138.	113.	83.7-116	WG702129
Lead	mg/kg	103	99.3	96.0	83.1-117	WG702129
Nickel	mg/kg	118	125.	106.	82-118	WG702129
Silver	mg/kg	47.3	48.6	103.	66.2-134	WG702129
Thallium	mg/kg	158	146.	92.0	81-119	WG702129
Zinc	mg/kg	183	186.	102.	82-118	WG702129
Selenium	mg/kg	110	115.	105.	78.7-122	WG702129
PCB 1016	mg/kg	.167	0.128	76.6	70-130	WG702070
PCB 1260	mg/kg	.167	0.154	92.0	70-130	WG702070
Decachlorobiphenyl				93.50	21-147	WG702070
Tetrachloro-m-xylene				81.60	35-130	WG702070

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/kg	0.0260	0.0257	104.	72.9-124	1.34	20	WG702041
1,1,1-Trichloroethane	mg/kg	0.0262	0.0269	105.	73.7-124	2.59	20	WG702041
1,1,2,2-Tetrachloroethane	mg/kg	0.0251	0.0250	100.	69.4-122	0.460	20	WG702041
1,1,2-Trichloroethane	mg/kg	0.0255	0.0253	102.	79.1-118	0.860	20	WG702041
1,1-Dichloroethane	mg/kg	0.0269	0.0280	107.	75-124	3.98	20	WG702041
1,1-Dichloroethene	mg/kg	0.0286	0.0296	114.	70.4-129	3.52	20	WG702041
1,1-Dichloropropene	mg/kg	0.0262	0.0273	105.	74.9-124	3.96	20	WG702041
1,2,3-Trichlorobenzene	mg/kg	0.0262	0.0258	105.	69.3-131	1.29	20	WG702041
1,2,3-Trichloropropane	mg/kg	0.0256	0.0253	102.	71.4-123	1.40	20	WG702041
1,2,4-Trichlorobenzene	mg/kg	0.0278	0.0276	111.	71.9-137	0.600	20	WG702041
1,2,4-Trimethylbenzene	mg/kg	0.0259	0.0261	103.	75.5-122	0.830	20	WG702041
1,2-Dibromo-3-Chloropropane	mg/kg	0.0260	0.0256	104.	62.8-133	1.54	20	WG702041
1,2-Dibromoethane	mg/kg	0.0253	0.0252	101.	78.6-120	0.320	20	WG702041
1,2-Dichlorobenzene	mg/kg	0.0260	0.0260	104.	78.3-118	0.0700	20	WG702041
1,2-Dichloroethane	mg/kg	0.0259	0.0265	104.	70.1-124	2.35	20	WG702041
1,2-Dichloropropane	mg/kg	0.0260	0.0267	104.	77.9-119	2.63	20	WG702041
1,3,5-Trimethylbenzene	mg/kg	0.0262	0.0263	105.	75.9-124	0.380	20	WG702041
1,3-Dichlorobenzene	mg/kg	0.0258	0.0257	103.	72-126	0.210	20	WG702041
1,3-Dichloropropane	mg/kg	0.0249	0.0251	100.	79.1-117	0.900	20	WG702041
1,4-Dichlorobenzene	mg/kg	0.0256	0.0257	102.	78.3-117	0.410	20	WG702041
2,2-Dichloropropane	mg/kg	0.0281	0.0287	112.	61.3-136	2.08	20	WG702041
2-Butanone (MEK)	mg/kg	0.103	0.107	83.0	53.7-153	3.55	21.2	WG702041
2-Chloroethyl vinyl ether	mg/kg	0.140	0.140	112.	37.7-157	0.210	20	WG702041
2-Chlorotoluene	mg/kg	0.0242	0.0244	97.0	75.6-121	0.840	20	WG702041
4-Chlorotoluene	mg/kg	0.0259	0.0260	104.	77.3-120	0.270	20	WG702041
4-Methyl-2-pentanone (MIBK)	mg/kg	0.137	0.135	109.	70.4-137	1.02	20	WG702041
Acetone	mg/kg	0.0818	0.0855	65.0	35.1-175	4.34	26.1	WG702041
Acrylonitrile	mg/kg	0.129	0.132	103.	56.4-128	1.93	20	WG702041
Benzene	mg/kg	0.0252	0.0258	101.	77.1-121	2.31	20	WG702041
Bromobenzene	mg/kg	0.0260	0.0258	104.	78.2-115	0.670	20	WG702041
Bromodichloromethane	mg/kg	0.0251	0.0256	100.	74.9-115	2.08	20	WG702041
Bromoform	mg/kg	0.0258	0.0256	103.	65.9-132	0.610	20	WG702041
Bromomethane	mg/kg	0.0260	0.0286	104.	48.7-165	9.53	20	WG702041
Carbon tetrachloride	mg/kg	0.0266	0.0274	106.	70-124	3.04	20	WG702041
Chlorobenzene	mg/kg	0.0251	0.0255	100.	79.1-119	1.24	20	WG702041
Chlorodibromomethane	mg/kg	0.0249	0.0248	100.	73.5-121	0.480	20	WG702041
Chloroethane	mg/kg	0.0264	0.0271	105.	66.2-132	2.70	20	WG702041
Chloroform	mg/kg	0.0259	0.0264	104.	76.7-122	1.97	20	WG702041
Chloromethane	mg/kg	0.0244	0.0249	97.0	63.4-131	2.24	20	WG702041
cis-1,2-Dichloroethene	mg/kg	0.0260	0.0264	104.	78.2-119	1.51	20	WG702041
cis-1,3-Dichloropropene	mg/kg	0.0261	0.0269	104.	79.6-120	3.12	20	WG702041
Di-isopropyl ether	mg/kg	0.0264	0.0273	105.	70.4-133	3.65	20	WG702041

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Quality Assurance Report
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January 24, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Dibromomethane	mg/kg	0.0267	0.0267	107.	79.4-120	0.120	20	WG702041
Dichlorodifluoromethane	mg/kg	0.0253	0.0263	101.	57.1-137	3.88	20	WG702041
Ethylbenzene	mg/kg	0.0261	0.0260	104.	79.7-122	0.660	20	WG702041
Hexachloro-1,3-butadiene	mg/kg	0.0243	0.0244	97.0	68.2-123	0.360	20	WG702041
Isopropylbenzene	mg/kg	0.0273	0.0278	109.	80-135	1.99	20	WG702041
Methyl tert-butyl ether	mg/kg	0.0255	0.0257	102.	73-129	0.490	20	WG702041
Methylene Chloride	mg/kg	0.0249	0.0259	99.0	72.6-120	3.99	20	WG702041
n-Butylbenzene	mg/kg	0.0272	0.0277	109.	77.5-126	1.96	20	WG702041
n-Propylbenzene	mg/kg	0.0262	0.0263	105.	77.9-123	0.630	20	WG702041
Naphthalene	mg/kg	0.0265	0.0257	106.	69.8-128	2.93	20	WG702041
p-Isopropyltoluene	mg/kg	0.0265	0.0271	106.	75.8-129	2.46	20	WG702041
sec-Butylbenzene	mg/kg	0.0264	0.0264	106.	75.8-126	0.0300	20	WG702041
Styrene	mg/kg	0.0272	0.0265	109.	82.4-126	2.69	20	WG702041
tert-Butylbenzene	mg/kg	0.0262	0.0260	105.	76.4-126	0.690	20	WG702041
Tetrachloroethene	mg/kg	0.0253	0.0256	101.	73.9-125	1.35	20	WG702041
Toluene	mg/kg	0.0251	0.0258	100.	79.7-118	2.90	20	WG702041
trans-1,2-Dichloroethene	mg/kg	0.0252	0.0264	101.	73.8-122	4.93	20	WG702041
trans-1,3-Dichloropropene	mg/kg	0.0251	0.0253	100.	75.9-124	0.530	20	WG702041
Trichloroethene	mg/kg	0.0257	0.0257	103.	77.9-118	0.0100	20	WG702041
Trichlorofluoromethane	mg/kg	0.0268	0.0273	107.	67.7-131	1.85	20	WG702041
Vinyl chloride	mg/kg	0.0254	0.0263	102.	66.7-130	3.36	20	WG702041
Xylenes, Total	mg/kg	0.0778	0.0780	104.	78.8-121	0.300	20	WG702041
4-Bromofluorobenzene				105.0	71-126			WG702041
Dibromofluoromethane				103.0	78.3-121			WG702041
Toluene-d8				107.0	88.5-111			WG702041
a,a,a-Trifluorotoluene				104.0	85-114			WG702041
1,1,1,2-Tetrachloroethane	mg/l	0.0275	0.0278	110.	74.2-124	1.15	20	WG702037
1,1,1-Trichloroethane	mg/l	0.0265	0.0266	106.	73.2-123	0.410	20	WG702037
1,1,2,2-Tetrachloroethane	mg/l	0.0271	0.0266	108.	70.7-122	1.87	20	WG702037
1,1,2-Trichloroethane	mg/l	0.0272	0.0268	109.	77.7-118	1.55	20	WG702037
1,1,2-Trichlorotrifluoroethane	mg/l	0.0274	0.0282	109.	67.2-143	3.20	20	WG702037
1,1-Dichloroethane	mg/l	0.0262	0.0269	105.	70.7-126	2.58	20	WG702037
1,1-Dichloroethene	mg/l	0.0266	0.0276	106.	67.8-129	3.70	20	WG702037
1,1-Dichloropropene	mg/l	0.0252	0.0258	101.	73.1-125	2.29	20	WG702037
1,2,3-Trichlorobenzene	mg/l	0.0303	0.0293	121.	64.9-135	3.52	20	WG702037
1,2,3-Trichloropropane	mg/l	0.0278	0.0270	111.	71.8-121	2.71	20	WG702037
1,2,3-Trimethylbenzene	mg/l	0.0234	0.0232	93.0	72.3-116	0.730	20	WG702037
1,2,4-Trichlorobenzene	mg/l	0.0313	0.0305	125.	69.7-136	2.41	20	WG702037
1,2,4-Trimethylbenzene	mg/l	0.0277	0.0277	111.	75-123	0.0500	20	WG702037
1,2-Dibromo-3-Chloropropane	mg/l	0.0295	0.0282	118.	65.4-128	4.25	20	WG702037
1,2-Dibromoethane	mg/l	0.0274	0.0269	110.	76.6-121	1.99	20	WG702037
1,2-Dichlorobenzene	mg/l	0.0273	0.0269	109.	78.4-117	1.45	20	WG702037
1,2-Dichloroethane	mg/l	0.0253	0.0255	101.	68.8-124	0.950	20	WG702037
1,2-Dichloropropane	mg/l	0.0262	0.0265	105.	76.5-119	1.34	20	WG702037
1,3,5-Trimethylbenzene	mg/l	0.0274	0.0276	110.	75.6-124	0.560	20	WG702037
1,3-Dichlorobenzene	mg/l	0.0280	0.0277	112.	70.8-128	1.00	20	WG702037
1,3-Dichloropropane	mg/l	0.0265	0.0265	106.	77.4-117	0.200	20	WG702037
1,4-Dichlorobenzene	mg/l	0.0267	0.0267	107.	78.8-115	0.180	20	WG702037
2,2-Dichloropropane	mg/l	0.0280	0.0286	112.	62.4-133	2.21	20	WG702037
2-Butanone (MEK)	mg/l	0.108	0.107	86.0	55-149	0.910	20	WG702037
2-Chloroethyl vinyl ether	mg/l	0.145	0.143	116.	43.8-150	1.27	20	WG702037
2-Chlorotoluene	mg/l	0.0254	0.0257	102.	74.7-122	1.20	20	WG702037
4-Chlorotoluene	mg/l	0.0273	0.0274	109.	77.5-120	0.380	20	WG702037
4-Methyl-2-pentanone (MIBK)	mg/l	0.142	0.140	114.	70.5-133	1.49	20	WG702037
Acetone	mg/l	0.0837	0.0798	67.0	35.6-163	4.79	23.9	WG702037
Acrolein	mg/l	0.117	0.118	94.0	10-190	1.00	28.1	WG702037
Acrylonitrile	mg/l	0.134	0.132	107.	55.2-130	1.18	20	WG702037

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678609

January 24, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0244	0.0245	98.0	74.8-121	0.410	20	WG702037
Bromobenzene	mg/l	0.0269	0.0267	108.	77.5-116	0.790	20	WG702037
Bromodichloromethane	mg/l	0.0258	0.0257	103.	75.1-116	0.0300	20	WG702037
Bromoform	mg/l	0.0286	0.0278	114.	67.5-130	2.84	20	WG702037
Bromomethane	mg/l	0.0222	0.0234	89.0	49.9-162	4.98	20	WG702037
Carbon tetrachloride	mg/l	0.0267	0.0270	107.	70.2-123	0.940	20	WG702037
Chlorobenzene	mg/l	0.0264	0.0268	106.	78.1-119	1.58	20	WG702037
Chlorodibromomethane	mg/l	0.0272	0.0268	109.	74-121	1.61	20	WG702037
Chloroethane	mg/l	0.0234	0.0246	94.0	61.7-135	5.16	20	WG702037
Chloroform	mg/l	0.0258	0.0259	103.	76-121	0.690	20	WG702037
Chloromethane	mg/l	0.0213	0.0220	85.0	61.5-129	3.36	20	WG702037
cis-1,2-Dichloroethene	mg/l	0.0259	0.0264	104.	76-119	1.87	20	WG702037
cis-1,3-Dichloropropene	mg/l	0.0270	0.0275	108.	78.2-120	2.11	20	WG702037
Di-isopropyl ether	mg/l	0.0257	0.0262	103.	65.6-132	1.63	20	WG702037
Dibromomethane	mg/l	0.0268	0.0273	107.	79.5-118	1.71	20	WG702037
Dichlorodifluoromethane	mg/l	0.0218	0.0230	87.0	54.8-135	5.43	20	WG702037
Ethylbenzene	mg/l	0.0272	0.0277	109.	78.8-122	1.56	20	WG702037
Hexachloro-1,3-butadiene	mg/l	0.0277	0.0272	111.	64.7-129	1.76	20	WG702037
Isopropylbenzene	mg/l	0.0291	0.0291	116.	78.6-132	0.130	20	WG702037
Methyl tert-butyl ether	mg/l	0.0260	0.0258	104.	71.2-126	0.810	20	WG702037
Methylene Chloride	mg/l	0.0245	0.0245	98.0	70.3-120	0.0900	20	WG702037
n-Butylbenzene	mg/l	0.0279	0.0281	112.	76.2-126	0.480	20	WG702037
n-Propylbenzene	mg/l	0.0273	0.0277	109.	78.2-122	1.45	20	WG702037
Naphthalene	mg/l	0.0301	0.0289	120.	68.4-128	4.28	20	WG702037
p-Isopropyltoluene	mg/l	0.0287	0.0286	115.	74-131	0.360	20	WG702037
sec-Butylbenzene	mg/l	0.0278	0.0282	111.	74.4-127	1.23	20	WG702037
Styrene	mg/l	0.0286	0.0285	114.	80.4-126	0.450	20	WG702037
tert-Butylbenzene	mg/l	0.0282	0.0284	113.	75.3-126	0.770	20	WG702037
Tetrachloroethene	mg/l	0.0269	0.0270	108.	72.6-126	0.410	20	WG702037
Toluene	mg/l	0.0260	0.0261	104.	79.7-116	0.560	20	WG702037
trans-1,2-Dichloroethene	mg/l	0.0249	0.0251	100.	72.6-121	0.590	20	WG702037
trans-1,3-Dichloropropene	mg/l	0.0263	0.0262	105.	74.3-123	0.0100	20	WG702037
Trichloroethene	mg/l	0.0265	0.0265	106.	77.7-118	0.0500	20	WG702037
Trichlorofluoromethane	mg/l	0.0255	0.0260	102.	63.5-135	2.03	20	WG702037
Vinyl chloride	mg/l	0.0230	0.0235	92.0	65.9-128	2.14	20	WG702037
Xylenes, Total	mg/l	0.0824	0.0818	110.	78.7-121	0.700	20	WG702037
4-Bromofluorobenzene				106.0	71-126			WG702037
Dibromofluoromethane				98.40	78.3-121			WG702037
Toluene-d8				106.0	88.5-111			WG702037
a,a,a-Trifluorotoluene				107.0	85-114			WG702037
1,2,4-Trichlorobenzene	mg/kg	0.231	0.229	69.0	39.8-100	0.740	20	WG702394
2,4,6-Trichlorophenol	mg/kg	0.267	0.266	80.0	44.4-108	0.540	20	WG702394
2,4-Dichlorophenol	mg/kg	0.255	0.247	76.0	46.2-109	2.94	20	WG702394
2,4-Dimethylphenol	mg/kg	0.246	0.246	74.0	42.2-110	0.180	20	WG702394
2,4-Dinitrophenol	mg/kg	0.171	0.171	51.0	10-105	0.250	36.5	WG702394
2,4-Dinitrotoluene	mg/kg	0.297	0.294	89.0	53-112	1.20	20	WG702394
2,6-Dinitrotoluene	mg/kg	0.301	0.302	90.0	51.6-110	0.290	20	WG702394
2-Chloronaphthalene	mg/kg	0.277	0.270	83.0	47.1-105	2.50	20	WG702394
2-Chlorophenol	mg/kg	0.242	0.257	72.0	40.8-103	6.06	20	WG702394
2-Nitrophenol	mg/kg	0.293	0.293	88.0	44.2-113	0.0700	20.9	WG702394
3,3-Dichlorobenzidine	mg/kg	0.210	0.203	63.0	21-101	3.23	22	WG702394
4,6-Dinitro-2-methylphenol	mg/kg	0.229	0.241	69.0	23.1-119	4.79	23.7	WG702394
4-Bromophenyl-phenylether	mg/kg	0.272	0.268	82.0	51.4-110	1.26	20	WG702394
4-Chloro-3-methylphenol	mg/kg	0.291	0.272	87.0	51.1-113	6.68	20	WG702394
4-Chlorophenyl-phenylether	mg/kg	0.276	0.262	83.0	48.1-108	5.14	20	WG702394
4-Nitrophenol	mg/kg	0.281	0.266	84.0	34.8-109	5.63	20	WG702394
Acenaphthene	mg/kg	0.267	0.269	80.0	48.9-107	0.640	20	WG702394

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Quality Assurance Report
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L678609

January 24, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Acenaphthylene	mg/kg	0.276	0.274	83.0	49.2-111	0.780	20	WG702394
Anthracene	mg/kg	0.285	0.275	86.0	52-112	3.63	20	WG702394
Benzidine	mg/kg	0.00499	0.00427	1.00	0-48	15.5	40	WG702394
Benzo(a)anthracene	mg/kg	0.264	0.259	79.0	52.3-106	2.05	20	WG702394
Benzo(a)pyrene	mg/kg	0.256	0.253	77.0	51.9-106	0.880	20	WG702394
Benzo(b)fluoranthene	mg/kg	0.293	0.280	88.0	51.3-106	4.48	20	WG702394
Benzo(g,h,i)perylene	mg/kg	0.277	0.283	83.0	45.8-108	2.32	20	WG702394
Benzo(k)fluoranthene	mg/kg	0.276	0.282	83.0	52.9-107	2.12	20	WG702394
Benzylbutyl phthalate	mg/kg	0.284	0.279	85.0	47.5-115	1.90	20	WG702394
Bis(2-chlorethoxy)methane	mg/kg	0.250	0.239	75.0	44.9-108	4.38	20	WG702394
Bis(2-chloroethyl)ether	mg/kg	0.225	0.241	68.0	32.5-112	6.66	26	WG702394
Bis(2-chloroisopropyl)ether	mg/kg	0.237	0.243	71.0	40.4-99	2.72	20.7	WG702394
Bis(2-ethylhexyl)phthalate	mg/kg	0.275	0.277	82.0	48.1-116	0.740	20.5	WG702394
Chrysene	mg/kg	0.269	0.271	81.0	54.4-110	0.800	20	WG702394
Di-n-butyl phthalate	mg/kg	0.257	0.263	77.0	49.7-113	2.22	20	WG702394
Di-n-octyl phthalate	mg/kg	0.290	0.292	87.0	49.6-112	0.880	22	WG702394
Dibenz(a,h)anthracene	mg/kg	0.278	0.283	83.0	45.7-111	1.96	20	WG702394
Diethyl phthalate	mg/kg	0.281	0.277	84.0	52-112	1.35	20	WG702394
Dimethyl phthalate	mg/kg	0.287	0.281	86.0	51.4-108	2.11	20	WG702394
Fluoranthene	mg/kg	0.251	0.249	75.0	53.7-110	0.790	20	WG702394
Fluorene	mg/kg	0.280	0.267	84.0	51.1-109	4.78	20	WG702394
Hexachloro-1,3-butadiene	mg/kg	0.228	0.233	68.0	41.5-112	2.14	20	WG702394
Hexachlorobenzene	mg/kg	0.274	0.264	82.0	43.2-104	4.03	20.1	WG702394
Hexachlorocyclopentadiene	mg/kg	0.185	0.184	56.0	13.5-123	0.640	20.7	WG702394
Hexachloroethane	mg/kg	0.238	0.250	71.0	36.2-103	5.10	22.7	WG702394
Indeno(1,2,3-cd)pyrene	mg/kg	0.278	0.281	83.0	47.5-109	1.29	20	WG702394
Isophorone	mg/kg	0.275	0.270	82.0	28.8-104	1.82	20	WG702394
n-Nitrosodi-n-propylamine	mg/kg	0.243	0.239	73.0	43.3-109	1.70	20	WG702394
n-Nitrosodimethylamine	mg/kg	0.199	0.216	60.0	18.1-122	8.37	23.5	WG702394
n-Nitrosodiphenylamine	mg/kg	0.266	0.255	80.0	48.8-107	3.93	20	WG702394
Naphthalene	mg/kg	0.240	0.241	72.0	43.4-103	0.290	20	WG702394
Nitrobenzene	mg/kg	0.267	0.265	80.0	40.7-109	0.890	21	WG702394
Pentachlorophenol	mg/kg	0.226	0.229	68.0	16.2-102	1.38	22.9	WG702394
Phenanthrene	mg/kg	0.281	0.287	84.0	51.6-107	2.04	20	WG702394
Phenol	mg/kg	0.249	0.256	75.0	41.5-106	2.75	20	WG702394
Pyrene	mg/kg	0.271	0.268	81.0	47.1-108	0.780	20	WG702394
2,4,6-Tribromophenol				93.90	21.6-142			WG702394
2-Fluorobiphenyl				78.10	34.9-129			WG702394
2-Fluorophenol				68.20	21.1-116			WG702394
Nitrobenzene-d5				76.80	21.9-129			WG702394
Phenol-d5				74.80	26.3-121			WG702394
p-Terphenyl-d14				68.50	21.5-128			WG702394
PCB 1016	mg/kg	0.134	0.128	80.0	70-130	4.84	20	WG702070
PCB 1260	mg/kg	0.164	0.154	98.0	70-130	6.30	20	WG702070
Decachlorobiphenyl				98.30	21-147			WG702070
Tetrachloro-m-xylene				78.30	35-130			WG702070

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/kg	0.279	0.0330	.25	98.0	80-120	L678607-05	WG702044
1,1,1,2-Tetrachloroethane	mg/kg	0.114	0.0	.025	92.0	64-128	L678551-01	WG702041
1,1,1-Trichloroethane	mg/kg	0.121	0.0	.025	96.0	58.7-134	L678551-01	WG702041
1,1,2,2-Tetrachloroethane	mg/kg	0.107	0.0	.025	86.0	56-132	L678551-01	WG702041
1,1,2-Trichloroethane	mg/kg	0.112	0.0	.025	90.0	66.3-125	L678551-01	WG702041

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Level II

L678609

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1-Dichloroethane	mg/kg	0.125	0.0	.025	100.	58.5-132	L678551-01	WG702041
1,1-Dichloroethene	mg/kg	0.134	0.0	.025	110.	51.1-140	L678551-01	WG702041
1,1-Dichloropropene	mg/kg	0.122	0.0	.025	98.0	57.3-136	L678551-01	WG702041
1,2,3-Trichlorobenzene	mg/kg	0.108	0.0	.025	86.0	59.1-138	L678551-01	WG702041
1,2,3-Trichloropropane	mg/kg	0.111	0.0	.025	89.0	61.4-128	L678551-01	WG702041
1,2,4-Trichlorobenzene	mg/kg	0.113	0.0	.025	90.0	63.6-143	L678551-01	WG702041
1,2,4-Trimethylbenzene	mg/kg	0.115	0.0	.025	92.0	57.4-137	L678551-01	WG702041
1,2-Dibromo-3-Chloropropane	mg/kg	0.111	0.0	.025	89.0	57.3-136	L678551-01	WG702041
1,2-Dibromoethane	mg/kg	0.111	0.0	.025	88.0	67.1-125	L678551-01	WG702041
1,2-Dichlorobenzene	mg/kg	0.111	0.0	.025	89.0	68.2-123	L678551-01	WG702041
1,2-Dichloroethane	mg/kg	0.116	0.0	.025	93.0	60-126	L678551-01	WG702041
1,2-Dichloropropane	mg/kg	0.119	0.0	.025	95.0	64.2-123	L678551-01	WG702041
1,3,5-Trimethylbenzene	mg/kg	0.117	0.0	.025	93.0	63.6-132	L678551-01	WG702041
1,3-Dichlorobenzene	mg/kg	0.110	0.0	.025	88.0	63.1-131	L678551-01	WG702041
1,3-Dichloropropane	mg/kg	0.113	0.0	.025	90.0	67.9-121	L678551-01	WG702041
1,4-Dichlorobenzene	mg/kg	0.111	0.0	.025	89.0	68.6-123	L678551-01	WG702041
2,2-Dichloropropane	mg/kg	0.128	0.0	.025	100.	50.5-144	L678551-01	WG702041
2-Butanone (MEK)	mg/kg	0.536	0.0	.125	86.0	22.4-138	L678551-01	WG702041
2-Chloroethyl vinyl ether	mg/kg	0.610	0.0	.125	98.0	10-155	L678551-01	WG702041
2-Chlorotoluene	mg/kg	0.106	0.0	.025	85.0	63.6-128	L678551-01	WG702041
4-Chlorotoluene	mg/kg	0.114	0.0	.025	91.0	65.7-127	L678551-01	WG702041
4-Methyl-2-pentanone (MIBK)	mg/kg	0.572	0.0	.125	92.0	60.8-140	L678551-01	WG702041
Acetone	mg/kg	0.533	0.00500	.125	84.0	10-130	L678551-01	WG702041
Acrylonitrile	mg/kg	0.557	0.0	.125	89.0	49.4-133	L678551-01	WG702041
Benzene	mg/kg	0.114	0.0	.025	91.0	54.3-133	L678551-01	WG702041
Bromobenzene	mg/kg	0.112	0.0	.025	90.0	63.9-124	L678551-01	WG702041
Bromodichloromethane	mg/kg	0.113	0.0	.025	90.0	63.9-121	L678551-01	WG702041
Bromoform	mg/kg	0.112	0.0	.025	90.0	59.5-134	L678551-01	WG702041
Bromomethane	mg/kg	0.118	0.0	.025	95.0	41.7-155	L678551-01	WG702041
Carbon tetrachloride	mg/kg	0.122	0.0	.025	98.0	55.7-134	L678551-01	WG702041
Chlorobenzene	mg/kg	0.113	0.0	.025	91.0	67-125	L678551-01	WG702041
Chlorodibromomethane	mg/kg	0.110	0.0	.025	88.0	64.3-125	L678551-01	WG702041
Chloroethane	mg/kg	0.120	0.0	.025	96.0	51.5-136	L678551-01	WG702041
Chloroform	mg/kg	0.120	0.0	.025	96.0	63-129	L678551-01	WG702041
Chloromethane	mg/kg	0.111	0.0	.025	89.0	42.4-135	L678551-01	WG702041
cis-1,2-Dichloroethene	mg/kg	0.118	0.0	.025	94.0	59.2-129	L678551-01	WG702041
cis-1,3-Dichloropropene	mg/kg	0.117	0.0	.025	94.0	66.4-125	L678551-01	WG702041
Di-isopropyl ether	mg/kg	0.120	0.0	.025	96.0	56.9-136	L678551-01	WG702041
Dibromomethane	mg/kg	0.115	0.0	.025	92.0	68.2-124	L678551-01	WG702041
Dichlorodifluoromethane	mg/kg	0.116	0.0	.025	93.0	40.6-144	L678551-01	WG702041
Ethylbenzene	mg/kg	0.117	0.0	.025	93.0	61.4-133	L678551-01	WG702041
Hexachloro-1,3-butadiene	mg/kg	0.108	0.0	.025	87.0	55.1-136	L678551-01	WG702041
Isopropylbenzene	mg/kg	0.123	0.0	.025	99.0	66.8-141	L678551-01	WG702041
Methyl tert-butyl ether	mg/kg	0.115	0.0	.025	92.0	57.7-134	L678551-01	WG702041
Methylene Chloride	mg/kg	0.114	0.000675	.025	90.0	58.1-122	L678551-01	WG702041
n-Butylbenzene	mg/kg	0.123	0.0	.025	98.0	62.7-140	L678551-01	WG702041
n-Propylbenzene	mg/kg	0.117	0.0	.025	94.0	10-176	L678551-01	WG702041
Naphthalene	mg/kg	0.109	0.00108	.025	86.0	58-135	L678551-01	WG702041
p-Isopropyltoluene	mg/kg	0.120	0.0	.025	96.0	63.2-139	L678551-01	WG702041
sec-Butylbenzene	mg/kg	0.120	0.0	.025	96.0	62.2-136	L678551-01	WG702041
Styrene	mg/kg	0.120	0.0	.025	96.0	66.8-133	L678551-01	WG702041
tert-Butylbenzene	mg/kg	0.119	0.0	.025	95.0	63.3-134	L678551-01	WG702041
Tetrachloroethene	mg/kg	0.116	0.0	.025	93.0	53-139	L678551-01	WG702041
Toluene	mg/kg	0.115	0.000323	.025	92.0	61.4-130	L678551-01	WG702041
trans-1,2-Dichloroethene	mg/kg	0.119	0.0	.025	95.0	56.5-129	L678551-01	WG702041
trans-1,3-Dichloropropene	mg/kg	0.110	0.0	.025	88.0	64.1-128	L678551-01	WG702041
Trichloroethene	mg/kg	0.116	0.0	.025	93.0	44.1-149	L678551-01	WG702041
Trichlorofluoromethane	mg/kg	0.123	0.0	.025	98.0	49.6-145	L678551-01	WG702041
Vinyl chloride	mg/kg	0.117	0.0	.025	93.0	47.8-137	L678551-01	WG702041

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678609

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Xylenes, Total	mg/kg	0.352	0.000363	.075	94.0	63.3-131	L678551-01	WG702041
4-Bromofluorobenzene					104.0	71-126		WG702041
Dibromofluoromethane					102.0	78.3-121		WG702041
Toluene-d8					105.0	88.5-111		WG702041
a,a,a-Trifluorotoluene					103.0	85-114		WG702041
1,1,1,2-Tetrachloroethane	mg/l	0.0244	0.0	.025	98.0	64-128	L678924-01	WG702037
1,1,1-Trichloroethane	mg/l	0.0238	0.0	.025	95.0	58.7-134	L678924-01	WG702037
1,1,2,2-Tetrachloroethane	mg/l	0.0239	0.0	.025	96.0	56-132	L678924-01	WG702037
1,1,2-Trichloroethane	mg/l	0.0249	0.0	.025	100.	66.3-125	L678924-01	WG702037
1,1,2-Trichlorotrifluoroethane	mg/l	0.0241	0.0	.025	96.0	54.8-154	L678924-01	WG702037
1,1-Dichloroethane	mg/l	0.0238	0.0	.025	95.0	58.5-132	L678924-01	WG702037
1,1-Dichloroethene	mg/l	0.0236	0.0	.025	95.0	51.1-140	L678924-01	WG702037
1,1-Dichloropropene	mg/l	0.0228	0.0	.025	91.0	57.3-136	L678924-01	WG702037
1,2,3-Trichlorobenzene	mg/l	0.0259	0.0	.025	100.	59.1-138	L678924-01	WG702037
1,2,3-Trichloropropane	mg/l	0.0248	0.0	.025	99.0	61.4-128	L678924-01	WG702037
1,2,3-Trimethylbenzene	mg/l	0.0209	0.0	.025	84.0	61.3-122	L678924-01	WG702037
1,2,4-Trichlorobenzene	mg/l	0.0275	0.0	.025	110.	63.6-143	L678924-01	WG702037
1,2,4-Trimethylbenzene	mg/l	0.0239	0.0	.025	96.0	57.4-137	L678924-01	WG702037
1,2-Dibromo-3-Chloropropane	mg/l	0.0266	0.0	.025	110.	57.3-136	L678924-01	WG702037
1,2-Dibromoethane	mg/l	0.0247	0.0	.025	99.0	67.1-125	L678924-01	WG702037
1,2-Dichlorobenzene	mg/l	0.0246	0.0	.025	98.0	68.2-123	L678924-01	WG702037
1,2-Dichloroethane	mg/l	0.0233	0.0	.025	93.0	60-126	L678924-01	WG702037
1,2-Dichloropropane	mg/l	0.0239	0.0	.025	96.0	64.2-123	L678924-01	WG702037
1,3,5-Trimethylbenzene	mg/l	0.0238	0.0	.025	95.0	63.6-132	L678924-01	WG702037
1,3-Dichlorobenzene	mg/l	0.0246	0.0	.025	98.0	63.1-131	L678924-01	WG702037
1,3-Dichloropropane	mg/l	0.0241	0.0	.025	96.0	67.9-121	L678924-01	WG702037
1,4-Dichlorobenzene	mg/l	0.0247	0.0	.025	99.0	68.6-123	L678924-01	WG702037
2,2-Dichloropropane	mg/l	0.0249	0.0	.025	100.	50.5-144	L678924-01	WG702037
2-Butanone (MEK)	mg/l	0.0972	0.000702	.125	77.0	22.4-138	L678924-01	WG702037
2-Chloroethyl vinyl ether	mg/l	0.0599	0.0	.125	48.0	10-155	L678924-01	WG702037
2-Chlorotoluene	mg/l	0.0223	0.0	.025	89.0	63.6-128	L678924-01	WG702037
4-Chlorotoluene	mg/l	0.0242	0.0	.025	97.0	65.7-127	L678924-01	WG702037
4-Methyl-2-pentanone (MIBK)	mg/l	0.131	0.0	.125	100.	60.8-140	L678924-01	WG702037
Acetone	mg/l	0.0625	0.00298	.125	48.0	10-130	L678924-01	WG702037
Acrolein	mg/l	0.125	0.0	.125	100.	10-200	L678924-01	WG702037
Acrylonitrile	mg/l	0.121	0.0	.125	97.0	49.4-133	L678924-01	WG702037
Benzene	mg/l	0.0222	0.0	.025	89.0	54.3-133	L678924-01	WG702037
Bromobenzene	mg/l	0.0233	0.0	.025	93.0	63.9-124	L678924-01	WG702037
Bromodichloromethane	mg/l	0.0234	0.0	.025	94.0	63.9-121	L678924-01	WG702037
Bromoform	mg/l	0.0252	0.0	.025	100.	59.5-134	L678924-01	WG702037
Bromomethane	mg/l	0.0209	0.0	.025	84.0	41.7-155	L678924-01	WG702037
Carbon tetrachloride	mg/l	0.0235	0.0	.025	94.0	55.7-134	L678924-01	WG702037
Chlorobenzene	mg/l	0.0236	0.0	.025	94.0	67-125	L678924-01	WG702037
Chlorodibromomethane	mg/l	0.0245	0.0	.025	98.0	64.3-125	L678924-01	WG702037
Chloroethane	mg/l	0.0212	0.0	.025	85.0	51.5-136	L678924-01	WG702037
Chloroform	mg/l	0.0232	0.0	.025	93.0	63-129	L678924-01	WG702037
Chloromethane	mg/l	0.0186	0.0	.025	74.0	42.4-135	L678924-01	WG702037
cis-1,2-Dichloroethene	mg/l	0.0230	0.0	.025	92.0	59.2-129	L678924-01	WG702037
cis-1,3-Dichloropropene	mg/l	0.0252	0.0	.025	100.	66.4-125	L678924-01	WG702037
Di-isopropyl ether	mg/l	0.0233	0.0	.025	93.0	56.9-136	L678924-01	WG702037
Dibromomethane	mg/l	0.0250	0.0	.025	100.	68.2-124	L678924-01	WG702037
Dichlorodifluoromethane	mg/l	0.0217	0.0	.025	87.0	40.6-144	L678924-01	WG702037
Ethylbenzene	mg/l	0.0239	0.0	.025	95.0	61.4-133	L678924-01	WG702037
Hexachloro-1,3-butadiene	mg/l	0.0239	0.0	.025	96.0	55.1-136	L678924-01	WG702037
Isopropylbenzene	mg/l	0.0251	0.0	.025	100.	66.8-141	L678924-01	WG702037
Methyl tert-butyl ether	mg/l	0.0237	0.0	.025	95.0	57.7-134	L678924-01	WG702037
Methylene Chloride	mg/l	0.0217	0.0	.025	87.0	58.1-122	L678924-01	WG702037

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L678609

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
n-Butylbenzene	mg/l	0.0249	0.0	.025	100.	62.7-140	L678924-01	WG702037
n-Propylbenzene	mg/l	0.0237	0.0	.025	95.0	65.9-131	L678924-01	WG702037
Naphthalene	mg/l	0.0262	0.0	.025	100.	58-135	L678924-01	WG702037
p-Isopropyltoluene	mg/l	0.0250	0.0	.025	100.	63.2-139	L678924-01	WG702037
sec-Butylbenzene	mg/l	0.0241	0.0	.025	96.0	62.2-136	L678924-01	WG702037
Styrene	mg/l	0.0244	0.0	.025	98.0	66.8-133	L678924-01	WG702037
tert-Butylbenzene	mg/l	0.0242	0.0	.025	97.0	63.3-134	L678924-01	WG702037
Tetrachloroethene	mg/l	0.0242	0.0	.025	97.0	53-139	L678924-01	WG702037
Toluene	mg/l	0.0232	0.0	.025	93.0	61.4-130	L678924-01	WG702037
trans-1,2-Dichloroethene	mg/l	0.0217	0.0	.025	87.0	56.5-129	L678924-01	WG702037
trans-1,3-Dichloropropene	mg/l	0.0246	0.0	.025	98.0	64.1-128	L678924-01	WG702037
Trichloroethene	mg/l	0.0238	0.0	.025	95.0	44.1-149	L678924-01	WG702037
Trichlorofluoromethane	mg/l	0.0227	0.0	.025	91.0	49.6-145	L678924-01	WG702037
Vinyl chloride	mg/l	0.0207	0.0	.025	83.0	47.8-137	L678924-01	WG702037
Xylenes, Total	mg/l	0.0726	0.0	.075	97.0	63.3-131	L678924-01	WG702037
4-Bromofluorobenzene					101.0	71-126		WG702037
Dibromofluoromethane					98.10	78.3-121		WG702037
Toluene-d8					107.0	88.5-111		WG702037
a,a,a-Trifluorotoluene					106.0	85-114		WG702037
1,2,4-Trichlorobenzene	mg/kg	0.219	0.0	.333	66.0	36.5-114	L678874-01	WG702394
2,4,6-Trichlorophenol	mg/kg	0.299	0.0	.333	90.0	33.8-133	L678874-01	WG702394
2,4-Dichlorophenol	mg/kg	0.257	0.0	.333	77.0	34.8-134	L678874-01	WG702394
2,4-Dimethylphenol	mg/kg	0.260	0.0	.333	78.0	12.3-149	L678874-01	WG702394
2,4-Dinitrophenol	mg/kg	0.147	0.0	.333	44.0	10-121	L678874-01	WG702394
2,4-Dinitrotoluene	mg/kg	0.306	0.0	.333	92.0	27.8-147	L678874-01	WG702394
2,6-Dinitrotoluene	mg/kg	0.315	0.0	.333	95.0	36.5-137	L678874-01	WG702394
2-Chloronaphthalene	mg/kg	0.278	0.0	.333	83.0	37.5-123	L678874-01	WG702394
2-Chlorophenol	mg/kg	0.231	0.0	.333	69.0	33.2-121	L678874-01	WG702394
2-Nitrophenol	mg/kg	0.269	0.0	.333	81.0	29.5-144	L678874-01	WG702394
3,3-Dichlorobenzidine	mg/kg	0.280	0.0	.333	84.0	10-129	L678874-01	WG702394
4,6-Dinitro-2-methylphenol	mg/kg	0.190	0.0	.333	57.0	10-144	L678874-01	WG702394
4-Bromophenyl-phenylether	mg/kg	0.284	0.0	.333	85.0	39-130	L678874-01	WG702394
4-Chloro-3-methylphenol	mg/kg	0.290	0.0	.333	87.0	27-154	L678874-01	WG702394
4-Chlorophenyl-phenylether	mg/kg	0.287	0.0	.333	86.0	37.9-123	L678874-01	WG702394
4-Nitrophenol	mg/kg	0.313	0.0	.333	94.0	20-133	L678874-01	WG702394
Acenaphthene	mg/kg	0.278	0.0	.333	83.0	32.2-134	L678874-01	WG702394
Acenaphthylene	mg/kg	0.286	0.0	.333	86.0	38.7-129	L678874-01	WG702394
Anthracene	mg/kg	0.285	0.0	.333	86.0	32.3-137	L678874-01	WG702394
Benzidine	mg/kg	0.0172	0.0	.333	5.20	0-49.9	L678874-01	WG702394
Benzo(a)anthracene	mg/kg	0.283	0.0	.333	85.0	33.3-124	L678874-01	WG702394
Benzo(a)pyrene	mg/kg	0.276	0.0	.333	83.0	28.2-128	L678874-01	WG702394
Benzo(b)fluoranthene	mg/kg	0.308	0.0	.333	92.0	23.3-133	L678874-01	WG702394
Benzo(g,h,i)perylene	mg/kg	0.299	0.0	.333	90.0	10-127	L678874-01	WG702394
Benzo(k)fluoranthene	mg/kg	0.296	0.0	.333	89.0	31-129	L678874-01	WG702394
Benzylbutyl phthalate	mg/kg	0.304	0.0	.333	91.0	33.4-128	L678874-01	WG702394
Bis(2-chlorethoxy)methane	mg/kg	0.237	0.0	.333	71.0	35-132	L678874-01	WG702394
Bis(2-chloroethyl)ether	mg/kg	0.214	0.0	.333	64.0	28.8-128	L678874-01	WG702394
Bis(2-chloroisopropyl)ether	mg/kg	0.220	0.0	.333	66.0	31.8-118	L678874-01	WG702394
Bis(2-ethylhexyl)phthalate	mg/kg	0.303	0.0	.333	91.0	21.8-141	L678874-01	WG702394
Chrysene	mg/kg	0.289	0.0	.333	87.0	36.3-129	L678874-01	WG702394
Di-n-butyl phthalate	mg/kg	0.261	0.0	.333	78.0	32.2-133	L678874-01	WG702394
Di-n-octyl phthalate	mg/kg	0.320	0.0	.333	96.0	28.5-128	L678874-01	WG702394
Dibenz(a,h)anthracene	mg/kg	0.300	0.0	.333	90.0	10.5-128	L678874-01	WG702394
Diethyl phthalate	mg/kg	0.294	0.0	.333	88.0	39.4-136	L678874-01	WG702394
Dimethyl phthalate	mg/kg	0.302	0.0	.333	91.0	35.8-137	L678874-01	WG702394
Fluoranthene	mg/kg	0.266	0.0	.333	80.0	27.9-138	L678874-01	WG702394
Fluorene	mg/kg	0.291	0.0	.333	87.0	34-133	L678874-01	WG702394

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Quality Assurance Report
Level II

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January 24, 2014

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
		Matrix Spike						
Hexachloro-1,3-butadiene	mg/kg	0.219	0.0	.333	66.0	36.5-125	L678874-01	WG702394
Hexachlorobenzene	mg/kg	0.285	0.0	.333	86.0	34.4-116	L678874-01	WG702394
Hexachlorocyclopentadiene	mg/kg	0.136	0.0	.333	41.0	10-124	L678874-01	WG702394
Hexachloroethane	mg/kg	0.218	0.0	.333	66.0	11.3-143	L678874-01	WG702394
Indeno(1,2,3-cd)pyrene	mg/kg	0.302	0.0	.333	91.0	10-128	L678874-01	WG702394
Isophorone	mg/kg	0.269	0.0	.333	81.0	25.7-116	L678874-01	WG702394
n-Nitrosodi-n-propylamine	mg/kg	0.233	0.0	.333	70.0	33-134	L678874-01	WG702394
n-Nitrosodimethylamine	mg/kg	0.193	0.0	.333	58.0	19.2-127	L678874-01	WG702394
n-Nitrosodiphenylamine	mg/kg	0.275	0.0	.333	82.0	26.8-133	L678874-01	WG702394
Naphthalene	mg/kg	0.234	0.0	.333	70.0	36.4-121	L678874-01	WG702394
Nitrobenzene	mg/kg	0.260	0.0	.333	78.0	30.9-134	L678874-01	WG702394
Pentachlorophenol	mg/kg	0.278	0.0	.333	83.0	10-139	L678874-01	WG702394
Phenanthrene	mg/kg	0.303	0.0	.333	91.0	30.8-137	L678874-01	WG702394
Phenol	mg/kg	0.238	0.0	.333	72.0	25.1-130	L678874-01	WG702394
Pyrene	mg/kg	0.288	0.0	.333	86.0	24.1-130	L678874-01	WG702394
2,4,6-Tribromophenol					99.10	21.6-142		WG702394
2-Fluorobiphenyl					82.00	34.9-129		WG702394
2-Fluorophenol					64.00	21.1-116		WG702394
Nitrobenzene-d5					72.10	21.9-129		WG702394
Phenol-d5					71.30	26.3-121		WG702394
p-Terphenyl-d14					74.20	21.5-128		WG702394
Antimony	mg/kg	46.1	-1.72	50	92.0	75-125	L678618-01	WG702129
Arsenic	mg/kg	57.9	8.21	50	99.0	75-125	L678618-01	WG702129
Beryllium	mg/kg	52.7	0.0926	50	100.	75-125	L678618-01	WG702129
Cadmium	mg/kg	49.5	0.877	50	97.0	75-125	L678618-01	WG702129
Chromium	mg/kg	51.7	4.15	50	95.0	75-125	L678618-01	WG702129
Copper	mg/kg	90.1	37.4	50	100.	75-125	L678618-01	WG702129
Lead	mg/kg	52.2	3.32	50	98.0	75-125	L678618-01	WG702129
Nickel	mg/kg	50.1	1.50	50	97.0	75-125	L678618-01	WG702129
Silver	mg/kg	51.4	0.0786	50	100.	75-125	L678618-01	WG702129
Thallium	mg/kg	48.8	-0.534	50	98.0	75-125	L678618-01	WG702129
Zinc	mg/kg	177.	132.	50	90.0	75-125	L678618-01	WG702129
Selenium	mg/kg	52.6	1.20	50	100.	75-125	L678618-01	WG702129
PCB 1016	mg/kg	0.110	0.0	.167	66.0	10-165	L678609-04	WG702070
PCB 1260	mg/kg	0.120	0.0	.167	72.0	29-154	L678609-04	WG702070
Decachlorobiphenyl					72.60	21-147		WG702070
Tetrachloro-m-xylene					74.30	35-130		WG702070

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
		Matrix Spike Duplicate							
Mercury	mg/kg	0.290	0.279	103.	80-120	4.00	20	L678607-05	WG702044
1,1,1,2-Tetrachloroethane	mg/kg	0.126	0.114	101.	64-128	9.72	20	L678551-01	WG702041
1,1,1-Trichloroethane	mg/kg	0.128	0.121	103.	58.7-134	6.34	20	L678551-01	WG702041
1,1,2,2-Tetrachloroethane	mg/kg	0.118	0.107	94.3	56-132	9.75	22.2	L678551-01	WG702041
1,1,2-Trichloroethane	mg/kg	0.126	0.112	100.	66.3-125	11.6	20	L678551-01	WG702041
1,1-Dichloroethane	mg/kg	0.132	0.125	105.	58.5-132	5.57	20	L678551-01	WG702041
1,1-Dichloroethene	mg/kg	0.138	0.134	110.	51.1-140	2.56	20.2	L678551-01	WG702041
1,1-Dichloropropene	mg/kg	0.127	0.122	101.	57.3-136	3.84	20	L678551-01	WG702041
1,2,3-Trichlorobenzene	mg/kg	0.114	0.108	91.5	59.1-138	6.02	23.7	L678551-01	WG702041
1,2,3-Trichloropropane	mg/kg	0.122	0.111	98.0	61.4-128	9.79	22.4	L678551-01	WG702041
1,2,4-Trichlorobenzene	mg/kg	0.120	0.113	96.4	63.6-143	6.41	21.9	L678551-01	WG702041
1,2,4-Trimethylbenzene	mg/kg	0.124	0.115	99.1	57.4-137	7.17	20	L678551-01	WG702041

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Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678609

January 24, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,2-Dibromo-3-Chloropropane	mg/kg	0.125	0.111	99.6	57.3-136	11.2	27	L678551-01	WG702041
1,2-Dibromoethane	mg/kg	0.121	0.111	96.5	67.1-125	8.78	20	L678551-01	WG702041
1,2-Dichlorobenzene	mg/kg	0.117	0.111	93.4	68.2-123	4.60	20	L678551-01	WG702041
1,2-Dichloroethane	mg/kg	0.125	0.116	100.	60-126	7.47	20	L678551-01	WG702041
1,2-Dichloropropane	mg/kg	0.125	0.119	100.	64.2-123	5.31	20	L678551-01	WG702041
1,3,5-Trimethylbenzene	mg/kg	0.126	0.117	101.	63.6-132	7.58	20.5	L678551-01	WG702041
1,3-Dichlorobenzene	mg/kg	0.117	0.110	93.8	63.1-131	6.20	20	L678551-01	WG702041
1,3-Dichloropropane	mg/kg	0.124	0.113	98.8	67.9-121	8.74	20	L678551-01	WG702041
1,4-Dichlorobenzene	mg/kg	0.117	0.111	93.7	68.6-123	5.14	20	L678551-01	WG702041
2,2-Dichloropropane	mg/kg	0.140	0.128	112.	50.5-144	8.33	21.9	L678551-01	WG702041
2-Butanone (MEK)	mg/kg	0.579	0.536	92.6	22.4-138	7.64	27	L678551-01	WG702041
2-Chloroethyl vinyl ether	mg/kg	0.651	0.610	104.	10-155	6.53	40	L678551-01	WG702041
2-Chlorotoluene	mg/kg	0.113	0.106	90.4	63.6-128	6.03	20	L678551-01	WG702041
4-Chlorotoluene	mg/kg	0.121	0.114	96.5	65.7-127	5.62	20	L678551-01	WG702041
4-Methyl-2-pentanone (MIBK)	mg/kg	0.631	0.572	101.	60.8-140	9.86	25.1	L678551-01	WG702041
Acetone	mg/kg	0.581	0.533	92.2	10-130	8.70	27.9	L678551-01	WG702041
Acrylonitrile	mg/kg	0.599	0.557	95.8	49.4-133	7.21	25.3	L678551-01	WG702041
Benzene	mg/kg	0.122	0.114	97.8	54.3-133	6.91	20	L678551-01	WG702041
Bromobenzene	mg/kg	0.120	0.112	96.1	63.9-124	6.57	20	L678551-01	WG702041
Bromodichloromethane	mg/kg	0.118	0.113	94.5	63.9-121	4.75	20	L678551-01	WG702041
Bromoform	mg/kg	0.122	0.112	97.9	59.5-134	8.96	20.8	L678551-01	WG702041
Bromomethane	mg/kg	0.122	0.118	97.8	41.7-155	3.37	20.5	L678551-01	WG702041
Carbon tetrachloride	mg/kg	0.130	0.122	104.	55.7-134	6.22	20.3	L678551-01	WG702041
Chlorobenzene	mg/kg	0.121	0.113	96.7	67-125	6.42	20	L678551-01	WG702041
Chlorodibromomethane	mg/kg	0.123	0.110	98.0	64.3-125	10.5	20	L678551-01	WG702041
Chloroethane	mg/kg	0.118	0.120	94.5	51.5-136	1.76	20.8	L678551-01	WG702041
Chloroform	mg/kg	0.125	0.120	100.	63-129	4.68	20	L678551-01	WG702041
Chloromethane	mg/kg	0.117	0.111	93.2	42.4-135	4.61	20	L678551-01	WG702041
cis-1,2-Dichloroethene	mg/kg	0.125	0.118	100.	59.2-129	6.08	20	L678551-01	WG702041
cis-1,3-Dichloropropene	mg/kg	0.124	0.117	99.5	66.4-125	6.21	20	L678551-01	WG702041
Di-isopropyl ether	mg/kg	0.129	0.120	103.	56.9-136	7.00	20	L678551-01	WG702041
Dibromomethane	mg/kg	0.123	0.115	98.3	68.2-124	6.63	20	L678551-01	WG702041
Dichlorodifluoromethane	mg/kg	0.119	0.116	95.2	40.6-144	2.58	20.2	L678551-01	WG702041
Ethylbenzene	mg/kg	0.126	0.117	100.	61.4-133	7.48	20	L678551-01	WG702041
Hexachloro-1,3-butadiene	mg/kg	0.118	0.108	94.6	55.1-136	8.76	23.6	L678551-01	WG702041
Isopropylbenzene	mg/kg	0.135	0.123	108.	66.8-141	9.27	20	L678551-01	WG702041
Methyl tert-butyl ether	mg/kg	0.121	0.115	96.6	57.7-134	5.14	20	L678551-01	WG702041
Methylene Chloride	mg/kg	0.120	0.114	95.5	58.1-122	5.43	20	L678551-01	WG702041
n-Butylbenzene	mg/kg	0.126	0.123	101.	62.7-140	2.94	20	L678551-01	WG702041
n-Propylbenzene	mg/kg	0.126	0.117	101.	10-176	7.33	26.6	L678551-01	WG702041
Naphthalene	mg/kg	0.118	0.109	93.3	58-135	7.95	25.5	L678551-01	WG702041
p-Isopropyltoluene	mg/kg	0.129	0.120	103.	63.2-139	7.20	20.4	L678551-01	WG702041
sec-Butylbenzene	mg/kg	0.128	0.120	103.	62.2-136	7.10	20.3	L678551-01	WG702041
Styrene	mg/kg	0.127	0.120	102.	66.8-133	6.28	20	L678551-01	WG702041
tert-Butylbenzene	mg/kg	0.128	0.119	102.	63.3-134	7.22	20.3	L678551-01	WG702041
Tetrachloroethene	mg/kg	0.124	0.116	99.2	53-139	6.90	20	L678551-01	WG702041
Toluene	mg/kg	0.121	0.115	96.3	61.4-130	4.83	20	L678551-01	WG702041
trans-1,2-Dichloroethene	mg/kg	0.124	0.119	99.5	56.5-129	4.77	20	L678551-01	WG702041
trans-1,3-Dichloropropene	mg/kg	0.117	0.110	93.8	64.1-128	6.69	20	L678551-01	WG702041
Trichloroethene	mg/kg	0.123	0.116	98.6	44.1-149	5.87	20	L678551-01	WG702041
Trichlorofluoromethane	mg/kg	0.127	0.123	102.	49.6-145	3.34	21.2	L678551-01	WG702041
Vinyl chloride	mg/kg	0.121	0.117	96.4	47.8-137	3.36	20	L678551-01	WG702041
Xylenes, Total	mg/kg	0.375	0.352	99.9	63.3-131	6.25	20	L678551-01	WG702041
4-Bromofluorobenzene				107.0	71-126				WG702041
Dibromofluoromethane				102.0	78.3-121				WG702041
Toluene-d8				105.0	88.5-111				WG702041
a,a,a-Trifluorotoluene				103.0	85-114				WG702041

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678609

January 24, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0276	0.0244	110.	64-128	12.1	20	L678924-01	WG702037
1,1,1-Trichloroethane	mg/l	0.0255	0.0238	102.	58.7-134	7.14	20	L678924-01	WG702037
1,1,2,2-Tetrachloroethane	mg/l	0.0280	0.0239	112.	56-132	15.7	22.2	L678924-01	WG702037
1,1,2-Trichloroethane	mg/l	0.0270	0.0249	108.	66.3-125	7.90	20	L678924-01	WG702037
1,1,2-Trichlorotrifluoroethane	mg/l	0.0260	0.0241	104.	54.8-154	7.58	22.5	L678924-01	WG702037
1,1-Dichloroethane	mg/l	0.0255	0.0238	102.	58.5-132	6.99	20	L678924-01	WG702037
1,1-Dichloroethene	mg/l	0.0255	0.0236	102.	51.1-140	7.49	20.2	L678924-01	WG702037
1,1-Dichloropropene	mg/l	0.0242	0.0228	96.7	57.3-136	5.83	20	L678924-01	WG702037
1,2,3-Trichlorobenzene	mg/l	0.0266	0.0259	106.	59.1-138	2.59	23.7	L678924-01	WG702037
1,2,3-Trichloropropane	mg/l	0.0282	0.0248	113.	61.4-128	12.9	22.4	L678924-01	WG702037
1,2,3-Trimethylbenzene	mg/l	0.0225	0.0209	90.0	61.3-122	7.49	20	L678924-01	WG702037
1,2,4-Trichlorobenzene	mg/l	0.0283	0.0275	113.	63.6-143	2.65	21.9	L678924-01	WG702037
1,2,4-Trimethylbenzene	mg/l	0.0269	0.0239	108.	57.4-137	11.8	20	L678924-01	WG702037
1,2-Dibromo-3-Chloropropane	mg/l	0.0301	0.0266	120.	57.3-136	12.4	27	L678924-01	WG702037
1,2-Dibromoethane	mg/l	0.0272	0.0247	109.	67.1-125	9.53	20	L678924-01	WG702037
1,2-Dichlorobenzene	mg/l	0.0273	0.0246	109.	68.2-123	10.5	20	L678924-01	WG702037
1,2-Dichloroethane	mg/l	0.0249	0.0233	99.7	60-126	6.66	20	L678924-01	WG702037
1,2-Dichloropropane	mg/l	0.0258	0.0239	103.	64.2-123	7.65	20	L678924-01	WG702037
1,3,5-Trimethylbenzene	mg/l	0.0267	0.0238	107.	63.6-132	11.6	20.5	L678924-01	WG702037
1,3-Dichlorobenzene	mg/l	0.0272	0.0246	109.	63.1-131	10.3	20	L678924-01	WG702037
1,3-Dichloropropane	mg/l	0.0264	0.0241	106.	67.9-121	9.26	20	L678924-01	WG702037
1,4-Dichlorobenzene	mg/l	0.0268	0.0247	107.	68.6-123	8.13	20	L678924-01	WG702037
2,2-Dichloropropane	mg/l	0.0275	0.0249	110.	50.5-144	9.72	21.9	L678924-01	WG702037
2-Butanone (MEK)	mg/l	0.102	0.0972	81.2	22.4-138	5.05	27	L678924-01	WG702037
2-Chloroethyl vinyl ether	mg/l	0.0165	0.0599	13.2	10-155	114.*	20	L678924-01	WG702037
2-Chlorotoluene	mg/l	0.0251	0.0223	100.	63.6-128	11.9	20	L678924-01	WG702037
4-Chlorotoluene	mg/l	0.0272	0.0242	109.	65.7-127	12.0	20	L678924-01	WG702037
4-Methyl-2-pentanone (MIBK)	mg/l	0.147	0.131	117.	60.8-140	11.0	25.1	L678924-01	WG702037
Acetone	mg/l	0.0652	0.0625	49.8	10-130	4.27	27.9	L678924-01	WG702037
Acrolein	mg/l	0.136	0.125	108.	10-200	7.75	27.7	L678924-01	WG702037
Acrylonitrile	mg/l	0.130	0.121	104.	49.4-133	7.21	25.3	L678924-01	WG702037
Benzene	mg/l	0.0236	0.0222	94.5	54.3-133	6.12	20	L678924-01	WG702037
Bromobenzene	mg/l	0.0271	0.0233	108.	63.9-124	15.1	20	L678924-01	WG702037
Bromodichloromethane	mg/l	0.0252	0.0234	101.	63.9-121	7.56	20	L678924-01	WG702037
Bromoform	mg/l	0.0291	0.0252	116.	59.5-134	14.4	20.5	L678924-01	WG702037
Bromomethane	mg/l	0.0259	0.0209	104.	41.7-155	21.5	21.9	L678924-01	WG702037
Carbon tetrachloride	mg/l	0.0256	0.0235	102.	55.7-134	8.66	20	L678924-01	WG702037
Chlorobenzene	mg/l	0.0261	0.0236	104.	67-125	9.86	20	L678924-01	WG702037
Chlorodibromomethane	mg/l	0.0272	0.0245	109.	64.3-125	10.7	20.8	L678924-01	WG702037
Chloroethane	mg/l	0.0227	0.0212	90.9	51.5-136	6.95	40	L678924-01	WG702037
Chloroform	mg/l	0.0249	0.0232	99.8	63-129	7.09	20	L678924-01	WG702037
Chloromethane	mg/l	0.0197	0.0186	78.8	42.4-135	5.86	20	L678924-01	WG702037
cis-1,2-Dichloroethene	mg/l	0.0251	0.0230	100.	59.2-129	8.70	20	L678924-01	WG702037
cis-1,3-Dichloropropene	mg/l	0.0263	0.0252	105.	66.4-125	4.18	20	L678924-01	WG702037
Di-isopropyl ether	mg/l	0.0250	0.0233	100.	56.9-136	6.87	20	L678924-01	WG702037
Dibromomethane	mg/l	0.0263	0.0250	105.	68.2-124	5.20	20	L678924-01	WG702037
Dichlorodifluoromethane	mg/l	0.0232	0.0217	92.7	40.6-144	6.77	20.2	L678924-01	WG702037
Ethylbenzene	mg/l	0.0266	0.0239	106.	61.4-133	11.0	20	L678924-01	WG702037
Hexachloro-1,3-butadiene	mg/l	0.0231	0.0239	92.4	55.1-136	3.22	23.6	L678924-01	WG702037
Isopropylbenzene	mg/l	0.0283	0.0251	113.	66.8-141	12.0	20	L678924-01	WG702037
Methyl tert-butyl ether	mg/l	0.0259	0.0237	104.	57.7-134	8.72	20	L678924-01	WG702037
Methylene Chloride	mg/l	0.0235	0.0217	93.9	58.1-122	7.75	20	L678924-01	WG702037
n-Butylbenzene	mg/l	0.0265	0.0249	106.	62.7-140	6.20	20.3	L678924-01	WG702037
n-Propylbenzene	mg/l	0.0269	0.0237	107.	65.9-131	12.6	20	L678924-01	WG702037
Naphthalene	mg/l	0.0284	0.0262	113.	58-135	8.07	25.5	L678924-01	WG702037
p-Isopropyltoluene	mg/l	0.0274	0.0250	110.	63.2-139	9.37	20.4	L678924-01	WG702037
sec-Butylbenzene	mg/l	0.0266	0.0241	106.	62.2-136	9.79	20.3	L678924-01	WG702037
Styrene	mg/l	0.0278	0.0244	111.	66.8-133	13.1	20	L678924-01	WG702037
tert-Butylbenzene	mg/l	0.0269	0.0242	108.	63.3-134	10.8	21	L678924-01	WG702037

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For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678609

January 24, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Tetrachloroethene	mg/l	0.0256	0.0242	102.	53-139	5.67	20	L678924-01	WG702037
Toluene	mg/l	0.0248	0.0232	99.0	61.4-130	6.29	20	L678924-01	WG702037
trans-1,2-Dichloroethene	mg/l	0.0239	0.0217	95.8	56.5-129	9.65	20	L678924-01	WG702037
trans-1,3-Dichloropropene	mg/l	0.0258	0.0246	103.	64.1-128	4.97	20	L678924-01	WG702037
Trichloroethene	mg/l	0.0252	0.0238	101.	44.1-149	5.74	20	L678924-01	WG702037
Trichlorofluoromethane	mg/l	0.0246	0.0227	98.4	49.6-145	8.00	21.2	L678924-01	WG702037
Vinyl chloride	mg/l	0.0219	0.0207	87.7	47.8-137	5.90	20	L678924-01	WG702037
Xylenes, Total	mg/l	0.0803	0.0726	107.	63.3-131	10.0	20	L678924-01	WG702037
4-Bromofluorobenzene				106.0	71-126				WG702037
Dibromofluoromethane				99.80	78.3-121				WG702037
Toluene-d8				106.0	88.5-111				WG702037
a,a,a-Trifluorotoluene				107.0	85-114				WG702037
1,2,4-Trichlorobenzene	mg/kg	0.241	0.219	72.3	36.5-114	9.29	28.4	L678874-01	WG702394
2,4,6-Trichlorophenol	mg/kg	0.288	0.299	86.6	33.8-133	3.42	28.1	L678874-01	WG702394
2,4-Dichlorophenol	mg/kg	0.273	0.257	82.1	34.8-134	6.20	27.3	L678874-01	WG702394
2,4-Dimethylphenol	mg/kg	0.277	0.260	83.3	12.3-149	6.33	32.3	L678874-01	WG702394
2,4-Dinitrophenol	mg/kg	0.156	0.147	46.9	10-121	5.94	39.4	L678874-01	WG702394
2,4-Dinitrotoluene	mg/kg	0.313	0.306	93.9	27.8-147	2.15	29.7	L678874-01	WG702394
2,6-Dinitrotoluene	mg/kg	0.313	0.315	93.9	36.5-137	0.900	29.7	L678874-01	WG702394
2-Chloronaphthalene	mg/kg	0.294	0.278	88.4	37.5-123	5.77	26.5	L678874-01	WG702394
2-Chlorophenol	mg/kg	0.256	0.231	76.8	33.2-121	10.1	29.3	L678874-01	WG702394
2-Nitrophenol	mg/kg	0.297	0.269	89.2	29.5-144	9.73	29.9	L678874-01	WG702394
3,3-Dichlorobenzidine	mg/kg	0.275	0.280	82.7	10-129	1.56	40	L678874-01	WG702394
4,6-Dinitro-2-methylphenol	mg/kg	0.204	0.190	61.2	10-144	6.92	32.7	L678874-01	WG702394
4-Bromophenyl-phenylether	mg/kg	0.290	0.284	87.1	39-130	2.13	26	L678874-01	WG702394
4-Chloro-3-methylphenol	mg/kg	0.293	0.290	87.9	27-154	1.11	26.6	L678874-01	WG702394
4-Chlorophenyl-phenylether	mg/kg	0.286	0.287	85.8	37.9-123	0.450	25.9	L678874-01	WG702394
4-Nitrophenol	mg/kg	0.313	0.313	93.9	20-133	0.0500	30.2	L678874-01	WG702394
Acenaphthene	mg/kg	0.285	0.278	85.7	32.2-134	2.82	27.3	L678874-01	WG702394
Acenaphthylene	mg/kg	0.299	0.286	89.7	38.7-129	4.22	25.9	L678874-01	WG702394
Anthracene	mg/kg	0.285	0.285	85.5	32.3-137	0.0	28.4	L678874-01	WG702394
Benzidine	mg/kg	0.0139	0.0172	4.16	0-49.9	21.8	40	L678874-01	WG702394
Benzo(a)anthracene	mg/kg	0.282	0.283	84.7	33.3-124	0.260	29	L678874-01	WG702394
Benzo(a)pyrene	mg/kg	0.277	0.276	83.3	28.2-128	0.390	28.4	L678874-01	WG702394
Benzo(b)fluoranthene	mg/kg	0.303	0.308	91.1	23.3-133	1.38	30.3	L678874-01	WG702394
Benzo(g,h,i)perylene	mg/kg	0.308	0.299	92.5	10-127	3.01	31.9	L678874-01	WG702394
Benzo(k)fluoranthene	mg/kg	0.290	0.296	87.1	31-129	1.91	26.7	L678874-01	WG702394
Benzylbutyl phthalate	mg/kg	0.302	0.304	90.7	33.4-128	0.550	28.5	L678874-01	WG702394
Bis(2-chlorethoxy)methane	mg/kg	0.253	0.237	76.0	35-132	6.55	26.1	L678874-01	WG702394
Bis(2-chloroethyl)ether	mg/kg	0.234	0.214	70.4	28.8-128	9.26	33.6	L678874-01	WG702394
Bis(2-chloroisopropyl)ether	mg/kg	0.242	0.220	72.6	31.8-118	9.24	31.7	L678874-01	WG702394
Bis(2-ethylhexyl)phthalate	mg/kg	0.292	0.303	87.8	21.8-141	3.45	35.2	L678874-01	WG702394
Chrysene	mg/kg	0.284	0.289	85.3	36.3-129	1.59	28	L678874-01	WG702394
Di-n-butyl phthalate	mg/kg	0.261	0.261	78.2	32.2-133	0.100	25.9	L678874-01	WG702394
Di-n-octyl phthalate	mg/kg	0.318	0.320	95.3	28.5-128	0.700	32.5	L678874-01	WG702394
Dibenz(a,h)anthracene	mg/kg	0.307	0.300	92.3	10.5-128	2.29	29.5	L678874-01	WG702394
Diethyl phthalate	mg/kg	0.287	0.294	86.1	39.4-136	2.46	25.5	L678874-01	WG702394
Dimethyl phthalate	mg/kg	0.305	0.302	91.5	35.8-137	0.690	25.4	L678874-01	WG702394
Fluoranthene	mg/kg	0.260	0.266	78.1	27.9-138	2.33	26.9	L678874-01	WG702394
Fluorene	mg/kg	0.292	0.291	87.8	34-133	0.610	27.1	L678874-01	WG702394
Hexachloro-1,3-butadiene	mg/kg	0.242	0.219	72.6	36.5-125	9.91	29.7	L678874-01	WG702394
Hexachlorobenzene	mg/kg	0.289	0.285	86.9	34.4-116	1.51	25.4	L678874-01	WG702394
Hexachlorocyclopentadiene	mg/kg	0.159	0.136	47.6	10-124	15.3	37.5	L678874-01	WG702394
Hexachloroethane	mg/kg	0.250	0.218	75.2	11.3-143	13.7	31.9	L678874-01	WG702394
Indeno(1,2,3-cd)pyrene	mg/kg	0.310	0.302	93.0	10-128	2.36	31.5	L678874-01	WG702394
Isophorone	mg/kg	0.285	0.269	85.7	25.7-116	5.92	27.7	L678874-01	WG702394
n-Nitrosodi-n-propylamine	mg/kg	0.247	0.233	74.0	33-134	5.60	28.2	L678874-01	WG702394

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678609

January 24, 2014

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
n-Nitrosodimethylamine	mg/kg	0.214	0.193	64.4	19.2-127	10.7	32	L678874-01	WG702394
n-Nitrosodiphenylamine	mg/kg	0.285	0.275	85.7	26.8-133	3.78	25.9	L678874-01	WG702394
Naphthalene	mg/kg	0.249	0.234	74.9	36.4-121	6.54	27.2	L678874-01	WG702394
Nitrobenzene	mg/kg	0.278	0.260	83.5	30.9-134	6.75	27.8	L678874-01	WG702394
Pentachlorophenol	mg/kg	0.272	0.278	81.6	10-139	2.18	28.3	L678874-01	WG702394
Phenanthrene	mg/kg	0.310	0.303	93.0	30.8-137	2.15	26.5	L678874-01	WG702394
Phenol	mg/kg	0.268	0.238	80.4	25.1-130	11.6	29.6	L678874-01	WG702394
Pyrene	mg/kg	0.286	0.288	85.9	24.1-130	0.700	29.9	L678874-01	WG702394
2,4,6-Tribromophenol				99.90	21.6-142				WG702394
2-Fluorobiphenyl				82.70	34.9-129				WG702394
2-Fluorophenol				74.30	21.1-116				WG702394
Nitrobenzene-d5				78.50	21.9-129				WG702394
Phenol-d5				77.70	26.3-121				WG702394
p-Terphenyl-d14				71.90	21.5-128				WG702394
Antimony	mg/kg	46.5	46.1	96.4	75-125	1.00	20	L678618-01	WG702129
Arsenic	mg/kg	58.5	57.9	100.	75-125	1.00	20	L678618-01	WG702129
Beryllium	mg/kg	52.2	52.7	104.	75-125	1.00	20	L678618-01	WG702129
Cadmium	mg/kg	49.2	49.5	96.7	75-125	1.00	20	L678618-01	WG702129
Chromium	mg/kg	51.7	51.7	95.1	75-125	0.0	20	L678618-01	WG702129
Copper	mg/kg	90.9	90.1	107.	75-125	1.00	20	L678618-01	WG702129
Lead	mg/kg	52.3	52.2	98.0	75-125	0.0	20	L678618-01	WG702129
Nickel	mg/kg	50.1	50.1	97.2	75-125	0.0	20	L678618-01	WG702129
Silver	mg/kg	51.7	51.4	103.	75-125	1.00	20	L678618-01	WG702129
Thallium	mg/kg	49.0	48.8	99.0	75-125	0.0	20	L678618-01	WG702129
Zinc	mg/kg	180.	177.	96.3	75-125	2.00	20	L678618-01	WG702129
Selenium	mg/kg	51.2	52.6	99.9	75-125	3.00	20	L678618-01	WG702129
PCB 1016	mg/kg	0.132	0.110	79.0	10-165	18.1	33	L678609-04	WG702070
PCB 1260	mg/kg	0.138	0.120	82.7	29-154	14.5	23	L678609-04	WG702070
Decachlorobiphenyl				81.90	21-147				WG702070
Tetrachloro-m-xylene				87.50	35-130				WG702070

Post Spike

Serial Dilution

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678609

January 24, 2014

Serial Dilution

Batch number /Run number / Sample number cross reference

WG702085: R2877378: L678609-01 02 03 04 05
WG702044: R2877507: L678609-01 02 03 04 05
WG702041: R2877584: L678609-01 02 03 04
WG702037: R2877600: L678609-06
WG702394: R2878290: L678609-01 02 03 04 05
WG702129: R2878609 R2878933: L678609-01 02 03 04 05
WG702070: R2879162 R2879254: L678609-01 02 03 04 05

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L678609

January 24, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Daphne Jones

Site/Facility ID #

P.O. #

Collected by (signature): Daphne M Jones

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 day maximum

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

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YOUR LAB OF CHOICE
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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L678669
T D037
Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
5-SB-B(6-7')	G	SS	6-7'	1/16/14	0900	7	X	X	X		X							-01
5-SB-C (6-7')	↓	↓	6-7'	↓	0940	7	↓	↓	↓		↓							-02
5-SB-D (5-6')	↓	↓	5-6'	↓	1110	7	↓	↓	↓		↓							-03
5-SB-E (7-8')	↓	↓		↓	1210	7	↓	↓	↓		↓							-04
5-SB-D 10.5-11.5	G	SS	10.5-11.5	1/16/14	1400	4		X	X		X							-05
Trip blank						1												-06

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Daphne M Jones	1/16/14	17:20	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/16/14	18:00	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA

Temp: 3.2 °C Bottles Received: 32 + TB

Date: 1/17/14 Time: 0930

Condition: (lab use only) TB OK

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-B 6-7FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678609-01

Date Collected: 1/16/2014

Lab File ID: 0118_23

Date Analyzed: 1/18/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-B 6-7FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678609-01

Date Collected: 1/16/2014

Lab File ID: 0122_19

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 2

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	2.95	0.547	72.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.28	0.161	64.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-C 6-7FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678609-02

Date Collected: 1/16/2014

Lab File ID: 0118_24

Date Analyzed: 1/18/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-C 6-7FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678609-02

Date Collected: 1/16/2014

Lab File ID: 0122_20

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	2.96	0.640	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-D 5-6FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678609-03

Date Collected: 1/16/2014

Lab File ID: 0118_25

Date Analyzed: 1/18/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-D 5-6FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678609-03

Date Collected: 1/16/2014

Lab File ID: 0122_21

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 2

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	2.96	0.601	72.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.28	0.115	59.00	J

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-D 10.5-11.5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678609-05

Date Collected: 1/16/2014

Lab File ID: 0122_23

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	2.96	0.513	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-E 7-8FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678609-04

Date Collected: 1/16/2014

Lab File ID: 0118_26

Date Analyzed: 1/18/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-E 7-8FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678609-04

Date Collected: 1/16/2014

Lab File ID: 0122_22

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	2.96	0.625	72.00	J

Divider
Page

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Tax I.D. 62-0814289

Est. 1970

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Thursday January 30, 2014

Report Number: L678497
Samples Received: 01/16/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Case Narrative

Thursday January 30, 2014

Report Number: L678497
Samples Received: 01/16/14
Client Project: 201336

Description: Dorothea Dix Campus

Other Comments

Instrument QC did not meet method requirements for Pentachlorophenol on in-hold extraction for L678497-01. Additional extraction was performed out-of-hold.

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-01

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-SB-J 8-9FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 08:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	91.3	0.0333	0.100	%		2540 G-2	01/18/14	1
TPH (GC/FID) Low Fraction	U	0.54	2.7	mg/kg		GRO	01/18/14	24.75
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.8			% Rec.		GRO	01/18/14	24.75
Volatile Petroleum Hydrocarbons	3.1	0.66	5.5	mg/kg	J	MADEPV	01/28/14	50
C5-C8 Aliphatics	1.2	0.66	5.5	mg/kg	JJ6	MADEPV	01/28/14	50
C9-C12 Aliphatics	3.5	0.36	5.5	mg/kg	J	MADEPV	01/28/14	50
C9-C10 Aromatics	1.6	0.36	5.5	mg/kg	J	MADEPV	01/28/14	50
Surrogate Recovery								
2,5-Dibromotoluene(FID)	108.			% Rec.		MADEPV	01/28/14	50
2,5-Dibromotoluene(PID)	110.			% Rec.		MADEPV	01/28/14	50
Volatile Organics								
Acetone	0.016	0.010	0.055	mg/kg	J	8260B	01/24/14	1
Acrylonitrile	U	0.0018	0.011	mg/kg		8260B	01/24/14	1
Benzene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
Bromobenzene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Bromodichloromethane	U	0.00025	0.0011	mg/kg		8260B	01/24/14	1
Bromoform	U	0.00042	0.0011	mg/kg		8260B	01/24/14	1
Bromomethane	U	0.0013	0.0055	mg/kg		8260B	01/24/14	1
n-Butylbenzene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
sec-Butylbenzene	0.0095	0.00020	0.0011	mg/kg		8260B	01/24/14	1
tert-Butylbenzene	0.00048	0.00021	0.0011	mg/kg	J	8260B	01/24/14	1
Carbon tetrachloride	U	0.00033	0.0011	mg/kg		8260B	01/24/14	1
Chlorobenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Chlorodibromomethane	U	0.00037	0.0011	mg/kg		8260B	01/24/14	1
Chloroethane	U	0.00095	0.0055	mg/kg		8260B	01/24/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.055	mg/kg		8260B	01/24/14	1
Chloroform	U	0.00023	0.0055	mg/kg		8260B	01/24/14	1
Chloromethane	U	0.00038	0.0027	mg/kg		8260B	01/24/14	1
2-Chlorotoluene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
4-Chlorotoluene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0055	mg/kg		8260B	01/24/14	1
1,2-Dibromoethane	U	0.00034	0.0011	mg/kg		8260B	01/24/14	1
Dibromomethane	U	0.00038	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichlorobenzene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
1,3-Dichlorobenzene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
1,4-Dichlorobenzene	U	0.00023	0.0011	mg/kg		8260B	01/24/14	1
Dichlorodifluoromethane	U	0.00071	0.0055	mg/kg		8260B	01/24/14	1
1,1-Dichloroethane	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichloroethane	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1

Results listed are dry weight basis.
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Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-01

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-SB-J 8-9FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 08:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloroethene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,2-Dichloropropane	U	0.00036	0.0011	mg/kg		8260B	01/24/14	1
1,1-Dichloropropene	U	0.00032	0.0011	mg/kg		8260B	01/24/14	1
1,3-Dichloropropane	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
2,2-Dichloropropane	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Di-isopropyl ether	U	0.00025	0.0011	mg/kg		8260B	01/24/14	1
Ethylbenzene	U	0.00030	0.0011	mg/kg		8260B	01/24/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0011	mg/kg		8260B	01/24/14	1
Isopropylbenzene	U	0.00024	0.0011	mg/kg		8260B	01/24/14	1
p-Isopropyltoluene	U	0.00020	0.0011	mg/kg		8260B	01/24/14	1
2-Butanone (MEK)	U	0.0047	0.011	mg/kg		8260B	01/24/14	1
Methylene Chloride	U	0.0010	0.0055	mg/kg		8260B	01/24/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.011	mg/kg		8260B	01/24/14	1
Methyl tert-butyl ether	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Naphthalene	U	0.0010	0.0055	mg/kg		8260B	01/24/14	1
n-Propylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
Styrene	U	0.00023	0.0011	mg/kg		8260B	01/24/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0011	mg/kg		8260B	01/24/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0011	mg/kg		8260B	01/24/14	1
Tetrachloroethene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Toluene	U	0.00043	0.0055	mg/kg		8260B	01/24/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0011	mg/kg		8260B	01/24/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0011	mg/kg		8260B	01/24/14	1
1,1,1-Trichloroethane	U	0.00029	0.0011	mg/kg		8260B	01/24/14	1
1,1,2-Trichloroethane	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Trichloroethene	U	0.00028	0.0011	mg/kg		8260B	01/24/14	1
Trichlorofluoromethane	U	0.00038	0.0055	mg/kg		8260B	01/24/14	1
1,2,3-Trichloropropane	U	0.00074	0.0027	mg/kg		8260B	01/24/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0011	mg/kg		8260B	01/24/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0011	mg/kg		8260B	01/24/14	1
Vinyl chloride	U	0.00029	0.0011	mg/kg		8260B	01/24/14	1
Xylenes, Total	U	0.00070	0.0033	mg/kg		8260B	01/24/14	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	01/24/14	1
Dibromofluoromethane	113.			% Rec.		8260B	01/24/14	1
a,a,a-Trifluorotoluene	102.			% Rec.		8260B	01/24/14	1
4-Bromofluorobenzene	105.			% Rec.		8260B	01/24/14	1
TPH (GC/FID) High Fraction	260	0.77	4.4	mg/kg	J3	3546/DRO	01/17/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-01

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-SB-J 8-9FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 08:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate recovery(%)								
o-Terphenyl	104.			% Rec.		3546/DRO	01/17/14	1
Extractable Petroleum Hydrocarb	130	2.1	7.1	mg/kg		MADEPE	01/29/14	1
C9-C18 Aliphatics	64.	1.2	7.1	mg/kg		MADEPE	01/28/14	1
C19-C36 Aliphatics	18.	0.35	7.1	mg/kg		MADEPE	01/28/14	1
C11-C22 Aromatics	47.	0.53	7.1	mg/kg		MADEPE	01/29/14	1
Surrogate Recovery								
o-Terphenyl	112.			% Rec.		MADEPE	01/29/14	1
1-Chloro-octadecane	87.3			% Rec.		MADEPE	01/28/14	1
2-Fluorobiphenyl	107.			% Rec.		MADEPE	01/29/14	1
2-Bromonaphthalene	111.			% Rec.		MADEPE	01/29/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.036	mg/kg		8270D	01/28/14	1
Acenaphthylene	U	0.0067	0.036	mg/kg		8270D	01/28/14	1
Anthracene	0.033	0.0063	0.036	mg/kg	J	8270D	01/28/14	1
Benzidine	U	0.064	0.36	mg/kg	J3	8270D	01/28/14	1
Benzo(a)anthracene	U	0.0043	0.036	mg/kg		8270D	01/28/14	1
Benzo(b)fluoranthene	U	0.0070	0.036	mg/kg		8270D	01/28/14	1
Benzo(k)fluoranthene	U	0.0058	0.036	mg/kg		8270D	01/28/14	1
Benzo(g,h,i)perylene	U	0.0072	0.036	mg/kg		8270D	01/28/14	1
Benzo(a)pyrene	U	0.0055	0.036	mg/kg		8270D	01/28/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.36	mg/kg		8270D	01/28/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.36	mg/kg		8270D	01/28/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.36	mg/kg		8270D	01/28/14	1
4-Bromophenyl-phenylether	U	0.011	0.36	mg/kg		8270D	01/28/14	1
2-Chloronaphthalene	U	0.0064	0.036	mg/kg		8270D	01/28/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.36	mg/kg		8270D	01/28/14	1
Chrysene	U	0.0056	0.036	mg/kg		8270D	01/28/14	1
Dibenz(a,h)anthracene	U	0.0082	0.036	mg/kg		8270D	01/28/14	1
3,3-Dichlorobenzidine	U	0.079	0.36	mg/kg		8270D	01/28/14	1
2,4-Dinitrotoluene	U	0.0061	0.36	mg/kg		8270D	01/28/14	1
2,6-Dinitrotoluene	U	0.0074	0.36	mg/kg		8270D	01/28/14	1
Fluoranthene	U	0.0050	0.036	mg/kg		8270D	01/28/14	1
Fluorene	U	0.0068	0.036	mg/kg		8270D	01/28/14	1
Hexachlorobenzene	U	0.0086	0.36	mg/kg		8270D	01/28/14	1
Hexachloro-1,3-butadiene	U	0.010	0.36	mg/kg		8270D	01/28/14	1
Hexachlorocyclopentadiene	U	0.059	0.36	mg/kg	J	8270D	01/28/14	1
Hexachloroethane	U	0.013	0.36	mg/kg		8270D	01/28/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.036	mg/kg		8270D	01/28/14	1
Isophorone	0.0085	0.0052	0.36	mg/kg	J	8270D	01/28/14	1
Naphthalene	U	0.0089	0.036	mg/kg		8270D	01/28/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-01

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-SB-J 8-9FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 08:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrobenzene	U	0.0070	0.36	mg/kg		8270D	01/28/14	1
n-Nitrosodimethylamine	U	0.065	0.36	mg/kg		8270D	01/28/14	1
n-Nitrosodiphenylamine	U	0.0059	0.36	mg/kg		8270D	01/28/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.36	mg/kg		8270D	01/28/14	1
Phenanthrene	0.039	0.0053	0.036	mg/kg		8270D	01/28/14	1
Benzylbutyl phthalate	U	0.010	0.36	mg/kg		8270D	01/28/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.36	mg/kg		8270D	01/28/14	1
Di-n-butyl phthalate	U	0.011	0.36	mg/kg		8270D	01/28/14	1
Diethyl phthalate	U	0.0069	0.36	mg/kg		8270D	01/28/14	1
Dimethyl phthalate	U	0.0054	0.36	mg/kg		8270D	01/28/14	1
Di-n-octyl phthalate	U	0.0091	0.36	mg/kg		8270D	01/28/14	1
Pyrene	0.019	0.012	0.036	mg/kg	J	8270D	01/28/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.36	mg/kg		8270D	01/28/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.36	mg/kg		8270D	01/28/14	1
2-Chlorophenol	U	0.0083	0.36	mg/kg		8270D	01/28/14	1
2,4-Dichlorophenol	U	0.0075	0.36	mg/kg		8270D	01/28/14	1
2,4-Dimethylphenol	U	0.047	0.36	mg/kg	J	8270D	01/28/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.36	mg/kg		8270D	01/28/14	1
2,4-Dinitrophenol	U	0.098	0.36	mg/kg	J4	8270D	01/28/14	1
2-Nitrophenol	U	0.013	0.36	mg/kg		8270D	01/28/14	1
4-Nitrophenol	U	0.052	0.36	mg/kg		8270D	01/28/14	1
Pentachlorophenol	U	0.048	0.36	mg/kg	Q	8270D	01/30/14	1
Phenol	U	0.0070	0.36	mg/kg		8270D	01/28/14	1
2,4,6-Trichlorophenol	U	0.0078	0.36	mg/kg		8270D	01/28/14	1
Surrogate Recovery								
2-Fluorophenol	64.3			% Rec.		8270D	01/28/14	1
2-Fluorophenol	78.1			% Rec.		8270D	01/28/14	1
Phenol-d5	80.1			% Rec.		8270D	01/28/14	1
Phenol-d5	68.1			% Rec.		8270D	01/28/14	1
Nitrobenzene-d5	78.4			% Rec.		8270D	01/28/14	1
Nitrobenzene-d5	76.4			% Rec.		8270D	01/28/14	1
2-Fluorobiphenyl	75.5			% Rec.		8270D	01/28/14	1
2-Fluorobiphenyl	80.6			% Rec.		8270D	01/28/14	1
2,4,6-Tribromophenol	99.9			% Rec.		8270D	01/28/14	1
2,4,6-Tribromophenol	121.			% Rec.		8270D	01/28/14	1
p-Terphenyl-d14	55.9			% Rec.		8270D	01/28/14	1
p-Terphenyl-d14	65.6			% Rec.		8270D	01/28/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-02

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-SB-K 8-9FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 08:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	86.8	0.0333	0.100	%		2540 G-2	01/18/14	1
TPH (GC/FID) Low Fraction	U	0.50	2.6	mg/kg		GRO	01/18/14	23
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	100.			% Rec.		GRO	01/18/14	23
TPH (GC/FID) High Fraction	U	0.77	4.6	mg/kg	J3	3546/DRO	01/17/14	1
Surrogate recovery(%)								
o-Terphenyl	93.4			% Rec.		3546/DRO	01/17/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-03

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-SB-L 7-8FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 09:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	73.8	0.0333	0.100	%		2540 G-2	01/18/14	1
TPH (GC/FID) Low Fraction	U	0.47	2.9	mg/kg		GRO	01/18/14	21.5
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	100.			% Rec.		GRO	01/18/14	21.5
TPH (GC/FID) High Fraction	U	0.77	5.4	mg/kg	J3	3546/DRO	01/18/14	1
Surrogate recovery(%)								
o-Terphenyl	95.3			% Rec.		3546/DRO	01/18/14	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-04

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-SB-M 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 10:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	77.0	0.0333	0.100	%		2540 G-2	01/18/14	1
TPH (GC/FID) Low Fraction	U	0.53	3.2	mg/kg		GRO	01/18/14	24.5
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.5			% Rec.		GRO	01/18/14	24.5
TPH (GC/FID) High Fraction	U	38.	260	mg/kg	O	3546/DRO	01/21/14	50
Surrogate recovery(%)								
o-Terphenyl	73.1			% Rec.	J7	3546/DRO	01/21/14	50

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-05

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 13-SB-N 7-8FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 10:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	76.6	0.0333	0.100	%		2540 G-2	01/18/14	1
TPH (GC/FID) Low Fraction	U	0.45	2.7	mg/kg		GRO	01/18/14	20.75
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.6			% Rec.		GRO	01/18/14	20.75
TPH (GC/FID) High Fraction	U	0.77	5.2	mg/kg	J3	3546/DRO	01/18/14	1
Surrogate recovery(%)								
o-Terphenyl	91.9			% Rec.		3546/DRO	01/18/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-06

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 6-SB-A 1FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 14:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	76.8	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.0062	0.0014	0.026	mg/kg	J	7471	01/18/14	1
Antimony	U	0.38	1.3	mg/kg		6010C	01/22/14	1
Arsenic	4.6	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	2.0	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.39	0.035	0.32	mg/kg		6010C	01/22/14	1
Chromium	22.	0.070	0.65	mg/kg		6010C	01/22/14	1
Copper	110	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	8.3	0.095	0.32	mg/kg		6010C	01/22/14	1
Nickel	14.	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	0.72	0.37	1.3	mg/kg	J	6010C	01/22/14	1
Silver	U	0.70	3.2	mg/kg	O	6010C	01/22/14	5
Thallium	U	1.6	6.5	mg/kg	O	6010C	01/22/14	5
Zinc	47.	0.30	2.0	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
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Cary, NC 27512

January 30,2014

ESC Sample # : L678497-07

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 6-SB-B 1FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 14:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	80.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.031	0.0014	0.025	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	32.	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.5	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.25	0.035	0.31	mg/kg	J	6010C	01/22/14	1
Chromium	47.	0.070	0.62	mg/kg		6010C	01/22/14	1
Copper	82.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	9.7	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	17.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	2.6	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.1	mg/kg	O	6010C	01/22/14	5
Thallium	1.1	0.32	1.2	mg/kg	J	6010C	01/22/14	1
Zinc	43.	0.30	1.9	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Cary, NC 27512

January 30,2014

ESC Sample # : L678497-08

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 6-SB-C 1FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 15:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	82.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.12	0.0014	0.024	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	4.7	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.3	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.28	0.035	0.30	mg/kg	J	6010C	01/22/14	1
Chromium	39.	0.070	0.60	mg/kg		6010C	01/22/14	1
Copper	59.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	11.	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	22.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	0.77	0.37	1.2	mg/kg	J	6010C	01/22/14	1
Silver	U	0.70	3.0	mg/kg	O	6010C	01/22/14	5
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	31.	0.30	1.8	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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January 30,2014

ESC Sample # : L678497-09

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 6-SB-D 1FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 15:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	81.4	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.054	0.0014	0.024	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	5.8	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.8	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.39	0.035	0.31	mg/kg		6010C	01/22/14	1
Chromium	38.	0.070	0.61	mg/kg		6010C	01/22/14	1
Copper	92.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	11.	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	23.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	0.72	0.37	1.2	mg/kg	J	6010C	01/22/14	1
Silver	U	0.70	3.1	mg/kg	O	6010C	01/22/14	5
Thallium	1.2	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	45.	0.30	1.8	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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January 30,2014

ESC Sample # : L678497-10

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 6-SB-E 1FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 15:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	83.0	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.020	0.0014	0.024	mg/kg	J	7471	01/18/14	1
Antimony	1.1	0.38	1.2	mg/kg	J	6010C	01/22/14	1
Arsenic	3.6	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.7	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.38	0.035	0.30	mg/kg		6010C	01/22/14	1
Chromium	23.	0.070	0.60	mg/kg		6010C	01/22/14	1
Copper	81.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	7.8	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	28.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	1.3	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.0	mg/kg	O	6010C	01/22/14	5
Thallium	1.2	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	30.	0.30	1.8	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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January 30,2014

ESC Sample # : L678497-11

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-4 1FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 15:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	80.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.061	0.0014	0.025	mg/kg		7471	01/18/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	6.0	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.9	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.43	0.035	0.31	mg/kg		6010C	01/22/14	1
Chromium	50.	0.070	0.62	mg/kg		6010C	01/22/14	1
Copper	99.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	11.	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	20.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	0.92	0.37	1.2	mg/kg	J	6010C	01/22/14	1
Silver	U	0.70	3.1	mg/kg	O	6010C	01/22/14	5
Thallium	1.0	0.32	1.2	mg/kg	J	6010C	01/22/14	1
Zinc	52.	0.30	1.9	mg/kg		6010C	01/22/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-12

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-A 12FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 16:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	83.2	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.0018	0.0014	0.024	mg/kg	J	7471	01/18/14	1
Antimony	1.8	0.38	1.2	mg/kg	O1P1J6	6010C	01/22/14	1
Arsenic	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.55	0.035	0.12	mg/kg	O1	6010C	01/22/14	1
Cadmium	0.26	0.035	0.30	mg/kg	J	6010C	01/22/14	1
Chromium	3.2	0.070	0.60	mg/kg		6010C	01/22/14	1
Copper	49.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	4.6	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	16.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.14	0.60	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	62.	0.30	1.8	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.062	mg/kg		8260B	01/21/14	1.03
Acrylonitrile	U	0.0018	0.012	mg/kg	J4	8260B	01/21/14	1.03
Benzene	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1.03
Bromobenzene	U	0.00029	0.0012	mg/kg		8260B	01/21/14	1.03
Bromodichloromethane	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1.03
Bromoform	U	0.00044	0.0012	mg/kg		8260B	01/21/14	1.03
Bromomethane	U	0.0014	0.0062	mg/kg		8260B	01/21/14	1.03
n-Butylbenzene	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1.03
sec-Butylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1.03
tert-Butylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1.03
Carbon tetrachloride	U	0.00034	0.0012	mg/kg		8260B	01/21/14	1.03
Chlorobenzene	U	0.00022	0.0012	mg/kg		8260B	01/21/14	1.03
Chlorodibromomethane	U	0.00038	0.0012	mg/kg		8260B	01/21/14	1.03
Chloroethane	U	0.00097	0.0062	mg/kg		8260B	01/21/14	1.03
2-Chloroethyl vinyl ether	U	0.0024	0.062	mg/kg	J3	8260B	01/21/14	1.03
Chloroform	U	0.00024	0.0062	mg/kg		8260B	01/21/14	1.03
Chloromethane	U	0.00039	0.0031	mg/kg		8260B	01/21/14	1.03
2-Chlorotoluene	U	0.00031	0.0012	mg/kg		8260B	01/21/14	1.03
4-Chlorotoluene	U	0.00025	0.0012	mg/kg		8260B	01/21/14	1.03
1,2-Dibromo-3-Chloropropane	U	0.0011	0.0062	mg/kg		8260B	01/21/14	1.03
1,2-Dibromoethane	U	0.00035	0.0012	mg/kg		8260B	01/21/14	1.03
Dibromomethane	U	0.00039	0.0012	mg/kg		8260B	01/21/14	1.03
1,2-Dichlorobenzene	U	0.00031	0.0012	mg/kg		8260B	01/21/14	1.03
1,3-Dichlorobenzene	U	0.00025	0.0012	mg/kg		8260B	01/21/14	1.03
1,4-Dichlorobenzene	U	0.00023	0.0012	mg/kg		8260B	01/21/14	1.03

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-12

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-A 12FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 16:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00073	0.0062	mg/kg		8260B	01/21/14	1.03
1,1-Dichloroethane	U	0.00020	0.0012	mg/kg		8260B	01/21/14	1.03
1,2-Dichloroethane	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1.03
1,1-Dichloroethene	U	0.00031	0.0012	mg/kg		8260B	01/21/14	1.03
cis-1,2-Dichloroethene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1.03
trans-1,2-Dichloroethene	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1.03
1,2-Dichloropropane	U	0.00037	0.0012	mg/kg		8260B	01/21/14	1.03
1,1-Dichloropropene	U	0.00033	0.0012	mg/kg		8260B	01/21/14	1.03
1,3-Dichloropropane	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1.03
cis-1,3-Dichloropropene	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1.03
trans-1,3-Dichloropropene	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1.03
2,2-Dichloropropane	U	0.00029	0.0012	mg/kg		8260B	01/21/14	1.03
Di-isopropyl ether	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1.03
Ethylbenzene	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1.03
Hexachloro-1,3-butadiene	U	0.00035	0.0012	mg/kg		8260B	01/21/14	1.03
Isopropylbenzene	U	0.00025	0.0012	mg/kg		8260B	01/21/14	1.03
p-Isopropyltoluene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1.03
2-Butanone (MEK)	U	0.0048	0.012	mg/kg	J3	8260B	01/21/14	1.03
Methylene Chloride	U	0.0010	0.0062	mg/kg		8260B	01/21/14	1.03
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.012	mg/kg		8260B	01/21/14	1.03
Methyl tert-butyl ether	U	0.00022	0.0012	mg/kg		8260B	01/21/14	1.03
Naphthalene	U	0.0010	0.0062	mg/kg		8260B	01/21/14	1.03
n-Propylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1.03
Styrene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1.03
1,1,1,2-Tetrachloroethane	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1.03
1,1,2,2-Tetrachloroethane	U	0.00038	0.0012	mg/kg		8260B	01/21/14	1.03
Tetrachloroethene	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1.03
Toluene	U	0.00045	0.0062	mg/kg		8260B	01/21/14	1.03
1,2,3-Trichlorobenzene	U	0.00032	0.0012	mg/kg		8260B	01/21/14	1.03
1,2,4-Trichlorobenzene	U	0.00040	0.0012	mg/kg		8260B	01/21/14	1.03
1,1,1-Trichloroethane	U	0.00029	0.0012	mg/kg		8260B	01/21/14	1.03
1,1,2-Trichloroethane	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1.03
Trichloroethene	U	0.00029	0.0012	mg/kg		8260B	01/21/14	1.03
Trichlorofluoromethane	U	0.00039	0.0062	mg/kg		8260B	01/21/14	1.03
1,2,3-Trichloropropane	U	0.00076	0.0031	mg/kg		8260B	01/21/14	1.03
1,2,4-Trimethylbenzene	U	0.00022	0.0012	mg/kg		8260B	01/21/14	1.03
1,3,5-Trimethylbenzene	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1.03
Vinyl chloride	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1.03
Xylenes, Total	U	0.00072	0.0037	mg/kg		8260B	01/21/14	1.03
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	01/21/14	1.03
Dibromofluoromethane	98.8			% Rec.		8260B	01/21/14	1.03
a,a,a-Trifluorotoluene	94.7			% Rec.		8260B	01/21/14	1.03

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-12

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-A 12FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 16:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	95.9			% Rec.		8260B	01/21/14	1.03
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.040	mg/kg		8270D	01/19/14	1
Acenaphthylene	U	0.0067	0.040	mg/kg		8270D	01/19/14	1
Anthracene	U	0.0063	0.040	mg/kg		8270D	01/19/14	1
Benzidine	U	0.064	0.40	mg/kg		8270D	01/19/14	1
Benzo(a)anthracene	U	0.0043	0.040	mg/kg		8270D	01/19/14	1
Benzo(b)fluoranthene	U	0.0070	0.040	mg/kg		8270D	01/19/14	1
Benzo(k)fluoranthene	U	0.0058	0.040	mg/kg		8270D	01/19/14	1
Benzo(g,h,i)perylene	U	0.0072	0.040	mg/kg		8270D	01/19/14	1
Benzo(a)pyrene	U	0.0055	0.040	mg/kg		8270D	01/19/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.40	mg/kg		8270D	01/19/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.40	mg/kg		8270D	01/19/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.40	mg/kg		8270D	01/19/14	1
4-Bromophenyl-phenylether	U	0.011	0.40	mg/kg		8270D	01/19/14	1
2-Chloronaphthalene	U	0.0064	0.040	mg/kg		8270D	01/19/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.40	mg/kg		8270D	01/19/14	1
Chrysene	U	0.0056	0.040	mg/kg		8270D	01/19/14	1
Dibenz(a,h)anthracene	U	0.0082	0.040	mg/kg		8270D	01/19/14	1
3,3-Dichlorobenzidine	U	0.079	0.40	mg/kg		8270D	01/19/14	1
2,4-Dinitrotoluene	U	0.0061	0.40	mg/kg		8270D	01/19/14	1
2,6-Dinitrotoluene	U	0.0074	0.40	mg/kg		8270D	01/19/14	1
Fluoranthene	U	0.0050	0.040	mg/kg		8270D	01/19/14	1
Fluorene	U	0.0068	0.040	mg/kg		8270D	01/19/14	1
Hexachlorobenzene	U	0.0086	0.40	mg/kg	J	8270D	01/19/14	1
Hexachloro-1,3-butadiene	U	0.010	0.40	mg/kg		8270D	01/19/14	1
Hexachlorocyclopentadiene	U	0.059	0.40	mg/kg	J	8270D	01/19/14	1
Hexachloroethane	U	0.013	0.40	mg/kg		8270D	01/19/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.040	mg/kg		8270D	01/19/14	1
Isophorone	U	0.0052	0.40	mg/kg		8270D	01/19/14	1
Naphthalene	U	0.0089	0.040	mg/kg		8270D	01/19/14	1
Nitrobenzene	U	0.0070	0.40	mg/kg		8270D	01/19/14	1
n-Nitrosodimethylamine	U	0.065	0.40	mg/kg		8270D	01/19/14	1
n-Nitrosodiphenylamine	U	0.0059	0.40	mg/kg		8270D	01/19/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.40	mg/kg		8270D	01/19/14	1
Phenanthrene	U	0.0053	0.040	mg/kg		8270D	01/19/14	1
Benzylbutyl phthalate	U	0.010	0.40	mg/kg		8270D	01/19/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.40	mg/kg		8270D	01/19/14	1
Di-n-butyl phthalate	U	0.011	0.40	mg/kg		8270D	01/19/14	1
Diethyl phthalate	U	0.0069	0.40	mg/kg		8270D	01/19/14	1
Dimethyl phthalate	U	0.0054	0.40	mg/kg		8270D	01/19/14	1
Di-n-octyl phthalate	U	0.0091	0.40	mg/kg		8270D	01/19/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30,2014

ESC Sample # : L678497-12

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-A 12FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 16:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.040	mg/kg		8270D	01/19/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.40	mg/kg		8270D	01/19/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.40	mg/kg		8270D	01/19/14	1
2-Chlorophenol	U	0.0083	0.40	mg/kg		8270D	01/19/14	1
2,4-Dichlorophenol	U	0.0075	0.40	mg/kg		8270D	01/19/14	1
2,4-Dimethylphenol	U	0.047	0.40	mg/kg		8270D	01/19/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.40	mg/kg		8270D	01/19/14	1
2,4-Dinitrophenol	U	0.098	0.40	mg/kg		8270D	01/19/14	1
2-Nitrophenol	U	0.013	0.40	mg/kg		8270D	01/19/14	1
4-Nitrophenol	U	0.052	0.40	mg/kg		8270D	01/19/14	1
Pentachlorophenol	U	0.048	0.40	mg/kg		8270D	01/19/14	1
Phenol	U	0.0070	0.40	mg/kg		8270D	01/19/14	1
2,4,6-Trichlorophenol	U	0.0078	0.40	mg/kg		8270D	01/19/14	1
Surrogate Recovery								
2-Fluorophenol	44.8			% Rec.		8270D	01/19/14	1
Phenol-d5	49.1			% Rec.		8270D	01/19/14	1
Nitrobenzene-d5	43.6			% Rec.		8270D	01/19/14	1
2-Fluorobiphenyl	49.0			% Rec.		8270D	01/19/14	1
2,4,6-Tribromophenol	51.1			% Rec.		8270D	01/19/14	1
p-Terphenyl-d14	41.2			% Rec.		8270D	01/19/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30, 2014

ESC Sample # : L678497-13

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-A 17FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 17:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	87.2	0.0333	0.100	%		2540 G-2	01/18/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.019	mg/kg		8082	01/20/14	1
PCB 1221	U	0.0054	0.019	mg/kg		8082	01/20/14	1
PCB 1232	U	0.0042	0.019	mg/kg		8082	01/20/14	1
PCB 1242	U	0.0032	0.019	mg/kg		8082	01/20/14	1
PCB 1248	U	0.0032	0.019	mg/kg		8082	01/20/14	1
PCB 1254	U	0.0047	0.019	mg/kg		8082	01/20/14	1
PCB 1260	U	0.0049	0.019	mg/kg		8082	01/20/14	1
PCBs Surrogates								
Decachlorobiphenyl	88.0			% Rec.		8082	01/20/14	1
Tetrachloro-m-xylene	85.5			% Rec.		8082	01/20/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30, 2014

ESC Sample # : L678497-14

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TB-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	23.	10.	50.	ug/l	J	8260B	01/21/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/21/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/21/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/21/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/21/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/21/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/21/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/21/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/21/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/21/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/21/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/21/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/21/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/21/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/21/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/21/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/21/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/21/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/21/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/21/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/21/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/21/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/21/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/21/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/21/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/21/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/21/14	1

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L678497-14 (V8260TIC) - Previous run of TB confirms hit

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 30, 2014

ESC Sample # : L678497-14

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TB-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/21/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/21/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/21/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/21/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/21/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/21/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/21/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/21/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/21/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	101.			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	102.			% Rec.		8260B	01/21/14	1
4-Bromofluorobenzene	102.			% Rec.		8260B	01/21/14	1

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.
Reported: 01/30/14 16:41 Printed: 01/30/14 16:42
L678497-14 (V8260TIC) - Previous run of TB confirms hit

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678497-01	WG703127	SAMP	Volatile Petroleum Hydrocarbons	R2880575	J
	WG703127	SAMP	C5-C8 Aliphatics	R2880575	JJ6
	WG703127	SAMP	C9-C12 Aliphatics	R2880575	J
	WG703127	SAMP	C9-C10 Aromatics	R2880575	J
	WG701965	SAMP	TPH (GC/FID) High Fraction	R2877659	J3
	WG703044	SAMP	Anthracene	R2880968	J
	WG703044	SAMP	Benzidine	R2880968	J3
	WG703044	SAMP	Hexachlorocyclopentadiene	R2880968	J
	WG703044	SAMP	Isophorone	R2880968	J
	WG703044	SAMP	Pyrene	R2880968	J
	WG703044	SAMP	2,4-Dimethylphenol	R2880968	J
	WG703044	SAMP	2,4-Dinitrophenol	R2880968	J4
	WG703930	SAMP	Pentachlorophenol	R2880980	Q
	WG703100	SAMP	Acetone	R2879822	J
	WG703100	SAMP	tert-Butylbenzene	R2879822	J
L678497-02	WG701965	SAMP	TPH (GC/FID) High Fraction	R2877659	J3
L678497-03	WG701965	SAMP	TPH (GC/FID) High Fraction	R2877659	J3
L678497-04	WG702264	SAMP	TPH (GC/FID) High Fraction	R2878205	O
	WG702264	SAMP	o-Terphenyl	R2878205	J7
L678497-05	WG701965	SAMP	TPH (GC/FID) High Fraction	R2877659	J3
L678497-06	WG701904	SAMP	Mercury	R2877506	J
	WG701908	SAMP	Selenium	R2878346	J
	WG701908	SAMP	Silver	R2878346	O
	WG701908	SAMP	Thallium	R2878346	O
L678497-07	WG701908	SAMP	Cadmium	R2878506	J
	WG701908	SAMP	Silver	R2878346	O
	WG701908	SAMP	Thallium	R2878346	J
L678497-08	WG701908	SAMP	Cadmium	R2878506	J
	WG701908	SAMP	Selenium	R2878346	J
	WG701908	SAMP	Silver	R2878346	O
L678497-09	WG701908	SAMP	Selenium	R2878346	J
	WG701908	SAMP	Silver	R2878346	O
L678497-10	WG701904	SAMP	Mercury	R2877506	J
	WG701908	SAMP	Antimony	R2878346	J
	WG701908	SAMP	Silver	R2878346	O
L678497-11	WG701908	SAMP	Selenium	R2878346	J
	WG701908	SAMP	Silver	R2878346	O
	WG701908	SAMP	Thallium	R2878346	J
L678497-12	WG701904	SAMP	Mercury	R2877506	J
	WG701973	SAMP	Hexachlorobenzene	R2877683	J
	WG701973	SAMP	Hexachlorocyclopentadiene	R2877683	J
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG701908	SAMP	Antimony	R2878346	O1P1J6
	WG701908	SAMP	Beryllium	R2878346	O1
	WG701908	SAMP	Cadmium	R2878506	J
L678497-14	WG702503	SAMP	Acetone	R2878181	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
Q	(ESC) Sample held beyond the accepted holding time.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/30/14 at 16:42:10

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678497-01 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-02 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-03 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-04 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-05 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-06 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-07 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-08 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-09 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-10 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-11 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-12 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-13 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

Sample: L678497-14 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/30/14 00:00 RPT Date: 01/30/14 16:41

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678497

January 30, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG701954	01/18/14 08:02
Total Solids	< .1	%			WG701953	01/18/14 08:11
Mercury	< .02	mg/kg			WG701904	01/18/14 17:23
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG702094	01/18/14 19:49
a,a,a-Trifluorotoluene(FID)		% Rec.	100.0	59-128	WG702094	01/18/14 19:49
TPH (GC/FID) High Fraction	< 4	mg/kg			WG701965	01/17/14 21:17
o-Terphenyl		% Rec.	92.30	50-150	WG701965	01/17/14 21:17
1,2,4-Trichlorobenzene	< .333	mg/kg			WG701973	01/19/14 12:45
2,4,6-Trichlorophenol	< .333	mg/kg			WG701973	01/19/14 12:45
2,4-Dichlorophenol	< .333	mg/kg			WG701973	01/19/14 12:45
2,4-Dimethylphenol	< .333	mg/kg			WG701973	01/19/14 12:45
2,4-Dinitrophenol	< .333	mg/kg			WG701973	01/19/14 12:45
2,4-Dinitrotoluene	< .333	mg/kg			WG701973	01/19/14 12:45
2,6-Dinitrotoluene	< .333	mg/kg			WG701973	01/19/14 12:45
2-Chloronaphthalene	< .033	mg/kg			WG701973	01/19/14 12:45
2-Chlorophenol	< .333	mg/kg			WG701973	01/19/14 12:45
2-Nitrophenol	< .333	mg/kg			WG701973	01/19/14 12:45
3,3-Dichlorobenzidine	< .333	mg/kg			WG701973	01/19/14 12:45
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG701973	01/19/14 12:45
4-Bromophenyl-phenylether	< .333	mg/kg			WG701973	01/19/14 12:45
4-Chloro-3-methylphenol	< .333	mg/kg			WG701973	01/19/14 12:45
4-Chlorophenyl-phenylether	< .333	mg/kg			WG701973	01/19/14 12:45
4-Nitrophenol	< .333	mg/kg			WG701973	01/19/14 12:45
Acenaphthene	< .033	mg/kg			WG701973	01/19/14 12:45
Acenaphthylene	< .033	mg/kg			WG701973	01/19/14 12:45
Anthracene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzidine	< .333	mg/kg			WG701973	01/19/14 12:45
Benzo(a)anthracene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzo(a)pyrene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzo(b)fluoranthene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzo(g,h,i)perylene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzo(k)fluoranthene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzylbutyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG701973	01/19/14 12:45
Bis(2-chloroethyl)ether	< .333	mg/kg			WG701973	01/19/14 12:45
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG701973	01/19/14 12:45
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Chrysene	< .033	mg/kg			WG701973	01/19/14 12:45
Di-n-butyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Di-n-octyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Dibenz(a,h)anthracene	< .033	mg/kg			WG701973	01/19/14 12:45
Diethyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Dimethyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Fluoranthene	< .033	mg/kg			WG701973	01/19/14 12:45
Fluorene	< .033	mg/kg			WG701973	01/19/14 12:45
Hexachloro-1,3-butadiene	< .333	mg/kg			WG701973	01/19/14 12:45
Hexachlorobenzene	< .333	mg/kg			WG701973	01/19/14 12:45
Hexachlorocyclopentadiene	< .333	mg/kg			WG701973	01/19/14 12:45
Hexachloroethane	< .333	mg/kg			WG701973	01/19/14 12:45

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678497

January 30, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG701973	01/19/14 12:45
Isophorone	< .333	mg/kg			WG701973	01/19/14 12:45
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG701973	01/19/14 12:45
n-Nitrosodimethylamine	< .333	mg/kg			WG701973	01/19/14 12:45
n-Nitrosodiphenylamine	< .333	mg/kg			WG701973	01/19/14 12:45
Naphthalene	< .033	mg/kg			WG701973	01/19/14 12:45
Nitrobenzene	< .333	mg/kg			WG701973	01/19/14 12:45
Pentachlorophenol	< .333	mg/kg			WG701973	01/19/14 12:45
Phenanthrene	< .033	mg/kg			WG701973	01/19/14 12:45
Phenol	< .333	mg/kg			WG701973	01/19/14 12:45
Pyrene	< .033	mg/kg			WG701973	01/19/14 12:45
2,4,6-Tribromophenol		% Rec.	51.00	21.6-142	WG701973	01/19/14 12:45
2-Fluorobiphenyl		% Rec.	57.50	34.9-129	WG701973	01/19/14 12:45
2-Fluorophenol		% Rec.	50.90	21.1-116	WG701973	01/19/14 12:45
Nitrobenzene-d5		% Rec.	50.30	21.9-129	WG701973	01/19/14 12:45
Phenol-d5		% Rec.	57.30	26.3-121	WG701973	01/19/14 12:45
p-Terphenyl-d14		% Rec.	50.20	21.5-128	WG701973	01/19/14 12:45
Arsenic	< 1	mg/kg			WG701908	01/18/14 01:54
Beryllium	< .1	mg/kg			WG701908	01/18/14 01:54
Cadmium	< .25	mg/kg			WG701908	01/18/14 01:54
Chromium	< .5	mg/kg			WG701908	01/18/14 01:54
Copper	< 1	mg/kg			WG701908	01/18/14 01:54
Lead	< .25	mg/kg			WG701908	01/18/14 01:54
Nickel	< 1	mg/kg			WG701908	01/18/14 01:54
Selenium	< 1	mg/kg			WG701908	01/18/14 01:54
Silver	< .5	mg/kg			WG701908	01/18/14 01:54
Thallium	< 1	mg/kg			WG701908	01/18/14 01:54
Zinc	< 1.5	mg/kg			WG701908	01/18/14 01:54
PCB 1016	< .017	mg/kg			WG701964	01/20/14 08:25
PCB 1221	< .017	mg/kg			WG701964	01/20/14 08:25
PCB 1232	< .017	mg/kg			WG701964	01/20/14 08:25
PCB 1242	< .017	mg/kg			WG701964	01/20/14 08:25
PCB 1248	< .017	mg/kg			WG701964	01/20/14 08:25
PCB 1254	< .017	mg/kg			WG701964	01/20/14 08:25
PCB 1260	< .017	mg/kg			WG701964	01/20/14 08:25
Decachlorobiphenyl		% Rec.	106.0	10-145	WG701964	01/20/14 08:25
Tetrachloro-m-xylene		% Rec.	95.20	21.1-148	WG701964	01/20/14 08:25
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG702503	01/21/14 12:10
1,1,1-Trichloroethane	< .001	mg/l			WG702503	01/21/14 12:10
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG702503	01/21/14 12:10
1,1,2-Trichloroethane	< .001	mg/l			WG702503	01/21/14 12:10
1,1-Dichloroethane	< .001	mg/l			WG702503	01/21/14 12:10
1,1-Dichloroethene	< .001	mg/l			WG702503	01/21/14 12:10
1,1-Dichloropropene	< .001	mg/l			WG702503	01/21/14 12:10
1,2,3-Trichlorobenzene	< .001	mg/l			WG702503	01/21/14 12:10
1,2,3-Trichloropropane	< .001	mg/l			WG702503	01/21/14 12:10
1,2,4-Trichlorobenzene	< .001	mg/l			WG702503	01/21/14 12:10
1,2,4-Trimethylbenzene	< .001	mg/l			WG702503	01/21/14 12:10
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG702503	01/21/14 12:10
1,2-Dibromoethane	< .001	mg/l			WG702503	01/21/14 12:10
1,2-Dichlorobenzene	< .001	mg/l			WG702503	01/21/14 12:10
1,2-Dichloroethane	< .001	mg/l			WG702503	01/21/14 12:10
1,2-Dichloropropane	< .001	mg/l			WG702503	01/21/14 12:10

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Quality Assurance Report
Level II

L678497

January 30, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,3,5-Trimethylbenzene	< .001	mg/l			WG702503	01/21/14 12:10
1,3-Dichlorobenzene	< .001	mg/l			WG702503	01/21/14 12:10
1,3-Dichloropropane	< .001	mg/l			WG702503	01/21/14 12:10
1,4-Dichlorobenzene	< .001	mg/l			WG702503	01/21/14 12:10
2,2-Dichloropropane	< .001	mg/l			WG702503	01/21/14 12:10
2-Butanone (MEK)	< .01	mg/l			WG702503	01/21/14 12:10
2-Chloroethyl vinyl ether	< .05	mg/l			WG702503	01/21/14 12:10
2-Chlorotoluene	< .001	mg/l			WG702503	01/21/14 12:10
4-Chlorotoluene	< .001	mg/l			WG702503	01/21/14 12:10
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG702503	01/21/14 12:10
Acetone	< .05	mg/l			WG702503	01/21/14 12:10
Acrolein	< .025	mg/l			WG702503	01/21/14 12:10
Acrylonitrile	< .01	mg/l			WG702503	01/21/14 12:10
Benzene	< .001	mg/l			WG702503	01/21/14 12:10
Bromobenzene	< .001	mg/l			WG702503	01/21/14 12:10
Bromodichloromethane	< .001	mg/l			WG702503	01/21/14 12:10
Bromoform	< .001	mg/l			WG702503	01/21/14 12:10
Bromomethane	< .005	mg/l			WG702503	01/21/14 12:10
Carbon tetrachloride	< .001	mg/l			WG702503	01/21/14 12:10
Chlorobenzene	< .001	mg/l			WG702503	01/21/14 12:10
Chlorodibromomethane	< .001	mg/l			WG702503	01/21/14 12:10
Chloroethane	< .005	mg/l			WG702503	01/21/14 12:10
Chloroform	< .005	mg/l			WG702503	01/21/14 12:10
Chloromethane	< .0025	mg/l			WG702503	01/21/14 12:10
cis-1,2-Dichloroethene	< .001	mg/l			WG702503	01/21/14 12:10
cis-1,3-Dichloropropene	< .001	mg/l			WG702503	01/21/14 12:10
Di-isopropyl ether	< .001	mg/l			WG702503	01/21/14 12:10
Dibromomethane	< .001	mg/l			WG702503	01/21/14 12:10
Dichlorodifluoromethane	< .005	mg/l			WG702503	01/21/14 12:10
Ethylbenzene	< .001	mg/l			WG702503	01/21/14 12:10
Hexachloro-1,3-butadiene	< .001	mg/l			WG702503	01/21/14 12:10
Isopropylbenzene	< .001	mg/l			WG702503	01/21/14 12:10
Methyl tert-butyl ether	< .001	mg/l			WG702503	01/21/14 12:10
Methylene Chloride	< .005	mg/l			WG702503	01/21/14 12:10
n-Butylbenzene	< .001	mg/l			WG702503	01/21/14 12:10
n-Propylbenzene	< .001	mg/l			WG702503	01/21/14 12:10
Naphthalene	< .005	mg/l			WG702503	01/21/14 12:10
p-Isopropyltoluene	< .001	mg/l			WG702503	01/21/14 12:10
sec-Butylbenzene	< .001	mg/l			WG702503	01/21/14 12:10
Styrene	< .001	mg/l			WG702503	01/21/14 12:10
tert-Butylbenzene	< .001	mg/l			WG702503	01/21/14 12:10
Tetrachloroethene	< .001	mg/l			WG702503	01/21/14 12:10
Toluene	< .005	mg/l			WG702503	01/21/14 12:10
trans-1,2-Dichloroethene	< .001	mg/l			WG702503	01/21/14 12:10
trans-1,3-Dichloropropene	< .001	mg/l			WG702503	01/21/14 12:10
Trichloroethene	< .001	mg/l			WG702503	01/21/14 12:10
Trichlorofluoromethane	< .005	mg/l			WG702503	01/21/14 12:10
Vinyl chloride	< .001	mg/l			WG702503	01/21/14 12:10
Xylenes, Total	< .003	mg/l			WG702503	01/21/14 12:10
4-Bromofluorobenzene		% Rec.	106.0	71-126	WG702503	01/21/14 12:10
Dibromofluoromethane		% Rec.	96.60	78.3-121	WG702503	01/21/14 12:10
Toluene-d8		% Rec.	104.0	88.5-111	WG702503	01/21/14 12:10
a,a,a-Trifluorotoluene		% Rec.	103.0	85-114	WG702503	01/21/14 12:10
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,1-Trichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,2-Trichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10

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12065 Lebanon Rd.
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Tax I.D. 62-0814289

Est. 1970

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PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678497

January 30, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1-Dichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,3-Trichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,3-Trichloropropane	< .0025	mg/kg			WG702232	01/21/14 12:10
1,2,4-Trichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,4-Trimethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG702232	01/21/14 12:10
1,2-Dibromoethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
1,3,5-Trimethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,3-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,3-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
1,4-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
2,2-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
2-Butanone (MEK)	< .01	mg/kg			WG702232	01/21/14 12:10
2-Chloroethyl vinyl ether	< .05	mg/kg			WG702232	01/21/14 12:10
2-Chlorotoluene	< .001	mg/kg			WG702232	01/21/14 12:10
4-Chlorotoluene	< .001	mg/kg			WG702232	01/21/14 12:10
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG702232	01/21/14 12:10
Acetone	< .05	mg/kg			WG702232	01/21/14 12:10
Acrylonitrile	< .01	mg/kg			WG702232	01/21/14 12:10
Benzene	< .001	mg/kg			WG702232	01/21/14 12:10
Bromobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Bromodichloromethane	< .001	mg/kg			WG702232	01/21/14 12:10
Bromoform	< .001	mg/kg			WG702232	01/21/14 12:10
Bromomethane	< .005	mg/kg			WG702232	01/21/14 12:10
Carbon tetrachloride	< .001	mg/kg			WG702232	01/21/14 12:10
Chlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Chlorodibromomethane	< .001	mg/kg			WG702232	01/21/14 12:10
Chloroethane	< .005	mg/kg			WG702232	01/21/14 12:10
Chloroform	< .005	mg/kg			WG702232	01/21/14 12:10
Chloromethane	< .0025	mg/kg			WG702232	01/21/14 12:10
cis-1,2-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
cis-1,3-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
Di-isopropyl ether	< .001	mg/kg			WG702232	01/21/14 12:10
Dibromomethane	< .001	mg/kg			WG702232	01/21/14 12:10
Dichlorodifluoromethane	< .005	mg/kg			WG702232	01/21/14 12:10
Ethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Hexachloro-1,3-butadiene	< .001	mg/kg			WG702232	01/21/14 12:10
Isopropylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Methyl tert-butyl ether	< .001	mg/kg			WG702232	01/21/14 12:10
Methylene Chloride	< .005	mg/kg			WG702232	01/21/14 12:10
n-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
n-Propylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Naphthalene	< .005	mg/kg			WG702232	01/21/14 12:10
p-Isopropyltoluene	< .001	mg/kg			WG702232	01/21/14 12:10
sec-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Styrene	< .001	mg/kg			WG702232	01/21/14 12:10
tert-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Tetrachloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
Toluene	< .005	mg/kg			WG702232	01/21/14 12:10
trans-1,2-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
trans-1,3-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
Trichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
Trichlorofluoromethane	< .005	mg/kg			WG702232	01/21/14 12:10
Vinyl chloride	< .001	mg/kg			WG702232	01/21/14 12:10

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Quality Assurance Report
Level II

L678497

January 30, 2014

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Xylenes, Total	< .003	mg/kg			WG702232	01/21/14 12:10
4-Bromofluorobenzene		% Rec.	99.50	71-126	WG702232	01/21/14 12:10
Dibromofluoromethane		% Rec.	98.00	78.3-121	WG702232	01/21/14 12:10
Toluene-d8		% Rec.	104.0	88.5-111	WG702232	01/21/14 12:10
a,a,a-Trifluorotoluene		% Rec.	101.0	85-114	WG702232	01/21/14 12:10
TPH (GC/FID) High Fraction	< 4	mg/kg			WG702264	01/21/14 15:42
o-Terphenyl		% Rec.	55.60	50-150	WG702264	01/21/14 15:42
Antimony	< 1	mg/kg			WG701908	01/22/14 05:22
Arsenic	< 1	mg/kg			WG701908	01/22/14 05:22
Beryllium	< .1	mg/kg			WG701908	01/22/14 05:22
Chromium	< .5	mg/kg			WG701908	01/22/14 05:22
Copper	< 1	mg/kg			WG701908	01/22/14 05:22
Lead	< .25	mg/kg			WG701908	01/22/14 05:22
Nickel	< 1	mg/kg			WG701908	01/22/14 05:22
Selenium	< 1	mg/kg			WG701908	01/22/14 05:22
Silver	< .5	mg/kg			WG701908	01/22/14 05:22
Thallium	< 1	mg/kg			WG701908	01/22/14 05:22
Zinc	< 1.5	mg/kg			WG701908	01/22/14 05:22
Cadmium	< .25	mg/kg			WG701908	01/22/14 14:03
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG703100	01/24/14 21:59
1,1,1-Trichloroethane	< .001	mg/kg			WG703100	01/24/14 21:59
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG703100	01/24/14 21:59
1,1,2-Trichloroethane	< .001	mg/kg			WG703100	01/24/14 21:59
1,1-Dichloroethane	< .001	mg/kg			WG703100	01/24/14 21:59
1,1-Dichloroethene	< .001	mg/kg			WG703100	01/24/14 21:59
1,1-Dichloropropene	< .001	mg/kg			WG703100	01/24/14 21:59
1,2,3-Trichlorobenzene	< .001	mg/kg			WG703100	01/24/14 21:59
1,2,3-Trichloropropane	< .0025	mg/kg			WG703100	01/24/14 21:59
1,2,4-Trichlorobenzene	< .001	mg/kg			WG703100	01/24/14 21:59
1,2,4-Trimethylbenzene	< .001	mg/kg			WG703100	01/24/14 21:59
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG703100	01/24/14 21:59
1,2-Dibromoethane	< .001	mg/kg			WG703100	01/24/14 21:59
1,2-Dichlorobenzene	< .001	mg/kg			WG703100	01/24/14 21:59
1,2-Dichloroethane	< .001	mg/kg			WG703100	01/24/14 21:59
1,2-Dichloropropane	< .001	mg/kg			WG703100	01/24/14 21:59
1,3,5-Trimethylbenzene	< .001	mg/kg			WG703100	01/24/14 21:59
1,3-Dichlorobenzene	< .001	mg/kg			WG703100	01/24/14 21:59
1,3-Dichloropropane	< .001	mg/kg			WG703100	01/24/14 21:59
1,4-Dichlorobenzene	< .001	mg/kg			WG703100	01/24/14 21:59
2,2-Dichloropropane	< .001	mg/kg			WG703100	01/24/14 21:59
2-Butanone (MEK)	< .01	mg/kg			WG703100	01/24/14 21:59
2-Chloroethyl vinyl ether	< .05	mg/kg			WG703100	01/24/14 21:59
2-Chlorotoluene	< .001	mg/kg			WG703100	01/24/14 21:59
4-Chlorotoluene	< .001	mg/kg			WG703100	01/24/14 21:59
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG703100	01/24/14 21:59
Acetone	< .05	mg/kg			WG703100	01/24/14 21:59
Acrylonitrile	< .01	mg/kg			WG703100	01/24/14 21:59
Benzene	< .001	mg/kg			WG703100	01/24/14 21:59
Bromobenzene	< .001	mg/kg			WG703100	01/24/14 21:59
Bromodichloromethane	< .001	mg/kg			WG703100	01/24/14 21:59
Bromoform	< .001	mg/kg			WG703100	01/24/14 21:59
Bromomethane	< .005	mg/kg			WG703100	01/24/14 21:59
Carbon tetrachloride	< .001	mg/kg			WG703100	01/24/14 21:59

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Quality Assurance Report
Level II

L678497

January 30, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Chlorobenzene	< .001	mg/kg			WG703100	01/24/14 21:59
Chlorodibromomethane	< .001	mg/kg			WG703100	01/24/14 21:59
Chloroethane	< .005	mg/kg			WG703100	01/24/14 21:59
Chloroform	< .005	mg/kg			WG703100	01/24/14 21:59
Chloromethane	< .0025	mg/kg			WG703100	01/24/14 21:59
cis-1,2-Dichloroethene	< .001	mg/kg			WG703100	01/24/14 21:59
cis-1,3-Dichloropropene	< .001	mg/kg			WG703100	01/24/14 21:59
Di-isopropyl ether	< .001	mg/kg			WG703100	01/24/14 21:59
Dibromomethane	< .001	mg/kg			WG703100	01/24/14 21:59
Dichlorodifluoromethane	< .005	mg/kg			WG703100	01/24/14 21:59
Ethylbenzene	< .001	mg/kg			WG703100	01/24/14 21:59
Hexachloro-1,3-butadiene	< .001	mg/kg			WG703100	01/24/14 21:59
Isopropylbenzene	< .001	mg/kg			WG703100	01/24/14 21:59
Methyl tert-butyl ether	< .001	mg/kg			WG703100	01/24/14 21:59
Methylene Chloride	< .005	mg/kg			WG703100	01/24/14 21:59
n-Butylbenzene	< .001	mg/kg			WG703100	01/24/14 21:59
n-Propylbenzene	< .001	mg/kg			WG703100	01/24/14 21:59
Naphthalene	< .005	mg/kg			WG703100	01/24/14 21:59
p-Isopropyltoluene	< .001	mg/kg			WG703100	01/24/14 21:59
sec-Butylbenzene	< .001	mg/kg			WG703100	01/24/14 21:59
Styrene	< .001	mg/kg			WG703100	01/24/14 21:59
tert-Butylbenzene	< .001	mg/kg			WG703100	01/24/14 21:59
Tetrachloroethene	< .001	mg/kg			WG703100	01/24/14 21:59
Toluene	< .005	mg/kg			WG703100	01/24/14 21:59
trans-1,2-Dichloroethene	< .001	mg/kg			WG703100	01/24/14 21:59
trans-1,3-Dichloropropene	< .001	mg/kg			WG703100	01/24/14 21:59
Trichloroethene	< .001	mg/kg			WG703100	01/24/14 21:59
Trichlorofluoromethane	< .005	mg/kg			WG703100	01/24/14 21:59
Vinyl chloride	< .001	mg/kg			WG703100	01/24/14 21:59
Xylenes, Total	< .003	mg/kg			WG703100	01/24/14 21:59
4-Bromofluorobenzene		% Rec.	103.0	71-126	WG703100	01/24/14 21:59
Dibromofluoromethane		% Rec.	105.0	78.3-121	WG703100	01/24/14 21:59
Toluene-d8		% Rec.	104.0	88.5-111	WG703100	01/24/14 21:59
a,a,a-Trifluorotoluene		% Rec.	104.0	85-114	WG703100	01/24/14 21:59
1,2,4-Trichlorobenzene	< .333	mg/kg			WG703044	01/27/14 04:43
2,4,6-Trichlorophenol	< .333	mg/kg			WG703044	01/27/14 04:43
2,4-Dichlorophenol	< .333	mg/kg			WG703044	01/27/14 04:43
2,4-Dimethylphenol	< .333	mg/kg			WG703044	01/27/14 04:43
2,4-Dinitrophenol	< .333	mg/kg			WG703044	01/27/14 04:43
2,4-Dinitrotoluene	< .333	mg/kg			WG703044	01/27/14 04:43
2,6-Dinitrotoluene	< .333	mg/kg			WG703044	01/27/14 04:43
2-Chloronaphthalene	< .033	mg/kg			WG703044	01/27/14 04:43
2-Chlorophenol	< .333	mg/kg			WG703044	01/27/14 04:43
2-Nitrophenol	< .333	mg/kg			WG703044	01/27/14 04:43
3,3-Dichlorobenzidine	< .333	mg/kg			WG703044	01/27/14 04:43
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG703044	01/27/14 04:43
4-Bromophenyl-phenylether	< .333	mg/kg			WG703044	01/27/14 04:43
4-Chloro-3-methylphenol	< .333	mg/kg			WG703044	01/27/14 04:43
4-Chlorophenyl-phenylether	< .333	mg/kg			WG703044	01/27/14 04:43
4-Nitrophenol	< .333	mg/kg			WG703044	01/27/14 04:43
Acenaphthene	< .033	mg/kg			WG703044	01/27/14 04:43
Acenaphthylene	< .033	mg/kg			WG703044	01/27/14 04:43
Anthracene	< .033	mg/kg			WG703044	01/27/14 04:43
Benzidine	< .333	mg/kg			WG703044	01/27/14 04:43
Benzo(a)anthracene	< .033	mg/kg			WG703044	01/27/14 04:43
Benzo(a)pyrene	< .033	mg/kg			WG703044	01/27/14 04:43
Benzo(b)fluoranthene	< .033	mg/kg			WG703044	01/27/14 04:43

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzo(g,h,i)perylene	< .033	mg/kg			WG703044	01/27/14 04:43
Benzo(k)fluoranthene	< .033	mg/kg			WG703044	01/27/14 04:43
Benzylbutyl phthalate	< .333	mg/kg			WG703044	01/27/14 04:43
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG703044	01/27/14 04:43
Bis(2-chloroethyl)ether	< .333	mg/kg			WG703044	01/27/14 04:43
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG703044	01/27/14 04:43
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG703044	01/27/14 04:43
Chrysene	< .033	mg/kg			WG703044	01/27/14 04:43
Di-n-butyl phthalate	< .333	mg/kg			WG703044	01/27/14 04:43
Di-n-octyl phthalate	< .333	mg/kg			WG703044	01/27/14 04:43
Dibenz(a,h)anthracene	< .033	mg/kg			WG703044	01/27/14 04:43
Diethyl phthalate	< .333	mg/kg			WG703044	01/27/14 04:43
Dimethyl phthalate	< .333	mg/kg			WG703044	01/27/14 04:43
Fluoranthene	< .033	mg/kg			WG703044	01/27/14 04:43
Fluorene	< .033	mg/kg			WG703044	01/27/14 04:43
Hexachloro-1,3-butadiene	< .333	mg/kg			WG703044	01/27/14 04:43
Hexachlorobenzene	< .333	mg/kg			WG703044	01/27/14 04:43
Hexachlorocyclopentadiene	< .333	mg/kg			WG703044	01/27/14 04:43
Hexachloroethane	< .333	mg/kg			WG703044	01/27/14 04:43
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG703044	01/27/14 04:43
Isophorone	< .333	mg/kg			WG703044	01/27/14 04:43
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG703044	01/27/14 04:43
n-Nitrosodimethylamine	< .333	mg/kg			WG703044	01/27/14 04:43
n-Nitrosodiphenylamine	< .333	mg/kg			WG703044	01/27/14 04:43
Naphthalene	< .033	mg/kg			WG703044	01/27/14 04:43
Nitrobenzene	< .333	mg/kg			WG703044	01/27/14 04:43
Phenanthrene	< .033	mg/kg			WG703044	01/27/14 04:43
Phenol	< .333	mg/kg			WG703044	01/27/14 04:43
Pyrene	< .033	mg/kg			WG703044	01/27/14 04:43
2,4,6-Tribromophenol		% Rec.	86.30	21.6-142	WG703044	01/27/14 04:43
2-Fluorobiphenyl		% Rec.	76.90	34.9-129	WG703044	01/27/14 04:43
2-Fluorophenol		% Rec.	62.00	21.1-116	WG703044	01/27/14 04:43
Nitrobenzene-d5		% Rec.	64.50	21.9-129	WG703044	01/27/14 04:43
Phenol-d5		% Rec.	65.80	26.3-121	WG703044	01/27/14 04:43
p-Terphenyl-d14		% Rec.	82.10	21.5-128	WG703044	01/27/14 04:43
C5-C8 Aliphatics	< .1	mg/kg			WG703127	01/28/14 21:43
C9-C10 Aromatics	< .1	mg/kg			WG703127	01/28/14 21:43
C9-C12 Aliphatics	< .1	mg/kg			WG703127	01/28/14 21:43
2,5-Dibromotoluene(FID)		% Rec.	109.0	70-130	WG703127	01/28/14 21:43
2,5-Dibromotoluene(PID)		% Rec.	110.0	70-130	WG703127	01/28/14 21:43
C19-C36 Aliphatics	< 6.5	mg/kg			WG703463	01/28/14 17:41
C9-C18 Aliphatics	< 6.5	mg/kg			WG703463	01/28/14 17:41
1-Chloro-octadecane		% Rec.	86.30	40-140	WG703463	01/28/14 17:41
C11-C22 Aromatics	< 6.5	mg/kg			WG703463	01/28/14 18:44
2-Bromonaphthalene		% Rec.	91.90	40-140	WG703463	01/28/14 18:44
2-Fluorobiphenyl		% Rec.	99.90	40-140	WG703463	01/28/14 18:44
o-Terphenyl		% Rec.	98.40	40-140	WG703463	01/28/14 18:44
Pentachlorophenol	< .333	mg/kg			WG703930	01/30/14 09:32
2,4,6-Tribromophenol		% Rec.	83.00	21.6-142	WG703930	01/30/14 09:32
2-Fluorobiphenyl		% Rec.	58.90	34.9-129	WG703930	01/30/14 09:32
2-Fluorophenol		% Rec.	53.50	21.1-116	WG703930	01/30/14 09:32
Nitrobenzene-d5		% Rec.	55.10	21.9-129	WG703930	01/30/14 09:32
Phenol-d5		% Rec.	58.70	26.3-121	WG703930	01/30/14 09:32

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Cary, NC 27512

Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
p-Terphenyl-d14	% Rec.		51.50		21.5-128	01/30/14 09:32	

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Total Solids	%	86.4	84.6	2.20	5	L678399-01	WG701954
Total Solids	%	90.8	91.3	0.572	5	L678497-01	WG701953
Mercury	mg/kg	0.0740	0.0749	1.00	20	L678495-03	WG701904
Arsenic	mg/kg	1.90	2.47	26.0*	20	L678497-12	WG701908
Beryllium	mg/kg	0.470	0.493	6.00	20	L678497-12	WG701908
Cadmium	mg/kg	0.0	-0.314	20.0	20	L678497-12	WG701908
Chromium	mg/kg	3.00	3.12	3.00	20	L678497-12	WG701908
Copper	mg/kg	45.0	45.0	1.00	20	L678497-12	WG701908
Lead	mg/kg	4.80	4.87	1.00	20	L678497-12	WG701908
Nickel	mg/kg	14.0	14.0	1.00	20	L678497-12	WG701908
Selenium	mg/kg	0.0	-0.728	143.*	20	L678497-12	WG701908
Silver	mg/kg	0.710	0.719	1.00	20	L678497-12	WG701908
Thallium	mg/kg	2.10	2.61	23.0*	20	L678497-12	WG701908
Zinc	mg/kg	53.0	54.2	2.00	20	L678497-12	WG701908
Cadmium	mg/kg	0.0	0.217	15.0	20	L678497-12	WG701908
Antimony	mg/kg	0.0	1.53	47.0*	20	L678497-12	WG701908
Arsenic	mg/kg	0.0	-0.903	59.0*	20	L678497-12	WG701908
Beryllium	mg/kg	0.440	0.457	4.00	20	L678497-12	WG701908
Chromium	mg/kg	2.60	2.73	5.00	20	L678497-12	WG701908
Copper	mg/kg	40.0	40.7	0.0	20	L678497-12	WG701908
Lead	mg/kg	3.30	3.78	14.0	20	L678497-12	WG701908
Nickel	mg/kg	13.0	12.9	1.00	20	L678497-12	WG701908
Selenium	mg/kg	0.0	-1.79	3.00	20	L678497-12	WG701908
Silver	mg/kg	0.0	-0.256	39.0*	20	L678497-12	WG701908
Thallium	mg/kg	0.0	-0.0403	184.*	20	L678497-12	WG701908
Zinc	mg/kg	52.0	52.6	1.00	20	L678497-12	WG701908

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
		Laboratory Control Sample				
Total Solids	%	50	49.9	99.8	85-115	WG701954
Total Solids	%	50	50.1	100.	85-115	WG701953
Mercury	mg/kg	12.4	15.4	124.	71.6-128	WG701904
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.85	125.	63.5-137	WG702094
a,a,a-Trifluorotoluene(FID)				101.0	59-128	WG702094
TPH (GC/FID) High Fraction	mg/kg	60	38.7	64.4	50-150	WG701965
o-Terphenyl				73.40	50-150	WG701965
1,2,4-Trichlorobenzene	mg/kg	.333	0.194	58.2	39.8-100	WG701973

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Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
2,4,6-Trichlorophenol	mg/kg	.333	0.221	66.2	44.4-108	WG701973
2,4-Dichlorophenol	mg/kg	.333	0.216	64.8	46.2-109	WG701973
2,4-Dimethylphenol	mg/kg	.333	0.199	59.8	42.2-110	WG701973
2,4-Dinitrophenol	mg/kg	.333	0.223	67.0	10-105	WG701973
2,4-Dinitrotoluene	mg/kg	.333	0.250	75.2	53-112	WG701973
2,6-Dinitrotoluene	mg/kg	.333	0.252	75.8	51.6-110	WG701973
2-Chloronaphthalene	mg/kg	.333	0.229	68.7	47.1-105	WG701973
2-Chlorophenol	mg/kg	.333	0.218	65.4	40.8-103	WG701973
2-Nitrophenol	mg/kg	.333	0.260	78.1	44.2-113	WG701973
3,3-Dichlorobenzidine	mg/kg	.333	0.191	57.5	21-101	WG701973
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.254	76.1	23.1-119	WG701973
4-Bromophenyl-phenylether	mg/kg	.333	0.201	60.4	51.4-110	WG701973
4-Chloro-3-methylphenol	mg/kg	.333	0.247	74.1	51.1-113	WG701973
4-Chlorophenyl-phenylether	mg/kg	.333	0.215	64.5	48.1-108	WG701973
4-Nitrophenol	mg/kg	.333	0.272	81.8	34.8-109	WG701973
Acenaphthene	mg/kg	.333	0.225	67.6	48.9-107	WG701973
Acenaphthylene	mg/kg	.333	0.239	71.7	49.2-111	WG701973
Anthracene	mg/kg	.333	0.221	66.5	52-112	WG701973
Benzidine	mg/kg	.333	0.0144	4.31	0-48	WG701973
Benzo(a)anthracene	mg/kg	.333	0.218	65.4	52.3-106	WG701973
Benzo(a)pyrene	mg/kg	.333	0.221	66.4	51.9-106	WG701973
Benzo(b)fluoranthene	mg/kg	.333	0.249	74.8	51.3-106	WG701973
Benzo(g,h,i)perylene	mg/kg	.333	0.240	72.1	45.8-108	WG701973
Benzo(k)fluoranthene	mg/kg	.333	0.232	69.7	52.9-107	WG701973
Benzylbutyl phthalate	mg/kg	.333	0.253	76.0	47.5-115	WG701973
Bis(2-chlorethoxy)methane	mg/kg	.333	0.218	65.3	44.9-108	WG701973
Bis(2-chloroethyl)ether	mg/kg	.333	0.206	61.8	32.5-112	WG701973
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.212	63.5	40.4-99	WG701973
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.254	76.3	48.1-116	WG701973
Chrysene	mg/kg	.333	0.220	66.1	54.4-110	WG701973
Di-n-butyl phthalate	mg/kg	.333	0.216	64.8	49.7-113	WG701973
Di-n-octyl phthalate	mg/kg	.333	0.268	80.4	49.6-112	WG701973
Dibenz(a,h)anthracene	mg/kg	.333	0.236	70.9	45.7-111	WG701973
Diethyl phthalate	mg/kg	.333	0.232	69.8	52-112	WG701973
Dimethyl phthalate	mg/kg	.333	0.241	72.5	51.4-108	WG701973
Fluoranthene	mg/kg	.333	0.197	59.2	53.7-110	WG701973
Fluorene	mg/kg	.333	0.228	68.3	51.1-109	WG701973
Hexachloro-1,3-butadiene	mg/kg	.333	0.179	53.9	41.5-112	WG701973
Hexachlorobenzene	mg/kg	.333	0.193	58.0	43.2-104	WG701973
Hexachlorocyclopentadiene	mg/kg	.333	0.133	39.8	13.5-123	WG701973
Hexachloroethane	mg/kg	.333	0.208	62.6	36.2-103	WG701973
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.240	72.1	47.5-109	WG701973
Isophorone	mg/kg	.333	0.239	71.9	28.8-104	WG701973
n-Nitrosodi-n-propylamine	mg/kg	.333	0.230	68.9	43.3-109	WG701973
n-Nitrosodimethylamine	mg/kg	.333	0.185	55.6	18.1-122	WG701973
n-Nitrosodiphenylamine	mg/kg	.333	0.219	65.8	48.8-107	WG701973
Naphthalene	mg/kg	.333	0.202	60.7	43.4-103	WG701973
Nitrobenzene	mg/kg	.333	0.235	70.7	40.7-109	WG701973
Pentachlorophenol	mg/kg	.333	0.189	56.7	16.2-102	WG701973
Phenanthrene	mg/kg	.333	0.228	68.5	51.6-107	WG701973
Phenol	mg/kg	.333	0.230	68.9	41.5-106	WG701973
Pyrene	mg/kg	.333	0.227	68.3	47.1-108	WG701973
2,4,6-Tribromophenol				58.50	21.6-142	WG701973
2-Fluorobiphenyl				62.10	34.9-129	WG701973
2-Fluorophenol				56.00	21.1-116	WG701973
Nitrobenzene-d5				62.30	21.9-129	WG701973
Phenol-d5				62.70	26.3-121	WG701973
p-Terphenyl-d14				51.20	21.5-128	WG701973

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Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Arsenic	mg/kg	237	255.	108.	83.1-117	WG701908
Beryllium	mg/kg	93.3	97.8	105.	83.3-117	WG701908
Cadmium	mg/kg	191	183.	96.0	83.2-117	WG701908
Chromium	mg/kg	128	129.	101.	81.3-118	WG701908
Copper	mg/kg	123	128.	104.	83.7-116	WG701908
Lead	mg/kg	103	102.	99.0	83.1-117	WG701908
Nickel	mg/kg	118	119.	101.	82-118	WG701908
Selenium	mg/kg	110	120.	109.	78.7-122	WG701908
Silver	mg/kg	47.3	48.8	103.	66.2-134	WG701908
Thallium	mg/kg	158	154.	98.0	81-119	WG701908
Zinc	mg/kg	183	181.	99.0	82-118	WG701908
PCB 1016	mg/kg	.167	0.147	87.9	63.2-118	WG701964
PCB 1260	mg/kg	.167	0.176	105.	64.6-123	WG701964
Decachlorobiphenyl				104.0	10-145	WG701964
Tetrachloro-m-xylene				97.80	21.1-148	WG701964
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0243	97.1	74.2-124	WG702503
1,1,1-Trichloroethane	mg/l	.025	0.0261	104.	73.2-123	WG702503
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0240	95.9	70.7-122	WG702503
1,1,2-Trichloroethane	mg/l	.025	0.0234	93.7	77.7-118	WG702503
1,1-Dichloroethane	mg/l	.025	0.0274	110.	70.7-126	WG702503
1,1-Dichloroethene	mg/l	.025	0.0247	98.8	67.8-129	WG702503
1,1-Dichloropropene	mg/l	.025	0.0269	108.	73.1-125	WG702503
1,2,3-Trichlorobenzene	mg/l	.025	0.0268	107.	64.9-135	WG702503
1,2,3-Trichloropropane	mg/l	.025	0.0231	92.5	71.8-121	WG702503
1,2,4-Trichlorobenzene	mg/l	.025	0.0284	114.	69.7-136	WG702503
1,2,4-Trimethylbenzene	mg/l	.025	0.0246	98.5	75-123	WG702503
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0248	99.1	65.4-128	WG702503
1,2-Dibromoethane	mg/l	.025	0.0239	95.7	76.6-121	WG702503
1,2-Dichlorobenzene	mg/l	.025	0.0251	100.	78.4-117	WG702503
1,2-Dichloroethane	mg/l	.025	0.0240	95.9	68.8-124	WG702503
1,2-Dichloropropane	mg/l	.025	0.0258	103.	76.5-119	WG702503
1,3,5-Trimethylbenzene	mg/l	.025	0.0250	100.	75.6-124	WG702503
1,3-Dichlorobenzene	mg/l	.025	0.0244	97.7	70.8-128	WG702503
1,3-Dichloropropane	mg/l	.025	0.0237	94.7	77.4-117	WG702503
1,4-Dichlorobenzene	mg/l	.025	0.0244	97.6	78.8-115	WG702503
2,2-Dichloropropane	mg/l	.025	0.0259	103.	62.4-133	WG702503
2-Butanone (MEK)	mg/l	.125	0.118	94.7	55-149	WG702503
2-Chloroethyl vinyl ether	mg/l	.125	0.131	105.	43.8-150	WG702503
2-Chlorotoluene	mg/l	.025	0.0243	97.2	74.7-122	WG702503
4-Chlorotoluene	mg/l	.025	0.0246	98.6	77.5-120	WG702503
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.138	110.	70.5-133	WG702503
Acetone	mg/l	.125	0.0866	69.2	35.6-163	WG702503
Acrolein	mg/l	.125	0.107	85.7	10-190	WG702503
Acrylonitrile	mg/l	.125	0.138	111.	55.2-130	WG702503
Benzene	mg/l	.025	0.0259	104.	74.8-121	WG702503
Bromobenzene	mg/l	.025	0.0243	97.2	77.5-116	WG702503
Bromodichloromethane	mg/l	.025	0.0242	96.7	75.1-116	WG702503
Bromoform	mg/l	.025	0.0239	95.6	67.5-130	WG702503
Bromomethane	mg/l	.025	0.0225	90.2	49.9-162	WG702503
Carbon tetrachloride	mg/l	.025	0.0262	105.	70.2-123	WG702503
Chlorobenzene	mg/l	.025	0.0238	95.1	78.1-119	WG702503
Chlorodibromomethane	mg/l	.025	0.0228	91.3	74-121	WG702503
Chloroethane	mg/l	.025	0.0230	92.0	61.7-135	WG702503
Chloroform	mg/l	.025	0.0252	101.	76-121	WG702503

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Chloromethane	mg/l	.025	0.0262	105.	61.5-129	WG702503
cis-1,2-Dichloroethene	mg/l	.025	0.0255	102.	76-119	WG702503
cis-1,3-Dichloropropene	mg/l	.025	0.0252	101.	78.2-120	WG702503
Di-isopropyl ether	mg/l	.025	0.0271	108.	65.6-132	WG702503
Dibromomethane	mg/l	.025	0.0250	100.	79.5-118	WG702503
Dichlorodifluoromethane	mg/l	.025	0.0242	96.8	54.8-135	WG702503
Ethylbenzene	mg/l	.025	0.0256	103.	78.8-122	WG702503
Hexachloro-1,3-butadiene	mg/l	.025	0.0257	103.	64.7-129	WG702503
Isopropylbenzene	mg/l	.025	0.0272	109.	78.6-132	WG702503
Methyl tert-butyl ether	mg/l	.025	0.0251	100.	71.2-126	WG702503
Methylene Chloride	mg/l	.025	0.0240	96.1	70.3-120	WG702503
n-Butylbenzene	mg/l	.025	0.0286	114.	76.2-126	WG702503
n-Propylbenzene	mg/l	.025	0.0261	104.	78.2-122	WG702503
Naphthalene	mg/l	.025	0.0255	102.	68.4-128	WG702503
p-Isopropyltoluene	mg/l	.025	0.0262	105.	74-131	WG702503
sec-Butylbenzene	mg/l	.025	0.0255	102.	74.4-127	WG702503
Styrene	mg/l	.025	0.0264	106.	80.4-126	WG702503
tert-Butylbenzene	mg/l	.025	0.0249	99.6	75.3-126	WG702503
Tetrachloroethene	mg/l	.025	0.0237	95.0	72.6-126	WG702503
Toluene	mg/l	.025	0.0253	101.	79.7-116	WG702503
trans-1,2-Dichloroethene	mg/l	.025	0.0256	103.	72.6-121	WG702503
trans-1,3-Dichloropropene	mg/l	.025	0.0246	98.3	74.3-123	WG702503
Trichloroethene	mg/l	.025	0.0242	96.8	77.7-118	WG702503
Trichlorofluoromethane	mg/l	.025	0.0233	93.3	63.5-135	WG702503
Vinyl chloride	mg/l	.025	0.0244	97.8	65.9-128	WG702503
Xylenes, Total	mg/l	.075	0.0747	99.6	78.7-121	WG702503
4-Bromofluorobenzene				98.10	71-126	WG702503
Dibromofluoromethane				104.0	78.3-121	WG702503
Toluene-d8				103.0	88.5-111	WG702503
a,a,a-Trifluorotoluene				102.0	85-114	WG702503
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0243	97.3	72.9-124	WG702232
1,1,1-Trichloroethane	mg/kg	.025	0.0261	104.	73.7-124	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0250	100.	69.4-122	WG702232
1,1,2-Trichloroethane	mg/kg	.025	0.0273	109.	79.1-118	WG702232
1,1-Dichloroethane	mg/kg	.025	0.0280	112.	75-124	WG702232
1,1-Dichloroethene	mg/kg	.025	0.0251	101.	70.4-129	WG702232
1,1-Dichloropropene	mg/kg	.025	0.0275	110.	74.9-124	WG702232
1,2,3-Trichlorobenzene	mg/kg	.025	0.0254	102.	69.3-131	WG702232
1,2,3-Trichloropropane	mg/kg	.025	0.0247	98.6	71.4-123	WG702232
1,2,4-Trichlorobenzene	mg/kg	.025	0.0264	106.	71.9-137	WG702232
1,2,4-Trimethylbenzene	mg/kg	.025	0.0239	95.4	75.5-122	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0268	107.	62.8-133	WG702232
1,2-Dibromoethane	mg/kg	.025	0.0279	111.	78.6-120	WG702232
1,2-Dichlorobenzene	mg/kg	.025	0.0245	97.8	78.3-118	WG702232
1,2-Dichloroethane	mg/kg	.025	0.0247	98.9	70.1-124	WG702232
1,2-Dichloropropane	mg/kg	.025	0.0281	112.	77.9-119	WG702232
1,3,5-Trimethylbenzene	mg/kg	.025	0.0244	97.7	75.9-124	WG702232
1,3-Dichlorobenzene	mg/kg	.025	0.0233	93.3	72-126	WG702232
1,3-Dichloropropane	mg/kg	.025	0.0276	110.	79.1-117	WG702232
1,4-Dichlorobenzene	mg/kg	.025	0.0239	95.5	78.3-117	WG702232
2,2-Dichloropropane	mg/kg	.025	0.0244	97.7	61.3-136	WG702232
2-Butanone (MEK)	mg/kg	.125	0.160	128.	53.7-153	WG702232
2-Chloroethyl vinyl ether	mg/kg	.125	0.179	144.	37.7-157	WG702232
2-Chlorotoluene	mg/kg	.025	0.0228	91.4	75.6-121	WG702232
4-Chlorotoluene	mg/kg	.025	0.0241	96.6	77.3-120	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.150	120.	70.4-137	WG702232
Acetone	mg/kg	.125	0.116	92.9	35.1-175	WG702232

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Fax (615) 758-5859

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Acrylonitrile	mg/kg	.125	0.167	134.*	56.4-128	WG702232
Benzene	mg/kg	.025	0.0268	107.	77.1-121	WG702232
Bromobenzene	mg/kg	.025	0.0247	98.7	78.2-115	WG702232
Bromodichloromethane	mg/kg	.025	0.0230	92.1	74.9-115	WG702232
Bromoform	mg/kg	.025	0.0249	99.8	65.9-132	WG702232
Bromomethane	mg/kg	.025	0.0267	107.	48.7-165	WG702232
Carbon tetrachloride	mg/kg	.025	0.0259	104.	70-124	WG702232
Chlorobenzene	mg/kg	.025	0.0259	104.	79.1-119	WG702232
Chlorodibromomethane	mg/kg	.025	0.0256	102.	73.5-121	WG702232
Chloroethane	mg/kg	.025	0.0269	108.	66.2-132	WG702232
Chloroform	mg/kg	.025	0.0253	101.	76.7-122	WG702232
Chloromethane	mg/kg	.025	0.0304	121.	63.4-131	WG702232
cis-1,2-Dichloroethene	mg/kg	.025	0.0266	106.	78.2-119	WG702232
cis-1,3-Dichloropropene	mg/kg	.025	0.0281	112.	79.6-120	WG702232
Di-isopropyl ether	mg/kg	.025	0.0284	114.	70.4-133	WG702232
Dibromomethane	mg/kg	.025	0.0258	103.	79.4-120	WG702232
Dichlorodifluoromethane	mg/kg	.025	0.0282	113.	57.1-137	WG702232
Ethylbenzene	mg/kg	.025	0.0262	105.	79.7-122	WG702232
Hexachloro-1,3-butadiene	mg/kg	.025	0.0234	93.8	68.2-123	WG702232
Isopropylbenzene	mg/kg	.025	0.0274	109.	80-135	WG702232
Methyl tert-butyl ether	mg/kg	.025	0.0251	100.	73-129	WG702232
Methylene Chloride	mg/kg	.025	0.0252	101.	72.6-120	WG702232
n-Butylbenzene	mg/kg	.025	0.0263	105.	77.5-126	WG702232
n-Propylbenzene	mg/kg	.025	0.0248	99.1	77.9-123	WG702232
Naphthalene	mg/kg	.025	0.0256	102.	69.8-128	WG702232
p-Isopropyltoluene	mg/kg	.025	0.0251	100.	75.8-129	WG702232
sec-Butylbenzene	mg/kg	.025	0.0247	98.7	75.8-126	WG702232
Styrene	mg/kg	.025	0.0262	105.	82.4-126	WG702232
tert-Butylbenzene	mg/kg	.025	0.0253	101.	76.4-126	WG702232
Tetrachloroethene	mg/kg	.025	0.0267	107.	73.9-125	WG702232
Toluene	mg/kg	.025	0.0259	104.	79.7-118	WG702232
trans-1,2-Dichloroethene	mg/kg	.025	0.0258	103.	73.8-122	WG702232
trans-1,3-Dichloropropene	mg/kg	.025	0.0267	107.	75.9-124	WG702232
Trichloroethene	mg/kg	.025	0.0260	104.	77.9-118	WG702232
Trichlorofluoromethane	mg/kg	.025	0.0234	93.7	67.7-131	WG702232
Vinyl chloride	mg/kg	.025	0.0297	119.	66.7-130	WG702232
Xylenes, Total	mg/kg	.075	0.0768	102.	78.8-121	WG702232
4-Bromofluorobenzene				95.90	71-126	WG702232
Dibromofluoromethane				95.30	78.3-121	WG702232
Toluene-d8				102.0	88.5-111	WG702232
a,a,a-Trifluorotoluene				98.10	85-114	WG702232
TPH (GC/FID) High Fraction	mg/kg	60	41.4	68.9	50-150	WG702264
o-Terphenyl				65.10	50-150	WG702264
Antimony	mg/kg	113	56.7	50.0	0.88-223	WG701908
Arsenic	mg/kg	237	232.	98.0	83.1-117	WG701908
Beryllium	mg/kg	93.3	89.0	95.0	83.3-117	WG701908
Chromium	mg/kg	128	125.	98.0	81.3-118	WG701908
Copper	mg/kg	123	123.	100.	83.7-116	WG701908
Lead	mg/kg	103	94.9	92.0	83.1-117	WG701908
Nickel	mg/kg	118	109.	92.0	82-118	WG701908
Selenium	mg/kg	110	109.	99.0	78.7-122	WG701908
Silver	mg/kg	47.3	46.5	98.0	66.2-134	WG701908
Thallium	mg/kg	158	150.	95.0	81-119	WG701908
Zinc	mg/kg	183	176.	96.0	82-118	WG701908
Cadmium	mg/kg	191	176.	92.0	83.2-117	WG701908

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L678497

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0234	93.8	72.9-124	WG703100
1,1,1-Trichloroethane	mg/kg	.025	0.0229	91.7	73.7-124	WG703100
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0223	89.3	69.4-122	WG703100
1,1,2-Trichloroethane	mg/kg	.025	0.0233	93.2	79.1-118	WG703100
1,1-Dichloroethane	mg/kg	.025	0.0233	93.2	75-124	WG703100
1,1-Dichloroethene	mg/kg	.025	0.0227	90.6	70.4-129	WG703100
1,1-Dichloropropene	mg/kg	.025	0.0228	91.3	74.9-124	WG703100
1,2,3-Trichlorobenzene	mg/kg	.025	0.0227	90.9	69.3-131	WG703100
1,2,3-Trichloropropane	mg/kg	.025	0.0233	93.0	71.4-123	WG703100
1,2,4-Trichlorobenzene	mg/kg	.025	0.0246	98.2	71.9-137	WG703100
1,2,4-Trimethylbenzene	mg/kg	.025	0.0234	93.7	75.5-122	WG703100
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0228	91.3	62.8-133	WG703100
1,2-Dibromoethane	mg/kg	.025	0.0233	93.2	78.6-120	WG703100
1,2-Dichlorobenzene	mg/kg	.025	0.0234	93.6	78.3-118	WG703100
1,2-Dichloroethane	mg/kg	.025	0.0225	89.8	70.1-124	WG703100
1,2-Dichloropropane	mg/kg	.025	0.0227	90.6	77.9-119	WG703100
1,3,5-Trimethylbenzene	mg/kg	.025	0.0236	94.6	75.9-124	WG703100
1,3-Dichlorobenzene	mg/kg	.025	0.0229	91.4	72-126	WG703100
1,3-Dichloropropane	mg/kg	.025	0.0219	87.7	79.1-117	WG703100
1,4-Dichlorobenzene	mg/kg	.025	0.0227	90.6	78.3-117	WG703100
2,2-Dichloropropane	mg/kg	.025	0.0229	91.5	61.3-136	WG703100
2-Butanone (MEK)	mg/kg	.125	0.128	103.	53.7-153	WG703100
2-Chloroethyl vinyl ether	mg/kg	.125	0.124	99.2	37.7-157	WG703100
2-Chlorotoluene	mg/kg	.025	0.0230	92.0	75.6-121	WG703100
4-Chlorotoluene	mg/kg	.025	0.0234	93.8	77.3-120	WG703100
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.126	101.	70.4-137	WG703100
Acetone	mg/kg	.125	0.164	131.	35.1-175	WG703100
Acrylonitrile	mg/kg	.125	0.117	93.7	56.4-128	WG703100
Benzene	mg/kg	.025	0.0225	89.8	77.1-121	WG703100
Bromobenzene	mg/kg	.025	0.0225	89.8	78.2-115	WG703100
Bromodichloromethane	mg/kg	.025	0.0228	91.1	74.9-115	WG703100
Bromoform	mg/kg	.025	0.0240	96.0	65.9-132	WG703100
Bromomethane	mg/kg	.025	0.0259	103.	48.7-165	WG703100
Carbon tetrachloride	mg/kg	.025	0.0227	90.8	70-124	WG703100
Chlorobenzene	mg/kg	.025	0.0232	93.0	79.1-119	WG703100
Chlorodibromomethane	mg/kg	.025	0.0226	90.4	73.5-121	WG703100
Chloroethane	mg/kg	.025	0.0246	98.5	66.2-132	WG703100
Chloroform	mg/kg	.025	0.0228	91.2	76.7-122	WG703100
Chloromethane	mg/kg	.025	0.0203	81.2	63.4-131	WG703100
cis-1,2-Dichloroethene	mg/kg	.025	0.0231	92.2	78.2-119	WG703100
cis-1,3-Dichloropropene	mg/kg	.025	0.0233	93.0	79.6-120	WG703100
Di-isopropyl ether	mg/kg	.025	0.0231	92.5	70.4-133	WG703100
Dibromomethane	mg/kg	.025	0.0240	96.1	79.4-120	WG703100
Dichlorodifluoromethane	mg/kg	.025	0.0190	76.1	57.1-137	WG703100
Ethylbenzene	mg/kg	.025	0.0232	92.7	79.7-122	WG703100
Hexachloro-1,3-butadiene	mg/kg	.025	0.0209	83.5	68.2-123	WG703100
Isopropylbenzene	mg/kg	.025	0.0259	104.	80-135	WG703100
Methyl tert-butyl ether	mg/kg	.025	0.0230	92.0	73-129	WG703100
Methylene Chloride	mg/kg	.025	0.0212	84.9	72.6-120	WG703100
n-Butylbenzene	mg/kg	.025	0.0245	97.9	77.5-126	WG703100
n-Propylbenzene	mg/kg	.025	0.0233	93.2	77.9-123	WG703100
Naphthalene	mg/kg	.025	0.0227	91.0	69.8-128	WG703100
p-Isopropyltoluene	mg/kg	.025	0.0244	97.5	75.8-129	WG703100
sec-Butylbenzene	mg/kg	.025	0.0233	93.3	75.8-126	WG703100
Styrene	mg/kg	.025	0.0253	101.	82.4-126	WG703100
tert-Butylbenzene	mg/kg	.025	0.0233	93.3	76.4-126	WG703100
Tetrachloroethene	mg/kg	.025	0.0227	90.7	73.9-125	WG703100
Toluene	mg/kg	.025	0.0227	90.7	79.7-118	WG703100
trans-1,2-Dichloroethene	mg/kg	.025	0.0226	90.6	73.8-122	WG703100

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Quality Assurance Report
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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
trans-1,3-Dichloropropene	mg/kg	.025	0.0235	94.2	75.9-124	WG703100
Trichloroethene	mg/kg	.025	0.0228	91.2	77.9-118	WG703100
Trichlorofluoromethane	mg/kg	.025	0.0232	92.6	67.7-131	WG703100
Vinyl chloride	mg/kg	.025	0.0216	86.3	66.7-130	WG703100
Xylenes, Total	mg/kg	.075	0.0695	92.7	78.8-121	WG703100
4-Bromofluorobenzene				103.0	71-126	WG703100
Dibromofluoromethane				103.0	78.3-121	WG703100
Toluene-d8				104.0	88.5-111	WG703100
a,a,a-Trifluorotoluene				106.0	85-114	WG703100
1,2,4-Trichlorobenzene	mg/kg	.333	0.247	74.1	39.8-100	WG703044
2,4,6-Trichlorophenol	mg/kg	.333	0.355	107.	44.4-108	WG703044
2,4-Dichlorophenol	mg/kg	.333	0.308	92.4	46.2-109	WG703044
2,4-Dimethylphenol	mg/kg	.333	0.280	84.1	42.2-110	WG703044
2,4-Dinitrophenol	mg/kg	.333	0.363	109.*	10-105	WG703044
2,4-Dinitrotoluene	mg/kg	.333	0.287	86.1	53-112	WG703044
2,6-Dinitrotoluene	mg/kg	.333	0.295	88.6	51.6-110	WG703044
2-Chloronaphthalene	mg/kg	.333	0.277	83.1	47.1-105	WG703044
2-Chlorophenol	mg/kg	.333	0.234	70.4	40.8-103	WG703044
2-Nitrophenol	mg/kg	.333	0.285	85.7	44.2-113	WG703044
3,3-Dichlorobenzidine	mg/kg	.333	0.261	78.3	21-101	WG703044
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.343	103.	23.1-119	WG703044
4-Bromophenyl-phenylether	mg/kg	.333	0.307	92.3	51.4-110	WG703044
4-Chloro-3-methylphenol	mg/kg	.333	0.308	92.5	51.1-113	WG703044
4-Chlorophenyl-phenylether	mg/kg	.333	0.295	88.7	48.1-108	WG703044
4-Nitrophenol	mg/kg	.333	0.331	99.3	34.8-109	WG703044
Acenaphthene	mg/kg	.333	0.296	88.9	48.9-107	WG703044
Acenaphthylene	mg/kg	.333	0.275	82.7	49.2-111	WG703044
Anthracene	mg/kg	.333	0.294	88.2	52-112	WG703044
Benzidine	mg/kg	.333	0.0198	5.95	0-48	WG703044
Benzo(a)anthracene	mg/kg	.333	0.326	97.9	52.3-106	WG703044
Benzo(a)pyrene	mg/kg	.333	0.295	88.6	51.9-106	WG703044
Benzo(b)fluoranthene	mg/kg	.333	0.319	95.9	51.3-106	WG703044
Benzo(g,h,i)perylene	mg/kg	.333	0.329	98.9	45.8-108	WG703044
Benzo(k)fluoranthene	mg/kg	.333	0.301	90.4	52.9-107	WG703044
Benzylbutyl phthalate	mg/kg	.333	0.292	87.7	47.5-115	WG703044
Bis(2-chlorethoxy)methane	mg/kg	.333	0.275	82.5	44.9-108	WG703044
Bis(2-chloroethyl)ether	mg/kg	.333	0.238	71.6	32.5-112	WG703044
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.246	73.9	40.4-99	WG703044
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.293	88.1	48.1-116	WG703044
Chrysene	mg/kg	.333	0.329	98.8	54.4-110	WG703044
Di-n-butyl phthalate	mg/kg	.333	0.292	87.6	49.7-113	WG703044
Di-n-octyl phthalate	mg/kg	.333	0.335	101.	49.6-112	WG703044
Dibenz(a,h)anthracene	mg/kg	.333	0.313	94.0	45.7-111	WG703044
Diethyl phthalate	mg/kg	.333	0.303	90.9	52-112	WG703044
Dimethyl phthalate	mg/kg	.333	0.300	90.1	51.4-108	WG703044
Fluoranthene	mg/kg	.333	0.309	92.8	53.7-110	WG703044
Fluorene	mg/kg	.333	0.280	84.2	51.1-109	WG703044
Hexachloro-1,3-butadiene	mg/kg	.333	0.286	86.0	41.5-112	WG703044
Hexachlorobenzene	mg/kg	.333	0.337	101.	43.2-104	WG703044
Hexachlorocyclopentadiene	mg/kg	.333	0.231	69.3	13.5-123	WG703044
Hexachloroethane	mg/kg	.333	0.242	72.6	36.2-103	WG703044
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.335	101.	47.5-109	WG703044
Isophorone	mg/kg	.333	0.303	90.9	28.8-104	WG703044
n-Nitrosodi-n-propylamine	mg/kg	.333	0.293	87.9	43.3-109	WG703044
n-Nitrosodimethylamine	mg/kg	.333	0.264	79.1	18.1-122	WG703044
n-Nitrosodiphenylamine	mg/kg	.333	0.270	81.0	48.8-107	WG703044
Naphthalene	mg/kg	.333	0.243	72.8	43.4-103	WG703044

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Nitrobenzene	mg/kg	.333	0.280	84.2	40.7-109	WG703044
Phenanthrene	mg/kg	.333	0.303	90.9	51.6-107	WG703044
Phenol	mg/kg	.333	0.277	83.1	41.5-106	WG703044
Pyrene	mg/kg	.333	0.313	94.0	47.1-108	WG703044
2,4,6-Tribromophenol				97.50	21.6-142	WG703044
2-Fluorobiphenyl				81.40	34.9-129	WG703044
2-Fluorophenol				68.60	21.1-116	WG703044
Nitrobenzene-d5				78.50	21.9-129	WG703044
Phenol-d5				71.10	26.3-121	WG703044
p-Terphenyl-d14				83.50	21.5-128	WG703044
C5-C8 Aliphatics	mg/kg	1.2	1.25	104.	70-130	WG703127
C9-C10 Aromatics	mg/kg	.2	0.228	114.	70-130	WG703127
C9-C12 Aliphatics	mg/kg	1.4	1.44	103.	70-130	WG703127
2,5-Dibromotoluene(FID)				102.0	70-130	WG703127
2,5-Dibromotoluene(PID)				105.0	70-130	WG703127
C19-C36 Aliphatics	mg/kg	64	62.0	96.8	40-140	WG703463
C9-C18 Aliphatics	mg/kg	48	35.7	74.4	40-140	WG703463
1-Chloro-octadecane				79.10	40-140	WG703463
C11-C22 Aromatics	mg/kg	136	130.	95.5	40-140	WG703463
2-Bromonaphthalene				94.30	40-140	WG703463
2-Fluorobiphenyl				99.60	40-140	WG703463
o-Terphenyl				105.0	40-140	WG703463
Pentachlorophenol	mg/kg	.333	0.300	90.0	16.2-102	WG703930
2,4,6-Tribromophenol				106.0	21.6-142	WG703930
2-Fluorobiphenyl				67.40	34.9-129	WG703930
2-Fluorophenol				62.10	21.1-116	WG703930
Nitrobenzene-d5				74.00	21.9-129	WG703930
Phenol-d5				70.20	26.3-121	WG703930
p-Terphenyl-d14				64.10	21.5-128	WG703930

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
TPH (GC/FID) Low Fraction	mg/kg	6.99	6.85	127.	63.5-137	1.92	20	WG702094
a,a,a-Trifluorotoluene(FID)				101.0	59-128			WG702094
TPH (GC/FID) High Fraction	mg/kg	53.7	38.7	89.0	50-150	32.5*	20	WG701965
o-Terphenyl				102.0	50-150			WG701965
1,2,4-Trichlorobenzene	mg/kg	0.184	0.194	55.0	39.8-100	5.48	20	WG701973
2,4,6-Trichlorophenol	mg/kg	0.221	0.221	66.0	44.4-108	0.0200	20	WG701973
2,4-Dichlorophenol	mg/kg	0.210	0.216	63.0	46.2-109	2.74	20	WG701973
2,4-Dimethylphenol	mg/kg	0.206	0.199	62.0	42.2-110	3.26	20	WG701973
2,4-Dinitrophenol	mg/kg	0.190	0.223	57.0	10-105	16.1	36.5	WG701973
2,4-Dinitrotoluene	mg/kg	0.250	0.250	75.0	53-112	0.240	20	WG701973
2,6-Dinitrotoluene	mg/kg	0.247	0.252	74.0	51.6-110	2.22	20	WG701973
2-Chloronaphthalene	mg/kg	0.227	0.229	68.0	47.1-105	0.740	20	WG701973
2-Chlorophenol	mg/kg	0.214	0.218	64.0	40.8-103	1.78	20	WG701973
2-Nitrophenol	mg/kg	0.243	0.260	73.0	44.2-113	6.95	20.9	WG701973
3,3-Dichlorobenzidine	mg/kg	0.182	0.191	54.0	21-101	5.17	22	WG701973
4,6-Dinitro-2-methylphenol	mg/kg	0.242	0.254	72.0	23.1-119	4.81	23.7	WG701973

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678497

January 30, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
4-Bromophenyl-phenylether	mg/kg	0.196	0.201	59.0	51.4-110	2.29	20	WG701973
4-Chloro-3-methylphenol	mg/kg	0.243	0.247	73.0	51.1-113	1.59	20	WG701973
4-Chlorophenyl-phenylether	mg/kg	0.213	0.215	64.0	48.1-108	0.680	20	WG701973
4-Nitrophenol	mg/kg	0.266	0.272	80.0	34.8-109	2.54	20	WG701973
Acenaphthene	mg/kg	0.220	0.225	66.0	48.9-107	2.33	20	WG701973
Acenaphthylene	mg/kg	0.234	0.239	70.0	49.2-111	1.97	20	WG701973
Anthracene	mg/kg	0.221	0.221	66.0	52-112	0.0600	20	WG701973
Benzidine	mg/kg	0.0149	0.0144	4.00	0-48	3.47	40	WG701973
Benzo(a)anthracene	mg/kg	0.214	0.218	64.0	52.3-106	1.75	20	WG701973
Benzo(a)pyrene	mg/kg	0.205	0.221	62.0	51.9-106	7.62	20	WG701973
Benzo(b)fluoranthene	mg/kg	0.228	0.249	68.0	51.3-106	8.85	20	WG701973
Benzo(g,h,i)perylene	mg/kg	0.223	0.240	67.0	45.8-108	7.31	20	WG701973
Benzo(k)fluoranthene	mg/kg	0.232	0.232	70.0	52.9-107	0.0700	20	WG701973
Benzylbutyl phthalate	mg/kg	0.261	0.253	78.0	47.5-115	3.15	20	WG701973
Bis(2-chlorethoxy)methane	mg/kg	0.204	0.218	61.0	44.9-108	6.21	20	WG701973
Bis(2-chloroethyl)ether	mg/kg	0.203	0.206	61.0	32.5-112	1.18	26	WG701973
Bis(2-chloroisopropyl)ether	mg/kg	0.211	0.212	63.0	40.4-99	0.220	20.7	WG701973
Bis(2-ethylhexyl)phthalate	mg/kg	0.260	0.254	78.0	48.1-116	2.37	20.5	WG701973
Chrysene	mg/kg	0.219	0.220	66.0	54.4-110	0.460	20	WG701973
Di-n-butyl phthalate	mg/kg	0.223	0.216	67.0	49.7-113	3.36	20	WG701973
Di-n-octyl phthalate	mg/kg	0.274	0.268	82.0	49.6-112	2.22	22	WG701973
Dibenz(a,h)anthracene	mg/kg	0.222	0.236	67.0	45.7-111	6.10	20	WG701973
Diethyl phthalate	mg/kg	0.233	0.232	70.0	52-112	0.450	20	WG701973
Dimethyl phthalate	mg/kg	0.231	0.241	69.0	51.4-108	4.56	20	WG701973
Fluoranthene	mg/kg	0.198	0.197	59.0	53.7-110	0.250	20	WG701973
Fluorene	mg/kg	0.220	0.228	66.0	51.1-109	3.33	20	WG701973
Hexachloro-1,3-butadiene	mg/kg	0.172	0.179	52.0	41.5-112	4.38	20	WG701973
Hexachlorobenzene	mg/kg	0.187	0.193	56.0	43.2-104	3.24	20.1	WG701973
Hexachlorocyclopentadiene	mg/kg	0.138	0.133	41.0	13.5-123	4.01	20.7	WG701973
Hexachloroethane	mg/kg	0.199	0.208	60.0	36.2-103	4.72	22.7	WG701973
Indeno(1,2,3-cd)pyrene	mg/kg	0.222	0.240	66.0	47.5-109	7.91	20	WG701973
Isophorone	mg/kg	0.237	0.239	71.0	28.8-104	1.19	20	WG701973
n-Nitrosodi-n-propylamine	mg/kg	0.221	0.230	66.0	43.3-109	4.00	20	WG701973
n-Nitrosodimethylamine	mg/kg	0.178	0.185	53.0	18.1-122	3.95	23.5	WG701973
n-Nitrosodiphenylamine	mg/kg	0.215	0.219	65.0	48.8-107	1.78	20	WG701973
Naphthalene	mg/kg	0.197	0.202	59.0	43.4-103	2.66	20	WG701973
Nitrobenzene	mg/kg	0.230	0.235	69.0	40.7-109	2.48	21	WG701973
Pentachlorophenol	mg/kg	0.188	0.189	56.0	16.2-102	0.490	22.9	WG701973
Phenanthrene	mg/kg	0.219	0.228	66.0	51.6-107	4.01	20	WG701973
Phenol	mg/kg	0.222	0.230	67.0	41.5-106	3.24	20	WG701973
Pyrene	mg/kg	0.232	0.227	70.0	47.1-108	2.11	20	WG701973
2,4,6-Tribromophenol				57.60	21.6-142			WG701973
2-Fluorobiphenyl				60.50	34.9-129			WG701973
2-Fluorophenol				55.80	21.1-116			WG701973
Nitrobenzene-d5				59.30	21.9-129			WG701973
Phenol-d5				61.70	26.3-121			WG701973
p-Terphenyl-d14				53.40	21.5-128			WG701973
PCB 1016	mg/kg	0.151	0.147	90.0	63.2-118	2.80	20	WG701964
PCB 1260	mg/kg	0.184	0.176	110.	64.6-123	4.30	20.8	WG701964
Decachlorobiphenyl				111.0	10-145			WG701964
Tetrachloro-m-xylene				101.0	21.1-148			WG701964
1,1,1,2-Tetrachloroethane	mg/l	0.0228	0.0243	91.0	74.2-124	6.26	20	WG702503
1,1,1-Trichloroethane	mg/l	0.0249	0.0261	99.0	73.2-123	4.80	20	WG702503
1,1,2,2-Tetrachloroethane	mg/l	0.0225	0.0240	90.0	70.7-122	6.44	20	WG702503
1,1,2-Trichloroethane	mg/l	0.0236	0.0234	94.0	77.7-118	0.770	20	WG702503

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Level II

L678497

January 30, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1-Dichloroethane	mg/l	0.0260	0.0274	104.	70.7-126	5.38	20	WG702503
1,1-Dichloroethene	mg/l	0.0228	0.0247	91.0	67.8-129	8.00	20	WG702503
1,1-Dichloropropene	mg/l	0.0257	0.0269	103.	73.1-125	4.41	20	WG702503
1,2,3-Trichlorobenzene	mg/l	0.0240	0.0268	96.0	64.9-135	11.0	20	WG702503
1,2,3-Trichloropropane	mg/l	0.0223	0.0231	89.0	71.8-121	3.67	20	WG702503
1,2,4-Trichlorobenzene	mg/l	0.0265	0.0284	106.	69.7-136	7.01	20	WG702503
1,2,4-Trimethylbenzene	mg/l	0.0235	0.0246	94.0	75-123	4.72	20	WG702503
1,2-Dibromo-3-Chloropropane	mg/l	0.0232	0.0248	93.0	65.4-128	6.76	20	WG702503
1,2-Dibromoethane	mg/l	0.0238	0.0239	95.0	76.6-121	0.550	20	WG702503
1,2-Dichlorobenzene	mg/l	0.0241	0.0251	96.0	78.4-117	3.95	20	WG702503
1,2-Dichloroethane	mg/l	0.0239	0.0240	96.0	68.8-124	0.100	20	WG702503
1,2-Dichloropropane	mg/l	0.0253	0.0258	101.	76.5-119	2.13	20	WG702503
1,3,5-Trimethylbenzene	mg/l	0.0243	0.0250	97.0	75.6-124	2.80	20	WG702503
1,3-Dichlorobenzene	mg/l	0.0236	0.0244	94.0	70.8-128	3.52	20	WG702503
1,3-Dichloropropane	mg/l	0.0232	0.0237	93.0	77.4-117	2.24	20	WG702503
1,4-Dichlorobenzene	mg/l	0.0238	0.0244	95.0	78.8-115	2.62	20	WG702503
2,2-Dichloropropane	mg/l	0.0236	0.0259	94.0	62.4-133	9.03	20	WG702503
2-Butanone (MEK)	mg/l	0.111	0.118	89.0	55-149	6.46	20	WG702503
2-Chloroethyl vinyl ether	mg/l	0.131	0.131	104.	43.8-150	0.500	20	WG702503
2-Chlorotoluene	mg/l	0.0230	0.0243	92.0	74.7-122	5.66	20	WG702503
4-Chlorotoluene	mg/l	0.0238	0.0246	95.0	77.5-120	3.51	20	WG702503
4-Methyl-2-pentanone (MIBK)	mg/l	0.129	0.138	103.	70.5-133	6.73	20	WG702503
Acetone	mg/l	0.0760	0.0866	61.0	35.6-163	13.0	23.9	WG702503
Acrolein	mg/l	0.101	0.107	81.0	10-190	5.84	28.1	WG702503
Acrylonitrile	mg/l	0.127	0.138	102.	55.2-130	8.20	20	WG702503
Benzene	mg/l	0.0254	0.0259	102.	74.8-121	1.80	20	WG702503
Bromobenzene	mg/l	0.0233	0.0243	93.0	77.5-116	4.30	20	WG702503
Bromodichloromethane	mg/l	0.0238	0.0242	95.0	75.1-116	1.67	20	WG702503
Bromoform	mg/l	0.0243	0.0239	97.0	67.5-130	1.71	20	WG702503
Bromomethane	mg/l	0.0201	0.0225	80.0	49.9-162	11.4	20	WG702503
Carbon tetrachloride	mg/l	0.0250	0.0262	100.	70.2-123	4.64	20	WG702503
Chlorobenzene	mg/l	0.0231	0.0238	92.0	78.1-119	2.92	20	WG702503
Chlorodibromomethane	mg/l	0.0222	0.0228	89.0	74-121	2.63	20	WG702503
Chloroethane	mg/l	0.0212	0.0230	85.0	61.7-135	8.38	20	WG702503
Chloroform	mg/l	0.0242	0.0252	97.0	76-121	4.38	20	WG702503
Chloromethane	mg/l	0.0238	0.0262	95.0	61.5-129	9.46	20	WG702503
cis-1,2-Dichloroethene	mg/l	0.0244	0.0255	97.0	76-119	4.47	20	WG702503
cis-1,3-Dichloropropene	mg/l	0.0263	0.0252	105.	78.2-120	4.41	20	WG702503
Di-isopropyl ether	mg/l	0.0256	0.0271	102.	65.6-132	5.59	20	WG702503
Dibromomethane	mg/l	0.0250	0.0250	100.	79.5-118	0.240	20	WG702503
Dichlorodifluoromethane	mg/l	0.0228	0.0242	91.0	54.8-135	5.87	20	WG702503
Ethylbenzene	mg/l	0.0245	0.0256	98.0	78.8-122	4.52	20	WG702503
Hexachloro-1,3-butadiene	mg/l	0.0237	0.0257	95.0	64.7-129	7.93	20	WG702503
Isopropylbenzene	mg/l	0.0265	0.0272	106.	78.6-132	2.52	20	WG702503
Methyl tert-butyl ether	mg/l	0.0236	0.0251	94.0	71.2-126	6.17	20	WG702503
Methylene Chloride	mg/l	0.0226	0.0240	90.0	70.3-120	6.23	20	WG702503
n-Butylbenzene	mg/l	0.0273	0.0286	109.	76.2-126	4.71	20	WG702503
n-Propylbenzene	mg/l	0.0244	0.0261	97.0	78.2-122	6.81	20	WG702503
Naphthalene	mg/l	0.0229	0.0255	92.0	68.4-128	10.6	20	WG702503
p-Isopropyltoluene	mg/l	0.0249	0.0262	99.0	74-131	5.29	20	WG702503
sec-Butylbenzene	mg/l	0.0242	0.0255	97.0	74.4-127	5.18	20	WG702503
Styrene	mg/l	0.0252	0.0264	101.	80.4-126	4.92	20	WG702503
tert-Butylbenzene	mg/l	0.0240	0.0249	96.0	75.3-126	3.84	20	WG702503
Tetrachloroethene	mg/l	0.0226	0.0237	90.0	72.6-126	4.81	20	WG702503
Toluene	mg/l	0.0250	0.0253	100.	79.7-116	1.01	20	WG702503
trans-1,2-Dichloroethene	mg/l	0.0244	0.0256	98.0	72.6-121	4.98	20	WG702503
trans-1,3-Dichloropropene	mg/l	0.0253	0.0246	101.	74.3-123	3.06	20	WG702503
Trichloroethene	mg/l	0.0242	0.0242	97.0	77.7-118	0.0200	20	WG702503
Trichlorofluoromethane	mg/l	0.0216	0.0233	86.0	63.5-135	7.55	20	WG702503

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Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Vinyl chloride	mg/l	0.0225	0.0244	90.0	65.9-128	8.23	20	WG702503
Xylenes, Total	mg/l	0.0717	0.0747	96.0	78.7-121	3.99	20	WG702503
4-Bromofluorobenzene				96.20	71-126			WG702503
Dibromofluoromethane				101.0	78.3-121			WG702503
Toluene-d8				105.0	88.5-111			WG702503
a,a,a-Trifluorotoluene				102.0	85-114			WG702503
1,1,1,2-Tetrachloroethane	mg/kg	0.0256	0.0243	102.	72.9-124	5.03	20	WG702232
1,1,1-Trichloroethane	mg/kg	0.0279	0.0261	112.	73.7-124	6.86	20	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0242	0.0250	97.0	69.4-122	3.42	20	WG702232
1,1,2-Trichloroethane	mg/kg	0.0248	0.0273	99.0	79.1-118	9.59	20	WG702232
1,1-Dichloroethane	mg/kg	0.0303	0.0280	121.	75-124	7.91	20	WG702232
1,1-Dichloroethene	mg/kg	0.0269	0.0251	108.	70.4-129	6.83	20	WG702232
1,1-Dichloropropene	mg/kg	0.0286	0.0275	114.	74.9-124	4.03	20	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0280	0.0254	112.	69.3-131	9.66	20	WG702232
1,2,3-Trichloropropane	mg/kg	0.0240	0.0247	96.0	71.4-123	2.66	20	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0293	0.0264	117.	71.9-137	10.2	20	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0254	0.0239	102.	75.5-122	6.44	20	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0255	0.0268	102.	62.8-133	4.83	20	WG702232
1,2-Dibromoethane	mg/kg	0.0245	0.0279	98.0	78.6-120	12.8	20	WG702232
1,2-Dichlorobenzene	mg/kg	0.0253	0.0245	101.	78.3-118	3.41	20	WG702232
1,2-Dichloroethane	mg/kg	0.0248	0.0247	99.0	70.1-124	0.180	20	WG702232
1,2-Dichloropropane	mg/kg	0.0281	0.0281	112.	77.9-119	0.270	20	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0260	0.0244	104.	75.9-124	6.21	20	WG702232
1,3-Dichlorobenzene	mg/kg	0.0245	0.0233	98.0	72-126	5.03	20	WG702232
1,3-Dichloropropane	mg/kg	0.0248	0.0276	99.0	79.1-117	10.7	20	WG702232
1,4-Dichlorobenzene	mg/kg	0.0239	0.0239	96.0	78.3-117	0.0400	20	WG702232
2,2-Dichloropropane	mg/kg	0.0277	0.0244	111.	61.3-136	12.6	20	WG702232
2-Butanone (MEK)	mg/kg	0.127	0.160	102.	53.7-153	22.7*	21.2	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.147	0.179	117.	37.7-157	20.1*	20	WG702232
2-Chlorotoluene	mg/kg	0.0246	0.0228	98.0	75.6-121	7.56	20	WG702232
4-Chlorotoluene	mg/kg	0.0254	0.0241	102.	77.3-120	5.03	20	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.135	0.150	108.	70.4-137	10.7	20	WG702232
Acetone	mg/kg	0.105	0.116	84.0	35.1-175	10.3	26.1	WG702232
Acrylonitrile	mg/kg	0.148	0.167	119.	56.4-128	11.9	20	WG702232
Benzene	mg/kg	0.0279	0.0268	112.	77.1-121	4.11	20	WG702232
Bromobenzene	mg/kg	0.0252	0.0247	101.	78.2-115	2.29	20	WG702232
Bromodichloromethane	mg/kg	0.0231	0.0230	92.0	74.9-115	0.250	20	WG702232
Bromoform	mg/kg	0.0235	0.0249	94.0	65.9-132	6.10	20	WG702232
Bromomethane	mg/kg	0.0299	0.0267	120.	48.7-165	11.4	20	WG702232
Carbon tetrachloride	mg/kg	0.0271	0.0259	108.	70-124	4.58	20	WG702232
Chlorobenzene	mg/kg	0.0256	0.0259	102.	79.1-119	1.02	20	WG702232
Chlorodibromomethane	mg/kg	0.0245	0.0256	98.0	73.5-121	4.07	20	WG702232
Chloroethane	mg/kg	0.0282	0.0269	113.	66.2-132	4.76	20	WG702232
Chloroform	mg/kg	0.0266	0.0253	106.	76.7-122	5.34	20	WG702232
Chloromethane	mg/kg	0.0328	0.0304	131.	63.4-131	7.60	20	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0287	0.0266	115.	78.2-119	7.53	20	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0263	0.0281	105.	79.6-120	6.53	20	WG702232
Di-isopropyl ether	mg/kg	0.0294	0.0284	117.	70.4-133	3.41	20	WG702232
Dibromomethane	mg/kg	0.0258	0.0258	103.	79.4-120	0.140	20	WG702232
Dichlorodifluoromethane	mg/kg	0.0294	0.0282	118.	57.1-137	4.31	20	WG702232
Ethylbenzene	mg/kg	0.0268	0.0262	107.	79.7-122	2.39	20	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0258	0.0234	103.	68.2-123	9.61	20	WG702232
Isopropylbenzene	mg/kg	0.0290	0.0274	116.	80-135	5.95	20	WG702232
Methyl tert-butyl ether	mg/kg	0.0266	0.0251	106.	73-129	5.84	20	WG702232
Methylene Chloride	mg/kg	0.0282	0.0252	113.	72.6-120	10.9	20	WG702232
n-Butylbenzene	mg/kg	0.0276	0.0263	110.	77.5-126	4.88	20	WG702232
n-Propylbenzene	mg/kg	0.0264	0.0248	106.	77.9-123	6.22	20	WG702232

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Naphthalene	mg/kg	0.0260	0.0256	104.	69.8-128	1.62	20	WG702232
p-Isopropyltoluene	mg/kg	0.0272	0.0251	109.	75.8-129	8.34	20	WG702232
sec-Butylbenzene	mg/kg	0.0265	0.0247	106.	75.8-126	7.33	20	WG702232
Styrene	mg/kg	0.0264	0.0262	106.	82.4-126	0.850	20	WG702232
tert-Butylbenzene	mg/kg	0.0269	0.0253	108.	76.4-126	6.23	20	WG702232
Tetrachloroethene	mg/kg	0.0260	0.0267	104.	73.9-125	2.76	20	WG702232
Toluene	mg/kg	0.0261	0.0259	104.	79.7-118	0.620	20	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0283	0.0258	113.	73.8-122	9.41	20	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0238	0.0267	95.0	75.9-124	11.7	20	WG702232
Trichloroethene	mg/kg	0.0270	0.0260	108.	77.9-118	4.06	20	WG702232
Trichlorofluoromethane	mg/kg	0.0254	0.0234	102.	67.7-131	8.24	20	WG702232
Vinyl chloride	mg/kg	0.0306	0.0297	122.	66.7-130	2.97	20	WG702232
Xylenes, Total	mg/kg	0.0778	0.0768	104.	78.8-121	1.31	20	WG702232
4-Bromofluorobenzene				96.20	71-126			WG702232
Dibromofluoromethane				101.0	78.3-121			WG702232
Toluene-d8				103.0	88.5-111			WG702232
a,a,a-Trifluorotoluene				103.0	85-114			WG702232
TPH (GC/FID) High Fraction	mg/kg	39.7	41.4	66.0	50-150	4.00	20	WG702264
o-Terphenyl				63.40	50-150			WG702264
1,1,1,2-Tetrachloroethane	mg/kg	0.0256	0.0234	102.	72.9-124	8.79	20	WG703100
1,1,1-Trichloroethane	mg/kg	0.0248	0.0229	99.0	73.7-124	7.72	20	WG703100
1,1,2,2-Tetrachloroethane	mg/kg	0.0238	0.0223	95.0	69.4-122	6.38	20	WG703100
1,1,2-Trichloroethane	mg/kg	0.0248	0.0233	99.0	79.1-118	6.38	20	WG703100
1,1-Dichloroethane	mg/kg	0.0253	0.0233	101.	75-124	8.04	20	WG703100
1,1-Dichloroethene	mg/kg	0.0244	0.0227	98.0	70.4-129	7.38	20	WG703100
1,1-Dichloropropene	mg/kg	0.0245	0.0228	98.0	74.9-124	7.23	20	WG703100
1,2,3-Trichlorobenzene	mg/kg	0.0247	0.0227	99.0	69.3-131	8.52	20	WG703100
1,2,3-Trichloropropane	mg/kg	0.0250	0.0233	100.	71.4-123	7.40	20	WG703100
1,2,4-Trichlorobenzene	mg/kg	0.0271	0.0246	108.	71.9-137	9.93	20	WG703100
1,2,4-Trimethylbenzene	mg/kg	0.0253	0.0234	101.	75.5-122	7.76	20	WG703100
1,2-Dibromo-3-Chloropropane	mg/kg	0.0243	0.0228	97.0	62.8-133	6.16	20	WG703100
1,2-Dibromoethane	mg/kg	0.0254	0.0233	101.	78.6-120	8.42	20	WG703100
1,2-Dichlorobenzene	mg/kg	0.0254	0.0234	102.	78.3-118	8.29	20	WG703100
1,2-Dichloroethane	mg/kg	0.0247	0.0225	99.0	70.1-124	9.53	20	WG703100
1,2-Dichloropropane	mg/kg	0.0245	0.0227	98.0	77.9-119	8.01	20	WG703100
1,3,5-Trimethylbenzene	mg/kg	0.0257	0.0236	103.	75.9-124	8.33	20	WG703100
1,3-Dichlorobenzene	mg/kg	0.0250	0.0229	100.	72-126	9.13	20	WG703100
1,3-Dichloropropane	mg/kg	0.0237	0.0219	95.0	79.1-117	7.56	20	WG703100
1,4-Dichlorobenzene	mg/kg	0.0248	0.0227	99.0	78.3-117	9.14	20	WG703100
2,2-Dichloropropane	mg/kg	0.0250	0.0229	100.	61.3-136	8.78	20	WG703100
2-Butanone (MEK)	mg/kg	0.128	0.128	102.	53.7-153	0.110	21.2	WG703100
2-Chloroethyl vinyl ether	mg/kg	0.132	0.124	106.	37.7-157	6.49	20	WG703100
2-Chlorotoluene	mg/kg	0.0250	0.0230	100.	75.6-121	8.33	20	WG703100
4-Chlorotoluene	mg/kg	0.0253	0.0234	101.	77.3-120	7.73	20	WG703100
4-Methyl-2-pentanone (MIBK)	mg/kg	0.131	0.126	104.	70.4-137	3.89	20	WG703100
Acetone	mg/kg	0.155	0.164	124.	35.1-175	5.68	26.1	WG703100
Acrylonitrile	mg/kg	0.125	0.117	100.	56.4-128	6.36	20	WG703100
Benzene	mg/kg	0.0241	0.0225	96.0	77.1-121	7.10	20	WG703100
Bromobenzene	mg/kg	0.0245	0.0225	98.0	78.2-115	8.62	20	WG703100
Bromodichloromethane	mg/kg	0.0249	0.0228	99.0	74.9-115	8.78	20	WG703100
Bromoform	mg/kg	0.0258	0.0240	103.	65.9-132	7.26	20	WG703100
Bromomethane	mg/kg	0.0291	0.0259	116.	48.7-165	11.6	20	WG703100
Carbon tetrachloride	mg/kg	0.0246	0.0227	98.0	70-124	7.99	20	WG703100
Chlorobenzene	mg/kg	0.0250	0.0232	100.	79.1-119	7.36	20	WG703100
Chlorodibromomethane	mg/kg	0.0243	0.0226	97.0	73.5-121	7.44	20	WG703100

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Quality Assurance Report
Level II

L678497

January 30, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Chloroethane	mg/kg	0.0248	0.0246	99.0	66.2-132	0.910	20	WG703100
Chloroform	mg/kg	0.0246	0.0228	98.0	76.7-122	7.56	20	WG703100
Chloromethane	mg/kg	0.0221	0.0203	88.0	63.4-131	8.59	20	WG703100
cis-1,2-Dichloroethene	mg/kg	0.0248	0.0231	99.0	78.2-119	7.45	20	WG703100
cis-1,3-Dichloropropene	mg/kg	0.0252	0.0233	101.	79.6-120	7.81	20	WG703100
Di-isopropyl ether	mg/kg	0.0247	0.0231	99.0	70.4-133	6.60	20	WG703100
Dibromomethane	mg/kg	0.0256	0.0240	102.	79.4-120	6.42	20	WG703100
Dichlorodifluoromethane	mg/kg	0.0201	0.0190	80.0	57.1-137	5.50	20	WG703100
Ethylbenzene	mg/kg	0.0247	0.0232	99.0	79.7-122	6.23	20	WG703100
Hexachloro-1,3-butadiene	mg/kg	0.0236	0.0209	94.0	68.2-123	12.4	20	WG703100
Isopropylbenzene	mg/kg	0.0278	0.0259	111.	80-135	7.11	20	WG703100
Methyl tert-butyl ether	mg/kg	0.0248	0.0230	99.0	73-129	7.59	20	WG703100
Methylene Chloride	mg/kg	0.0225	0.0212	90.0	72.6-120	6.06	20	WG703100
n-Butylbenzene	mg/kg	0.0261	0.0245	104.	77.5-126	6.51	20	WG703100
n-Propylbenzene	mg/kg	0.0252	0.0233	101.	77.9-123	7.75	20	WG703100
Naphthalene	mg/kg	0.0252	0.0227	101.	69.8-128	10.2	20	WG703100
p-Isopropyltoluene	mg/kg	0.0260	0.0244	104.	75.8-129	6.25	20	WG703100
sec-Butylbenzene	mg/kg	0.0253	0.0233	101.	75.8-126	8.25	20	WG703100
Styrene	mg/kg	0.0274	0.0253	110.	82.4-126	7.82	20	WG703100
tert-Butylbenzene	mg/kg	0.0258	0.0233	103.	76.4-126	9.96	20	WG703100
Tetrachloroethene	mg/kg	0.0244	0.0227	98.0	73.9-125	7.27	20	WG703100
Toluene	mg/kg	0.0249	0.0227	99.0	79.7-118	9.19	20	WG703100
trans-1,2-Dichloroethene	mg/kg	0.0249	0.0226	100.	73.8-122	9.71	20	WG703100
trans-1,3-Dichloropropene	mg/kg	0.0262	0.0235	105.	75.9-124	10.5	20	WG703100
Trichloroethene	mg/kg	0.0245	0.0228	98.0	77.9-118	7.41	20	WG703100
Trichlorofluoromethane	mg/kg	0.0256	0.0232	102.	67.7-131	10.2	20	WG703100
Vinyl chloride	mg/kg	0.0237	0.0216	95.0	66.7-130	9.42	20	WG703100
Xylenes, Total	mg/kg	0.0757	0.0695	101.	78.8-121	8.52	20	WG703100
4-Bromofluorobenzene				104.0	71-126			WG703100
Dibromofluoromethane				105.0	78.3-121			WG703100
Toluene-d8				105.0	88.5-111			WG703100
a,a,a-Trifluorotoluene				104.0	85-114			WG703100
1,2,4-Trichlorobenzene	mg/kg	0.255	0.247	76.0	39.8-100	3.20	20	WG703044
2,4,6-Trichlorophenol	mg/kg	0.351	0.355	105.	44.4-108	1.19	20	WG703044
2,4-Dichlorophenol	mg/kg	0.300	0.308	90.0	46.2-109	2.62	20	WG703044
2,4-Dimethylphenol	mg/kg	0.263	0.280	79.0	42.2-110	6.15	20	WG703044
2,4-Dinitrophenol	mg/kg	0.373	0.363	112*	10-105	2.61	36.5	WG703044
2,4-Dinitrotoluene	mg/kg	0.294	0.287	88.0	53-112	2.62	20	WG703044
2,6-Dinitrotoluene	mg/kg	0.297	0.295	89.0	51.6-110	0.600	20	WG703044
2-Chloronaphthalene	mg/kg	0.280	0.277	84.0	47.1-105	1.21	20	WG703044
2-Chlorophenol	mg/kg	0.260	0.234	78.0	40.8-103	10.5	20	WG703044
2-Nitrophenol	mg/kg	0.276	0.285	83.0	44.2-113	3.35	20.9	WG703044
3,3-Dichlorobenzidine	mg/kg	0.228	0.261	68.0	21-101	13.5	22	WG703044
4,6-Dinitro-2-methylphenol	mg/kg	0.332	0.343	100.	23.1-119	3.35	23.7	WG703044
4-Bromophenyl-phenylether	mg/kg	0.296	0.307	89.0	51.4-110	3.64	20	WG703044
4-Chloro-3-methylphenol	mg/kg	0.295	0.308	89.0	51.1-113	4.22	20	WG703044
4-Chlorophenyl-phenylether	mg/kg	0.298	0.295	89.0	48.1-108	0.850	20	WG703044
4-Nitrophenol	mg/kg	0.322	0.331	97.0	34.8-109	2.66	20	WG703044
Acenaphthene	mg/kg	0.291	0.296	87.0	48.9-107	1.67	20	WG703044
Acenaphthylene	mg/kg	0.277	0.275	83.0	49.2-111	0.710	20	WG703044
Anthracene	mg/kg	0.285	0.294	86.0	52-112	3.01	20	WG703044
Benzidine	mg/kg	0.0101	0.0198	3.00	0-48	65.2*	40	WG703044
Benzo(a)anthracene	mg/kg	0.302	0.326	90.0	52.3-106	7.72	20	WG703044
Benzo(a)pyrene	mg/kg	0.275	0.295	82.0	51.9-106	7.12	20	WG703044
Benzo(b)fluoranthene	mg/kg	0.298	0.319	90.0	51.3-106	6.78	20	WG703044
Benzo(g,h,i)perylene	mg/kg	0.314	0.329	94.0	45.8-108	4.90	20	WG703044
Benzo(k)fluoranthene	mg/kg	0.300	0.301	90.0	52.9-107	0.180	20	WG703044

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Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzylbutyl phthalate	mg/kg	0.269	0.292	81.0	47.5-115	8.35	20	WG703044
Bis(2-chlorethoxy)methane	mg/kg	0.269	0.275	81.0	44.9-108	2.02	20	WG703044
Bis(2-chloroethyl)ether	mg/kg	0.252	0.238	76.0	32.5-112	5.54	26	WG703044
Bis(2-chloroisopropyl)ether	mg/kg	0.276	0.246	83.0	40.4-99	11.4	20.7	WG703044
Bis(2-ethylhexyl)phthalate	mg/kg	0.273	0.293	82.0	48.1-116	7.11	20.5	WG703044
Chrysene	mg/kg	0.299	0.329	90.0	54.4-110	9.73	20	WG703044
Di-n-butyl phthalate	mg/kg	0.291	0.292	87.0	49.7-113	0.260	20	WG703044
Di-n-octyl phthalate	mg/kg	0.303	0.335	91.0	49.6-112	10.2	22	WG703044
Dibenz(a,h)anthracene	mg/kg	0.288	0.313	86.0	45.7-111	8.36	20	WG703044
Diethyl phthalate	mg/kg	0.310	0.303	93.0	52-112	2.41	20	WG703044
Dimethyl phthalate	mg/kg	0.299	0.300	90.0	51.4-108	0.430	20	WG703044
Fluoranthene	mg/kg	0.302	0.309	91.0	53.7-110	2.34	20	WG703044
Fluorene	mg/kg	0.287	0.280	86.0	51.1-109	2.32	20	WG703044
Hexachloro-1,3-butadiene	mg/kg	0.281	0.286	84.0	41.5-112	2.09	20	WG703044
Hexachlorobenzene	mg/kg	0.345	0.337	104.	43.2-104	2.19	20.1	WG703044
Hexachlorocyclopentadiene	mg/kg	0.220	0.231	66.0	13.5-123	5.01	20.7	WG703044
Hexachloroethane	mg/kg	0.264	0.242	79.0	36.2-103	8.95	22.7	WG703044
Indeno(1,2,3-cd)pyrene	mg/kg	0.314	0.335	94.0	47.5-109	6.42	20	WG703044
Isophorone	mg/kg	0.301	0.303	90.0	28.8-104	0.580	20	WG703044
n-Nitrosodi-n-propylamine	mg/kg	0.310	0.293	93.0	43.3-109	5.74	20	WG703044
n-Nitrosodimethylamine	mg/kg	0.295	0.264	88.0	18.1-122	11.2	23.5	WG703044
n-Nitrosodiphenylamine	mg/kg	0.263	0.270	79.0	48.8-107	2.44	20	WG703044
Naphthalene	mg/kg	0.243	0.243	73.0	43.4-103	0.210	20	WG703044
Nitrobenzene	mg/kg	0.280	0.280	84.0	40.7-109	0.280	21	WG703044
Phenanthrene	mg/kg	0.295	0.303	89.0	51.6-107	2.48	20	WG703044
Phenol	mg/kg	0.299	0.277	90.0	41.5-106	7.86	20	WG703044
Pyrene	mg/kg	0.285	0.313	86.0	47.1-108	9.43	20	WG703044
2,4,6-Tribromophenol				96.70	21.6-142			WG703044
2-Fluorobiphenyl				81.80	34.9-129			WG703044
2-Fluorophenol				76.10	21.1-116			WG703044
Nitrobenzene-d5				75.10	21.9-129			WG703044
Phenol-d5				76.70	26.3-121			WG703044
p-Terphenyl-d14				73.40	21.5-128			WG703044
C5-C8 Aliphatics	mg/kg	1.19	1.25	99.0	70-130	5.24	25	WG703127
C9-C10 Aromatics	mg/kg	0.221	0.228	110.	70-130	3.22	25	WG703127
C9-C12 Aliphatics	mg/kg	1.40	1.44	100.	70-130	2.62	25	WG703127
2,5-Dibromotoluene(FID)				98.80	70-130			WG703127
2,5-Dibromotoluene(PID)				101.0	70-130			WG703127
C19-C36 Aliphatics	mg/kg	65.4	62.0	102.	40-140	5.45	50	WG703463
C9-C18 Aliphatics	mg/kg	39.2	35.7	82.0	40-140	9.25	50	WG703463
1-Chloro-octadecane				83.40	40-140			WG703463
C11-C22 Aromatics	mg/kg	133.	130.	98.0	40-140	2.07	50	WG703463
2-Bromonaphthalene				95.70	40-140			WG703463
2-Fluorobiphenyl				102.0	40-140			WG703463
o-Terphenyl				104.0	40-140			WG703463
Pentachlorophenol	mg/kg	0.329	0.300	99.0	16.2-102	9.18	22.9	WG703930
2,4,6-Tribromophenol				109.0	21.6-142			WG703930
2-Fluorobiphenyl				71.00	34.9-129			WG703930
2-Fluorophenol				64.40	21.1-116			WG703930
Nitrobenzene-d5				78.00	21.9-129			WG703930
Phenol-d5				74.00	26.3-121			WG703930
p-Terphenyl-d14				67.70	21.5-128			WG703930

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Quality Assurance Report
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L678497

January 30, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/kg	0.329	0.0749	.25	100.	80-120	L678495-03	WG701904
TPH (GC/FID) Low Fraction	mg/kg	27.4	0.0	5.5	100.	28.5-138	L678698-22	WG702094
a,a,a-Trifluorotoluene(FID)					98.70	59-128		WG702094
TPH (GC/FID) High Fraction	mg/kg	180.	0.0	60	300.*	50-150	L678453-01	WG701965
o-Terphenyl					98.60	50-150		WG701965
Arsenic	mg/kg	54.8	2.47	50	100.	75-125	L678497-12	WG701908
Beryllium	mg/kg	55.2	0.493	50	110.	75-125	L678497-12	WG701908
Cadmium	mg/kg	49.9	-0.314	50	100.	75-125	L678497-12	WG701908
Chromium	mg/kg	54.5	3.12	50	100.	75-125	L678497-12	WG701908
Copper	mg/kg	100.	45.0	50	110.	75-125	L678497-12	WG701908
Lead	mg/kg	56.8	4.87	50	100.	75-125	L678497-12	WG701908
Nickel	mg/kg	65.0	14.0	50	100.	75-125	L678497-12	WG701908
Selenium	mg/kg	54.5	-0.728	50	110.	75-125	L678497-12	WG701908
Silver	mg/kg	52.7	0.719	50	100.	75-125	L678497-12	WG701908
Thallium	mg/kg	50.4	2.61	50	95.0	75-125	L678497-12	WG701908
Zinc	mg/kg	102.	54.2	50	96.0	75-125	L678497-12	WG701908
PCB 1016	mg/kg	0.125	0.0	.167	75.0	23.5-134	L678497-13	WG701964
PCB 1260	mg/kg	0.144	0.0	.167	86.0	16.1-139	L678497-13	WG701964
Decachlorobiphenyl					91.50	10-145		WG701964
Tetrachloro-m-xylene					86.00	21.1-148		WG701964
1,1,1,2-Tetrachloroethane	mg/l	0.0212	0.0	.025	85.0	64-128	L678951-01	WG702503
1,1,1-Trichloroethane	mg/l	0.0226	0.0	.025	90.0	58.7-134	L678951-01	WG702503
1,1,2,2-Tetrachloroethane	mg/l	0.0216	0.0	.025	86.0	56-132	L678951-01	WG702503
1,1,2-Trichloroethane	mg/l	0.0232	0.0	.025	93.0	66.3-125	L678951-01	WG702503
1,1-Dichloroethane	mg/l	0.0241	0.0	.025	96.0	58.5-132	L678951-01	WG702503
1,1-Dichloroethene	mg/l	0.0213	0.0	.025	85.0	51.1-140	L678951-01	WG702503
1,1-Dichloropropene	mg/l	0.0236	0.0	.025	95.0	57.3-136	L678951-01	WG702503
1,2,3-Trichlorobenzene	mg/l	0.0232	0.0	.025	93.0	59.1-138	L678951-01	WG702503
1,2,3-Trichloropropane	mg/l	0.0215	0.0	.025	86.0	61.4-128	L678951-01	WG702503
1,2,4-Trichlorobenzene	mg/l	0.0255	0.0	.025	100.	63.6-143	L678951-01	WG702503
1,2,4-Trimethylbenzene	mg/l	0.0218	0.000670	.025	85.0	57.4-137	L678951-01	WG702503
1,2-Dibromo-3-Chloropropane	mg/l	0.0217	0.0	.025	87.0	57.3-136	L678951-01	WG702503
1,2-Dibromoethane	mg/l	0.0223	0.0	.025	89.0	67.1-125	L678951-01	WG702503
1,2-Dichlorobenzene	mg/l	0.0226	0.0	.025	90.0	68.2-123	L678951-01	WG702503
1,2-Dichloroethane	mg/l	0.0222	0.0	.025	89.0	60-126	L678951-01	WG702503
1,2-Dichloropropane	mg/l	0.0236	0.0	.025	94.0	64.2-123	L678951-01	WG702503
1,3,5-Trimethylbenzene	mg/l	0.0219	0.0	.025	88.0	63.6-132	L678951-01	WG702503
1,3-Dichlorobenzene	mg/l	0.0211	0.0	.025	84.0	63.1-131	L678951-01	WG702503
1,3-Dichloropropane	mg/l	0.0222	0.0	.025	89.0	67.9-121	L678951-01	WG702503
1,4-Dichlorobenzene	mg/l	0.0228	0.0	.025	91.0	68.6-123	L678951-01	WG702503
2,2-Dichloropropane	mg/l	0.0219	0.0	.025	87.0	50.5-144	L678951-01	WG702503
2-Butanone (MEK)	mg/l	0.114	0.0	.125	91.0	22.4-138	L678951-01	WG702503
2-Chloroethyl vinyl ether	mg/l	0.0417	0.0	.125	33.0	10-155	L678951-01	WG702503
2-Chlorotoluene	mg/l	0.0205	0.0	.025	82.0	63.6-128	L678951-01	WG702503
4-Chlorotoluene	mg/l	0.0215	0.0	.025	86.0	65.7-127	L678951-01	WG702503
4-Methyl-2-pentanone (MIBK)	mg/l	0.129	0.0	.125	100.	60.8-140	L678951-01	WG702503
Acetone	mg/l	0.0750	0.00252	.125	58.0	10-130	L678951-01	WG702503
Acrolein	mg/l	0.125	0.0	.125	100.	10-200	L678951-01	WG702503
Acrylonitrile	mg/l	0.125	0.0	.125	100.	49.4-133	L678951-01	WG702503
Benzene	mg/l	0.0233	0.0	.025	93.0	54.3-133	L678951-01	WG702503

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Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Bromobenzene	mg/l	0.0216	0.0	.025	86.0	63.9-124	L678951-01	WG702503
Bromodichloromethane	mg/l	0.0213	0.0	.025	85.0	63.9-121	L678951-01	WG702503
Bromoform	mg/l	0.0227	0.0	.025	91.0	59.5-134	L678951-01	WG702503
Bromomethane	mg/l	0.0194	0.0	.025	78.0	41.7-155	L678951-01	WG702503
Carbon tetrachloride	mg/l	0.0230	0.0	.025	92.0	55.7-134	L678951-01	WG702503
Chlorobenzene	mg/l	0.0212	0.0	.025	85.0	67-125	L678951-01	WG702503
Chlorodibromomethane	mg/l	0.0208	0.0	.025	83.0	64.3-125	L678951-01	WG702503
Chloroethane	mg/l	0.0190	0.0	.025	76.0	51.5-136	L678951-01	WG702503
Chloroform	mg/l	0.0225	0.0	.025	90.0	63-129	L678951-01	WG702503
Chloromethane	mg/l	0.0232	0.0	.025	93.0	42.4-135	L678951-01	WG702503
cis-1,2-Dichloroethene	mg/l	0.0224	0.0	.025	90.0	59.2-129	L678951-01	WG702503
cis-1,3-Dichloropropene	mg/l	0.0240	0.0	.025	96.0	66.4-125	L678951-01	WG702503
Di-isopropyl ether	mg/l	0.0239	0.0	.025	96.0	56.9-136	L678951-01	WG702503
Dibromomethane	mg/l	0.0231	0.0	.025	92.0	68.2-124	L678951-01	WG702503
Dichlorodifluoromethane	mg/l	0.0227	0.0	.025	91.0	40.6-144	L678951-01	WG702503
Ethylbenzene	mg/l	0.0221	0.0	.025	88.0	61.4-133	L678951-01	WG702503
Hexachloro-1,3-butadiene	mg/l	0.0235	0.0	.025	94.0	55.1-136	L678951-01	WG702503
Isopropylbenzene	mg/l	0.0238	0.0	.025	95.0	66.8-141	L678951-01	WG702503
Methyl tert-butyl ether	mg/l	0.0221	0.0	.025	88.0	57.7-134	L678951-01	WG702503
Methylene Chloride	mg/l	0.0206	0.0	.025	82.0	58.1-122	L678951-01	WG702503
n-Butylbenzene	mg/l	0.0253	0.0	.025	100.	62.7-140	L678951-01	WG702503
n-Propylbenzene	mg/l	0.0225	0.0	.025	90.0	65.9-131	L678951-01	WG702503
Naphthalene	mg/l	0.0226	0.0	.025	90.0	58-135	L678951-01	WG702503
p-Isopropyltoluene	mg/l	0.0228	0.0	.025	91.0	63.2-139	L678951-01	WG702503
sec-Butylbenzene	mg/l	0.0220	0.0	.025	88.0	62.2-136	L678951-01	WG702503
Styrene	mg/l	0.0239	0.0	.025	96.0	66.8-133	L678951-01	WG702503
tert-Butylbenzene	mg/l	0.0221	0.0	.025	88.0	63.3-134	L678951-01	WG702503
Tetrachloroethene	mg/l	0.0212	0.0	.025	85.0	53-139	L678951-01	WG702503
Toluene	mg/l	0.0232	0.000394	.025	91.0	61.4-130	L678951-01	WG702503
trans-1,2-Dichloroethene	mg/l	0.0225	0.0	.025	90.0	56.5-129	L678951-01	WG702503
trans-1,3-Dichloropropene	mg/l	0.0244	0.0	.025	98.0	64.1-128	L678951-01	WG702503
Trichloroethene	mg/l	0.0219	0.0	.025	88.0	44.1-149	L678951-01	WG702503
Trichlorofluoromethane	mg/l	0.0207	0.0	.025	83.0	49.6-145	L678951-01	WG702503
Vinyl chloride	mg/l	0.0215	0.0	.025	86.0	47.8-137	L678951-01	WG702503
Xylenes, Total	mg/l	0.0659	0.000691	.075	87.0	63.3-131	L678951-01	WG702503
4-Bromofluorobenzene					96.50	71-126		WG702503
Dibromofluoromethane					99.10	78.3-121		WG702503
Toluene-d8					104.0	88.5-111		WG702503
a,a,a-Trifluorotoluene					101.0	85-114		WG702503
1,1,1,2-Tetrachloroethane	mg/kg	0.0115	0.0	.025	46.0*	64-128	L678902-01	WG702232
1,1,1-Trichloroethane	mg/kg	0.0122	0.0	.025	49.0*	58.7-134	L678902-01	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0113	0.0	.025	45.0*	56-132	L678902-01	WG702232
1,1,2-Trichloroethane	mg/kg	0.0123	0.0	.025	49.0*	66.3-125	L678902-01	WG702232
1,1-Dichloroethane	mg/kg	0.0129	0.0	.025	52.0*	58.5-132	L678902-01	WG702232
1,1-Dichloroethene	mg/kg	0.0115	0.0	.025	46.0*	51.1-140	L678902-01	WG702232
1,1-Dichloropropene	mg/kg	0.0127	0.0	.025	51.0*	57.3-136	L678902-01	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0116	0.0	.025	47.0*	59.1-138	L678902-01	WG702232
1,2,3-Trichloropropane	mg/kg	0.0112	0.0	.025	45.0*	61.4-128	L678902-01	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0125	0.0	.025	50.0*	63.6-143	L678902-01	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0112	0.0	.025	45.0*	57.4-137	L678902-01	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0113	0.0	.025	45.0*	57.3-136	L678902-01	WG702232
1,2-Dibromoethane	mg/kg	0.0120	0.0	.025	48.0*	67.1-125	L678902-01	WG702232
1,2-Dichlorobenzene	mg/kg	0.0118	0.0	.025	47.0*	68.2-123	L678902-01	WG702232
1,2-Dichloroethane	mg/kg	0.0112	0.0	.025	45.0*	60-126	L678902-01	WG702232
1,2-Dichloropropane	mg/kg	0.0130	0.0	.025	52.0*	64.2-123	L678902-01	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0117	0.0	.025	47.0*	63.6-132	L678902-01	WG702232
1,3-Dichlorobenzene	mg/kg	0.0111	0.0	.025	44.0*	63.1-131	L678902-01	WG702232

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Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,3-Dichloropropane	mg/kg	0.0121	0.0	.025	48.0*	67.9-121	L678902-01	WG702232
1,4-Dichlorobenzene	mg/kg	0.0115	0.0	.025	46.0*	68.6-123	L678902-01	WG702232
2,2-Dichloropropane	mg/kg	0.0124	0.0	.025	50.0*	50.5-144	L678902-01	WG702232
2-Butanone (MEK)	mg/kg	0.0558	0.0	.125	45.0	22.4-138	L678902-01	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.0784	0.0	.125	63.0	10-155	L678902-01	WG702232
2-Chlorotoluene	mg/kg	0.0110	0.0	.025	44.0*	63.6-128	L678902-01	WG702232
4-Chlorotoluene	mg/kg	0.0114	0.0	.025	46.0*	65.7-127	L678902-01	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.0644	0.0	.125	52.0*	60.8-140	L678902-01	WG702232
Acetone	mg/kg	0.0379	0.00537	.125	26.0	10-130	L678902-01	WG702232
Acrylonitrile	mg/kg	0.0654	0.0	.125	52.0	49.4-133	L678902-01	WG702232
Benzene	mg/kg	0.0125	0.0	.025	50.0*	54.3-133	L678902-01	WG702232
Bromobenzene	mg/kg	0.0118	0.0	.025	47.0*	63.9-124	L678902-01	WG702232
Bromodichloromethane	mg/kg	0.0109	0.0	.025	44.0*	63.9-121	L678902-01	WG702232
Bromoform	mg/kg	0.0106	0.0	.025	42.0*	59.5-134	L678902-01	WG702232
Bromomethane	mg/kg	0.0129	0.0	.025	52.0	41.7-155	L678902-01	WG702232
Carbon tetrachloride	mg/kg	0.0119	0.0	.025	48.0*	55.7-134	L678902-01	WG702232
Chlorobenzene	mg/kg	0.0122	0.0	.025	49.0*	67-125	L678902-01	WG702232
Chlorodibromomethane	mg/kg	0.0113	0.0	.025	45.0*	64.3-125	L678902-01	WG702232
Chloroethane	mg/kg	0.0135	0.0	.025	54.0	51.5-136	L678902-01	WG702232
Chloroform	mg/kg	0.0120	0.0	.025	48.0*	63-129	L678902-01	WG702232
Chloromethane	mg/kg	0.0143	0.0	.025	57.0	42.4-135	L678902-01	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0121	0.0	.025	48.0*	59.2-129	L678902-01	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0129	0.0	.025	51.0*	66.4-125	L678902-01	WG702232
Di-isopropyl ether	mg/kg	0.0131	0.0	.025	52.0*	56.9-136	L678902-01	WG702232
Dibromomethane	mg/kg	0.0114	0.0	.025	46.0*	68.2-124	L678902-01	WG702232
Dichlorodifluoromethane	mg/kg	0.0131	0.0	.025	53.0	40.6-144	L678902-01	WG702232
Ethylbenzene	mg/kg	0.0122	0.0	.025	49.0*	61.4-133	L678902-01	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0112	0.0	.025	45.0*	55.1-136	L678902-01	WG702232
Isopropylbenzene	mg/kg	0.0131	0.0	.025	52.0*	66.8-141	L678902-01	WG702232
Methyl tert-butyl ether	mg/kg	0.0118	0.0	.025	47.0*	57.7-134	L678902-01	WG702232
Methylene Chloride	mg/kg	0.0122	0.0	.025	49.0*	58.1-122	L678902-01	WG702232
n-Butylbenzene	mg/kg	0.0127	0.0	.025	51.0*	62.7-140	L678902-01	WG702232
n-Propylbenzene	mg/kg	0.0118	0.0	.025	47.0	10-176	L678902-01	WG702232
Naphthalene	mg/kg	0.0111	0.0	.025	44.0*	58-135	L678902-01	WG702232
p-Isopropyltoluene	mg/kg	0.0119	0.0	.025	47.0*	63.2-139	L678902-01	WG702232
sec-Butylbenzene	mg/kg	0.0116	0.0	.025	46.0*	62.2-136	L678902-01	WG702232
Styrene	mg/kg	0.0119	0.0	.025	48.0*	66.8-133	L678902-01	WG702232
tert-Butylbenzene	mg/kg	0.0120	0.0	.025	48.0*	63.3-134	L678902-01	WG702232
Tetrachloroethene	mg/kg	0.0121	0.0	.025	48.0*	53-139	L678902-01	WG702232
Toluene	mg/kg	0.0124	0.0	.025	50.0*	61.4-130	L678902-01	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0124	0.0	.025	49.0*	56.5-129	L678902-01	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0125	0.0	.025	50.0*	64.1-128	L678902-01	WG702232
Trichloroethene	mg/kg	0.0119	0.0	.025	48.0	44.1-149	L678902-01	WG702232
Trichlorofluoromethane	mg/kg	0.0113	0.0	.025	45.0*	49.6-145	L678902-01	WG702232
Vinyl chloride	mg/kg	0.0136	0.0	.025	54.0	47.8-137	L678902-01	WG702232
Xylenes, Total	mg/kg	0.0361	0.0	.075	48.0*	63.3-131	L678902-01	WG702232
4-Bromofluorobenzene					90.40	71-126		WG702232
Dibromofluoromethane					93.80	78.3-121		WG702232
Toluene-d8					103.0	88.5-111		WG702232
a,a,a-Trifluorotoluene					98.20	85-114		WG702232
TPH (GC/FID) High Fraction	mg/kg	36.2	0.0	60	60.0	50-150	L678834-02	WG702264
o-Terphenyl					59.50	50-150		WG702264
Cadmium	mg/kg	50.2	0.217	50	100.	75-125	L678497-12	WG701908
Antimony	mg/kg	18.9	1.53	50	35.0*	75-125	L678497-12	WG701908
Arsenic	mg/kg	47.8	-0.903	50	96.0	75-125	L678497-12	WG701908

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Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Beryllium	mg/kg	50.4	0.457	50	100.	75-125	L678497-12	WG701908
Chromium	mg/kg	52.9	2.73	50	100.	75-125	L678497-12	WG701908
Copper	mg/kg	94.6	40.7	50	110.	75-125	L678497-12	WG701908
Lead	mg/kg	51.4	3.78	50	95.0	75-125	L678497-12	WG701908
Nickel	mg/kg	60.7	12.9	50	96.0	75-125	L678497-12	WG701908
Selenium	mg/kg	47.8	-1.79	50	96.0	75-125	L678497-12	WG701908
Silver	mg/kg	51.0	-0.256	50	100.	75-125	L678497-12	WG701908
Thallium	mg/kg	46.1	-0.0403	50	92.0	75-125	L678497-12	WG701908
Zinc	mg/kg	99.8	52.6	50	94.0	75-125	L678497-12	WG701908
1,1,1,2-Tetrachloroethane	mg/kg	0.106	0.0	.025	85.0	64-128	L679466-01	WG703100
1,1,1-Trichloroethane	mg/kg	0.108	0.0	.025	86.0	58.7-134	L679466-01	WG703100
1,1,2,2-Tetrachloroethane	mg/kg	0.109	0.0	.025	87.0	56-132	L679466-01	WG703100
1,1,2-Trichloroethane	mg/kg	0.111	0.0	.025	88.0	66.3-125	L679466-01	WG703100
1,1-Dichloroethane	mg/kg	0.109	0.0	.025	87.0	58.5-132	L679466-01	WG703100
1,1-Dichloroethene	mg/kg	0.103	0.0	.025	82.0	51.1-140	L679466-01	WG703100
1,1-Dichloropropene	mg/kg	0.104	0.0	.025	83.0	57.3-136	L679466-01	WG703100
1,2,3-Trichlorobenzene	mg/kg	0.115	0.000739	.025	91.0	59.1-138	L679466-01	WG703100
1,2,3-Trichloropropane	mg/kg	0.113	0.0	.025	90.0	61.4-128	L679466-01	WG703100
1,2,4-Trichlorobenzene	mg/kg	0.123	0.000581	.025	98.0	63.6-143	L679466-01	WG703100
1,2,4-Trimethylbenzene	mg/kg	0.105	0.0	.025	84.0	57.4-137	L679466-01	WG703100
1,2-Dibromo-3-Chloropropane	mg/kg	0.121	0.0	.025	96.0	57.3-136	L679466-01	WG703100
1,2-Dibromoethane	mg/kg	0.114	0.0	.025	91.0	67.1-125	L679466-01	WG703100
1,2-Dichlorobenzene	mg/kg	0.113	0.0	.025	90.0	68.2-123	L679466-01	WG703100
1,2-Dichloroethane	mg/kg	0.110	0.0	.025	88.0	60-126	L679466-01	WG703100
1,2-Dichloropropane	mg/kg	0.109	0.0	.025	87.0	64.2-123	L679466-01	WG703100
1,3,5-Trimethylbenzene	mg/kg	0.105	0.0	.025	84.0	63.6-132	L679466-01	WG703100
1,3-Dichlorobenzene	mg/kg	0.105	0.0	.025	84.0	63.1-131	L679466-01	WG703100
1,3-Dichloropropane	mg/kg	0.107	0.0	.025	86.0	67.9-121	L679466-01	WG703100
1,4-Dichlorobenzene	mg/kg	0.108	0.0	.025	86.0	68.6-123	L679466-01	WG703100
2,2-Dichloropropane	mg/kg	0.110	0.0	.025	88.0	50.5-144	L679466-01	WG703100
2-Butanone (MEK)	mg/kg	0.753	0.0	.125	120.	22.4-138	L679466-01	WG703100
2-Chloroethyl vinyl ether	mg/kg	0.628	0.0	.125	100.	10-155	L679466-01	WG703100
2-Chlorotoluene	mg/kg	0.104	0.0	.025	83.0	63.6-128	L679466-01	WG703100
4-Chlorotoluene	mg/kg	0.106	0.0	.025	85.0	65.7-127	L679466-01	WG703100
4-Methyl-2-pentanone (MIBK)	mg/kg	0.645	0.0	.125	100.	60.8-140	L679466-01	WG703100
Acetone	mg/kg	1.11	0.00976	.125	180.*	10-130	L679466-01	WG703100
Acrylonitrile	mg/kg	0.594	0.0	.125	95.0	49.4-133	L679466-01	WG703100
Benzene	mg/kg	0.106	0.0	.025	85.0	54.3-133	L679466-01	WG703100
Bromobenzene	mg/kg	0.102	0.0	.025	82.0	63.9-124	L679466-01	WG703100
Bromodichloromethane	mg/kg	0.110	0.0	.025	88.0	63.9-121	L679466-01	WG703100
Bromoform	mg/kg	0.116	0.0	.025	93.0	59.5-134	L679466-01	WG703100
Bromomethane	mg/kg	0.119	0.0	.025	95.0	41.7-155	L679466-01	WG703100
Carbon tetrachloride	mg/kg	0.106	0.0	.025	85.0	55.7-134	L679466-01	WG703100
Chlorobenzene	mg/kg	0.106	0.0	.025	85.0	67-125	L679466-01	WG703100
Chlorodibromomethane	mg/kg	0.109	0.0	.025	88.0	64.3-125	L679466-01	WG703100
Chloroethane	mg/kg	0.103	0.0	.025	82.0	51.5-136	L679466-01	WG703100
Chloroform	mg/kg	0.107	0.0	.025	86.0	63-129	L679466-01	WG703100
Chloromethane	mg/kg	0.0951	0.0	.025	76.0	42.4-135	L679466-01	WG703100
cis-1,2-Dichloroethene	mg/kg	0.108	0.0	.025	86.0	59.2-129	L679466-01	WG703100
cis-1,3-Dichloropropene	mg/kg	0.113	0.0	.025	91.0	66.4-125	L679466-01	WG703100
Di-isopropyl ether	mg/kg	0.109	0.0	.025	87.0	56.9-136	L679466-01	WG703100
Dibromomethane	mg/kg	0.117	0.0	.025	94.0	68.2-124	L679466-01	WG703100
Dichlorodifluoromethane	mg/kg	0.0999	0.0	.025	80.0	40.6-144	L679466-01	WG703100
Ethylbenzene	mg/kg	0.105	0.0	.025	84.0	61.4-133	L679466-01	WG703100
Hexachloro-1,3-butadiene	mg/kg	0.101	0.0	.025	80.0	55.1-136	L679466-01	WG703100
Isopropylbenzene	mg/kg	0.113	0.0	.025	91.0	66.8-141	L679466-01	WG703100
Methyl tert-butyl ether	mg/kg	0.110	0.0	.025	88.0	57.7-134	L679466-01	WG703100

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Quality Assurance Report
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L678497

January 30, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Methylene Chloride	mg/kg	0.0983	0.000693	.025	78.0	58.1-122	L679466-01	WG703100
n-Butylbenzene	mg/kg	0.112	0.0	.025	89.0	62.7-140	L679466-01	WG703100
n-Propylbenzene	mg/kg	0.103	0.0	.025	82.0	10-176	L679466-01	WG703100
Naphthalene	mg/kg	0.119	0.00122	.025	94.0	58-135	L679466-01	WG703100
p-Isopropyltoluene	mg/kg	0.106	0.0	.025	85.0	63.2-139	L679466-01	WG703100
sec-Butylbenzene	mg/kg	0.104	0.0	.025	83.0	62.2-136	L679466-01	WG703100
Styrene	mg/kg	0.115	0.0	.025	92.0	66.8-133	L679466-01	WG703100
tert-Butylbenzene	mg/kg	0.106	0.0	.025	84.0	63.3-134	L679466-01	WG703100
Tetrachloroethene	mg/kg	0.101	0.0	.025	81.0	53-139	L679466-01	WG703100
Toluene	mg/kg	0.108	0.0	.025	86.0	61.4-130	L679466-01	WG703100
trans-1,2-Dichloroethene	mg/kg	0.103	0.0	.025	82.0	56.5-129	L679466-01	WG703100
trans-1,3-Dichloropropene	mg/kg	0.117	0.0	.025	93.0	64.1-128	L679466-01	WG703100
Trichloroethene	mg/kg	0.107	0.0	.025	86.0	44.1-149	L679466-01	WG703100
Trichlorofluoromethane	mg/kg	0.108	0.0	.025	86.0	49.6-145	L679466-01	WG703100
Vinyl chloride	mg/kg	0.103	0.0	.025	82.0	47.8-137	L679466-01	WG703100
Xylenes, Total	mg/kg	0.316	0.0	.075	84.0	63.3-131	L679466-01	WG703100
4-Bromofluorobenzene					99.40	71-126		WG703100
Dibromofluoromethane					104.0	78.3-121		WG703100
Toluene-d8					105.0	88.5-111		WG703100
a,a,a-Trifluorotoluene					102.0	85-114		WG703100
1,2,4-Trichlorobenzene	mg/kg	0.272	0.0	.0333	82.0	36.5-114	L679355-05	WG703044
2,4,6-Trichlorophenol	mg/kg	1.17	0.0	.0333	350.*	33.8-133	L679355-05	WG703044
2,4-Dichlorophenol	mg/kg	0.297	0.0	.0333	89.0	34.8-134	L679355-05	WG703044
2,4-Dimethylphenol	mg/kg	0.309	0.0	.0333	93.0	12.3-149	L679355-05	WG703044
2,4-Dinitrophenol	mg/kg	0.0	0.0	.0333	0.0*	10-121	L679355-05	WG703044
2,4-Dinitrotoluene	mg/kg	0.224	0.0	.0333	67.0	27.8-147	L679355-05	WG703044
2,6-Dinitrotoluene	mg/kg	0.246	0.0	.0333	74.0	36.5-137	L679355-05	WG703044
2-Chloronaphthalene	mg/kg	0.281	0.0	.0333	84.0	37.5-123	L679355-05	WG703044
2-Chlorophenol	mg/kg	0.255	0.0	.0333	76.0	33.2-121	L679355-05	WG703044
2-Nitrophenol	mg/kg	0.225	0.0	.0333	68.0	29.5-144	L679355-05	WG703044
3,3-Dichlorobenzidine	mg/kg	0.240	0.0	.0333	72.0	10-129	L679355-05	WG703044
4,6-Dinitro-2-methylphenol	mg/kg	0.581	0.0	.0333	170.*	10-144	L679355-05	WG703044
4-Bromophenyl-phenylether	mg/kg	0.313	0.0	.0333	94.0	39-130	L679355-05	WG703044
4-Chloro-3-methylphenol	mg/kg	0.323	0.0	.0333	97.0	27-154	L679355-05	WG703044
4-Chlorophenyl-phenylether	mg/kg	0.296	0.0	.0333	89.0	37.9-123	L679355-05	WG703044
4-Nitrophenol	mg/kg	0.817	0.0	.0333	240.*	20-133	L679355-05	WG703044
Acenaphthene	mg/kg	0.355	0.0	.0333	110.	32.2-134	L679355-05	WG703044
Acenaphthylene	mg/kg	0.374	0.0	.0333	110.	38.7-129	L679355-05	WG703044
Anthracene	mg/kg	0.526	0.0	.0333	160.*	32.3-137	L679355-05	WG703044
Benzidine	mg/kg	0.00396	0.0	.0333	1.20	0-49.9	L679355-05	WG703044
Benzo(a)anthracene	mg/kg	1.47	0.643	.0333	250.*	33.3-124	L679355-05	WG703044
Benzo(a)pyrene	mg/kg	1.25	0.667	.0333	180.*	28.2-128	L679355-05	WG703044
Benzo(b)fluoranthene	mg/kg	1.59	0.869	.0333	220.*	23.3-133	L679355-05	WG703044
Benzo(g,h,i)perylene	mg/kg	0.954	0.477	.0333	140.*	10-127	L679355-05	WG703044
Benzo(k)fluoranthene	mg/kg	0.718	0.0	.0333	220.*	31-129	L679355-05	WG703044
Benzylbutyl phthalate	mg/kg	0.308	0.0	.0333	92.0	33.4-128	L679355-05	WG703044
Bis(2-chlorethoxy)methane	mg/kg	0.282	0.0	.0333	85.0	35-132	L679355-05	WG703044
Bis(2-chloroethyl)ether	mg/kg	0.258	0.0	.0333	78.0	28.8-128	L679355-05	WG703044
Bis(2-chloroisopropyl)ether	mg/kg	0.287	0.0	.0333	86.0	31.8-118	L679355-05	WG703044
Bis(2-ethylhexyl)phthalate	mg/kg	0.344	0.0	.0333	100.	21.8-141	L679355-05	WG703044
Chrysene	mg/kg	1.33	0.682	.0333	190.*	36.3-129	L679355-05	WG703044
Di-n-butyl phthalate	mg/kg	0.314	0.0	.0333	94.0	32.2-133	L679355-05	WG703044
Di-n-octyl phthalate	mg/kg	0.0216	0.0	.0333	6.50*	28.5-128	L679355-05	WG703044
Dibenz(a,h)anthracene	mg/kg	0.484	0.0	.0333	140.*	10.5-128	L679355-05	WG703044
Diethyl phthalate	mg/kg	0.301	0.0	.0333	90.0	39.4-136	L679355-05	WG703044
Dimethyl phthalate	mg/kg	0.291	0.0	.0333	87.0	35.8-137	L679355-05	WG703044
Fluoranthene	mg/kg	2.41	1.25	.0333	350.*	27.9-138	L679355-05	WG703044

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Level II

L678497

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Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Fluorene	mg/kg	0.389	0.0	.0333	120.	34-133	L679355-05	WG703044
Hexachloro-1,3-butadiene	mg/kg	0.330	0.0	.0333	99.0	36.5-125	L679355-05	WG703044
Hexachlorobenzene	mg/kg	0.342	0.0	.0333	100.	34.4-116	L679355-05	WG703044
Hexachlorocyclopentadiene	mg/kg	0.0564	0.0	.0333	17.0	10-124	L679355-05	WG703044
Hexachloroethane	mg/kg	0.271	0.0	.0333	82.0	11.3-143	L679355-05	WG703044
Indeno(1,2,3-cd)pyrene	mg/kg	0.949	0.417	.0333	160.*	10-128	L679355-05	WG703044
Isophorone	mg/kg	0.311	0.0	.0333	93.0	25.7-116	L679355-05	WG703044
n-Nitrosodi-n-propylamine	mg/kg	0.349	0.0	.0333	100.	33-134	L679355-05	WG703044
n-Nitrosodimethylamine	mg/kg	0.322	0.0	.0333	97.0	19.2-127	L679355-05	WG703044
n-Nitrosodiphenylamine	mg/kg	0.310	0.0	.0333	93.0	26.8-133	L679355-05	WG703044
Naphthalene	mg/kg	0.380	0.0	.0333	110.	36.4-121	L679355-05	WG703044
Nitrobenzene	mg/kg	0.291	0.0	.0333	87.0	30.9-134	L679355-05	WG703044
Phenanthrene	mg/kg	1.36	0.580	.0333	230.*	30.8-137	L679355-05	WG703044
Phenol	mg/kg	0.298	0.0	.0333	90.0	25.1-130	L679355-05	WG703044
Pyrene	mg/kg	2.04	1.09	.0333	290.*	24.1-130	L679355-05	WG703044
2,4,6-Tribromophenol					85.20	21.6-142		WG703044
2-Fluorobiphenyl					78.00	34.9-129		WG703044
2-Fluorophenol					76.30	21.1-116		WG703044
Nitrobenzene-d5					83.50	21.9-129		WG703044
Phenol-d5					81.70	26.3-121		WG703044
p-Terphenyl-d14					84.60	21.5-128		WG703044
C5-C8 Aliphatics	mg/kg	43.7	1.08	1.2	71.0	70-130	L678497-01	WG703127
C9-C10 Aromatics	mg/kg	13.2	1.46	.2	120.	70-130	L678497-01	WG703127
C9-C12 Aliphatics	mg/kg	77.2	3.22	1.4	110.	70-130	L678497-01	WG703127
2,5-Dibromotoluene(FID)					110.0	70-130		WG703127
2,5-Dibromotoluene(PID)					114.0	70-130		WG703127
C19-C36 Aliphatics	mg/kg	76.1	15.8	64	94.0	40-140	L678497-01	WG703463
C9-C18 Aliphatics	mg/kg	91.5	58.0	48	70.0	40-140	L678497-01	WG703463
1-Chloro-octadecane					75.60	40-140		WG703463
C11-C22 Aromatics	mg/kg	169.	42.8	136	93.0	40-140	L678497-01	WG703463
2-Bromonaphthalene					94.60	40-140		WG703463
2-Fluorobiphenyl					102.0	40-140		WG703463
o-Terphenyl					114.0	40-140		WG703463
Pentachlorophenol	mg/kg	0.317	0.0	.333	95.0	10-139	L680357-02	WG703930
2,4,6-Tribromophenol					123.0	21.6-142		WG703930
2-Fluorobiphenyl					73.00	34.9-129		WG703930
2-Fluorophenol					67.00	21.1-116		WG703930
Nitrobenzene-d5					81.30	21.9-129		WG703930
Phenol-d5					73.50	26.3-121		WG703930
p-Terphenyl-d14					64.70	21.5-128		WG703930

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/kg	0.353	0.329	111.	80-120	7.00	20	L678495-03	WG701904
TPH (GC/FID) Low Fraction	mg/kg	18.4	27.4	67.0	28.5-138	39.1*	23.6	L678698-22	WG702094
a,a,a-Trifluorotoluene(FID)				97.90	59-128				WG702094
TPH (GC/FID) High Fraction	mg/kg	260.	180.	434.*	50-150	36.5*	20	L678453-01	WG701965
o-Terphenyl				105.0	50-150				WG701965

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Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Arsenic	mg/kg	51.2	54.8	97.5	75-125	7.00	20	L678497-12	WG701908
Beryllium	mg/kg	52.0	55.2	103.	75-125	6.00	20	L678497-12	WG701908
Cadmium	mg/kg	47.4	49.9	95.4	75-125	5.00	20	L678497-12	WG701908
Chromium	mg/kg	51.0	54.5	95.7	75-125	7.00	20	L678497-12	WG701908
Copper	mg/kg	94.0	100.	98.1	75-125	6.00	20	L678497-12	WG701908
Lead	mg/kg	52.9	56.8	96.1	75-125	7.00	20	L678497-12	WG701908
Nickel	mg/kg	60.6	65.0	93.1	75-125	7.00	20	L678497-12	WG701908
Selenium	mg/kg	51.6	54.5	104.	75-125	6.00	20	L678497-12	WG701908
Silver	mg/kg	50.0	52.7	98.5	75-125	5.00	20	L678497-12	WG701908
Thallium	mg/kg	47.3	50.4	89.3	75-125	6.00	20	L678497-12	WG701908
Zinc	mg/kg	99.8	102.	91.4	75-125	3.00	20	L678497-12	WG701908
PCB 1016	mg/kg	0.129	0.125	77.1	23.5-134	2.74	25.8	L678497-13	WG701964
PCB 1260	mg/kg	0.148	0.144	88.4	16.1-139	2.36	25.9	L678497-13	WG701964
Decachlorobiphenyl				92.40	10-145				WG701964
Tetrachloro-m-xylene				86.20	21.1-148				WG701964
1,1,1,2-Tetrachloroethane	mg/l	0.0240	0.0212	95.9	64-128	12.3	20	L678951-01	WG702503
1,1,1-Trichloroethane	mg/l	0.0258	0.0226	103.	58.7-134	13.1	20	L678951-01	WG702503
1,1,2,2-Tetrachloroethane	mg/l	0.0253	0.0216	101.	56-132	16.1	22.2	L678951-01	WG702503
1,1,2-Trichloroethane	mg/l	0.0259	0.0232	104.	66.3-125	11.3	20	L678951-01	WG702503
1,1-Dichloroethane	mg/l	0.0272	0.0241	109.	58.5-132	12.3	20	L678951-01	WG702503
1,1-Dichloroethene	mg/l	0.0237	0.0213	94.8	51.1-140	10.7	20.2	L678951-01	WG702503
1,1-Dichloropropene	mg/l	0.0275	0.0236	110.	57.3-136	15.1	20	L678951-01	WG702503
1,2,3-Trichlorobenzene	mg/l	0.0263	0.0232	105.	59.1-138	12.2	23.7	L678951-01	WG702503
1,2,3-Trichloropropane	mg/l	0.0255	0.0215	102.	61.4-128	16.9	22.4	L678951-01	WG702503
1,2,4-Trichlorobenzene	mg/l	0.0280	0.0255	112.	63.6-143	9.30	21.9	L678951-01	WG702503
1,2,4-Trimethylbenzene	mg/l	0.0247	0.0218	96.2	57.4-137	12.4	20	L678951-01	WG702503
1,2-Dibromo-3-Chloropropane	mg/l	0.0271	0.0217	108.	57.3-136	21.9	27	L678951-01	WG702503
1,2-Dibromoethane	mg/l	0.0259	0.0223	103.	67.1-125	14.7	20	L678951-01	WG702503
1,2-Dichlorobenzene	mg/l	0.0249	0.0226	99.7	68.2-123	9.96	20	L678951-01	WG702503
1,2-Dichloroethane	mg/l	0.0259	0.0222	104.	60-126	15.7	20	L678951-01	WG702503
1,2-Dichloropropane	mg/l	0.0267	0.0236	107.	64.2-123	12.5	20	L678951-01	WG702503
1,3,5-Trimethylbenzene	mg/l	0.0249	0.0219	99.5	63.6-132	12.7	20.5	L678951-01	WG702503
1,3-Dichlorobenzene	mg/l	0.0245	0.0211	97.8	63.1-131	14.8	20	L678951-01	WG702503
1,3-Dichloropropane	mg/l	0.0256	0.0222	102.	67.9-121	14.1	20	L678951-01	WG702503
1,4-Dichlorobenzene	mg/l	0.0248	0.0228	99.2	68.6-123	8.57	20	L678951-01	WG702503
2,2-Dichloropropane	mg/l	0.0255	0.0219	102.	50.5-144	15.2	21.9	L678951-01	WG702503
2-Butanone (MEK)	mg/l	0.149	0.114	119.	22.4-138	27.2*	27	L678951-01	WG702503
2-Chloroethyl vinyl ether	mg/l	0.0129	0.0417	10.3	10-155	106.*	20	L678951-01	WG702503
2-Chlorotoluene	mg/l	0.0238	0.0205	95.2	63.6-128	14.9	20	L678951-01	WG702503
4-Chlorotoluene	mg/l	0.0250	0.0215	100.	65.7-127	15.1	20	L678951-01	WG702503
4-Methyl-2-pentanone (MIBK)	mg/l	0.159	0.129	127.	60.8-140	20.3	25.1	L678951-01	WG702503
Acetone	mg/l	0.0940	0.0750	73.2	10-130	22.5	27.9	L678951-01	WG702503
Acrolein	mg/l	0.152	0.125	121.	10-200	19.5	27.7	L678951-01	WG702503
Acrylonitrile	mg/l	0.154	0.125	123.	49.4-133	20.2	25.3	L678951-01	WG702503
Benzene	mg/l	0.0268	0.0233	107.	54.3-133	13.8	20	L678951-01	WG702503
Bromobenzene	mg/l	0.0242	0.0216	96.9	63.9-124	11.6	20	L678951-01	WG702503
Bromodichloromethane	mg/l	0.0244	0.0213	97.4	63.9-121	13.3	20	L678951-01	WG702503
Bromoform	mg/l	0.0255	0.0227	102.	59.5-134	11.4	20.5	L678951-01	WG702503
Bromomethane	mg/l	0.0218	0.0194	87.3	41.7-155	11.5	21.9	L678951-01	WG702503
Carbon tetrachloride	mg/l	0.0265	0.0230	106.	55.7-134	14.1	20	L678951-01	WG702503
Chlorobenzene	mg/l	0.0241	0.0212	96.2	67-125	12.6	20	L678951-01	WG702503
Chlorodibromomethane	mg/l	0.0238	0.0208	95.2	64.3-125	13.4	20.8	L678951-01	WG702503
Chloroethane	mg/l	0.0211	0.0190	84.5	51.5-136	10.5	40	L678951-01	WG702503
Chloroform	mg/l	0.0252	0.0225	101.	63-129	11.6	20	L678951-01	WG702503
Chloromethane	mg/l	0.0259	0.0232	104.	42.4-135	10.9	20	L678951-01	WG702503

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Cary, NC 27512

Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
cis-1,2-Dichloroethene	mg/l	0.0259	0.0224	103.	59.2-129	14.3	20	L678951-01	WG702503
cis-1,3-Dichloropropene	mg/l	0.0265	0.0240	106.	66.4-125	9.70	20	L678951-01	WG702503
Di-isopropyl ether	mg/l	0.0264	0.0239	106.	56.9-136	9.81	20	L678951-01	WG702503
Dibromomethane	mg/l	0.0253	0.0231	101.	68.2-124	8.81	20	L678951-01	WG702503
Dichlorodifluoromethane	mg/l	0.0263	0.0227	105.	40.6-144	15.0	20.2	L678951-01	WG702503
Ethylbenzene	mg/l	0.0263	0.0221	105.	61.4-133	17.4	20	L678951-01	WG702503
Hexachloro-1,3-butadiene	mg/l	0.0268	0.0235	107.	55.1-136	13.2	23.6	L678951-01	WG702503
Isopropylbenzene	mg/l	0.0270	0.0238	108.	66.8-141	12.6	20	L678951-01	WG702503
Methyl tert-butyl ether	mg/l	0.0247	0.0221	99.0	57.7-134	11.5	20	L678951-01	WG702503
Methylene Chloride	mg/l	0.0231	0.0206	92.5	58.1-122	11.8	20	L678951-01	WG702503
n-Butylbenzene	mg/l	0.0295	0.0253	118.	62.7-140	15.5	20.3	L678951-01	WG702503
n-Propylbenzene	mg/l	0.0257	0.0225	103.	65.9-131	13.4	20	L678951-01	WG702503
Naphthalene	mg/l	0.0259	0.0226	104.	58-135	13.7	25.5	L678951-01	WG702503
p-Isopropyltoluene	mg/l	0.0262	0.0228	105.	63.2-139	13.9	20.4	L678951-01	WG702503
sec-Butylbenzene	mg/l	0.0257	0.0220	103.	62.2-136	15.7	20.3	L678951-01	WG702503
Styrene	mg/l	0.0267	0.0239	107.	66.8-133	11.1	20	L678951-01	WG702503
tert-Butylbenzene	mg/l	0.0253	0.0221	101.	63.3-134	13.3	21	L678951-01	WG702503
Tetrachloroethene	mg/l	0.0244	0.0212	97.5	53-139	14.0	20	L678951-01	WG702503
Toluene	mg/l	0.0260	0.0232	102.	61.4-130	11.4	20	L678951-01	WG702503
trans-1,2-Dichloroethene	mg/l	0.0259	0.0225	104.	56.5-129	13.8	20	L678951-01	WG702503
trans-1,3-Dichloropropene	mg/l	0.0281	0.0244	112.	64.1-128	14.2	20	L678951-01	WG702503
Trichloroethene	mg/l	0.0247	0.0219	98.6	44.1-149	11.8	20	L678951-01	WG702503
Trichlorofluoromethane	mg/l	0.0230	0.0207	92.1	49.6-145	10.8	21.2	L678951-01	WG702503
Vinyl chloride	mg/l	0.0244	0.0215	97.6	47.8-137	12.8	20	L678951-01	WG702503
Xylenes, Total	mg/l	0.0755	0.0659	99.7	63.3-131	13.5	20	L678951-01	WG702503
4-Bromofluorobenzene				96.40	71-126				WG702503
Dibromofluoromethane				103.0	78.3-121				WG702503
Toluene-d8				104.0	88.5-111				WG702503
a,a,a-Trifluorotoluene				103.0	85-114				WG702503
1,1,1,2-Tetrachloroethane	mg/kg	0.0212	0.0115	84.8	64-128	59.3*	20	L678902-01	WG702232
1,1,1-Trichloroethane	mg/kg	0.0241	0.0122	96.2	58.7-134	65.2*	20	L678902-01	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0216	0.0113	86.4	56-132	62.7*	22.2	L678902-01	WG702232
1,1,2-Trichloroethane	mg/kg	0.0237	0.0123	94.6	66.3-125	62.8*	20	L678902-01	WG702232
1,1-Dichloroethane	mg/kg	0.0259	0.0129	104.	58.5-132	67.1*	20	L678902-01	WG702232
1,1-Dichloroethene	mg/kg	0.0236	0.0115	94.3	51.1-140	69.1*	20.2	L678902-01	WG702232
1,1-Dichloropropene	mg/kg	0.0250	0.0127	100.	57.3-136	65.1*	20	L678902-01	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0209	0.0116	83.8	59.1-138	57.1*	23.7	L678902-01	WG702232
1,2,3-Trichloropropane	mg/kg	0.0207	0.0112	82.7	61.4-128	59.5*	22.4	L678902-01	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0216	0.0125	86.6	63.6-143	53.8*	21.9	L678902-01	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0202	0.0112	81.0	57.4-137	57.8*	20	L678902-01	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0244	0.0113	97.5	57.3-136	73.5*	27	L678902-01	WG702232
1,2-Dibromoethane	mg/kg	0.0233	0.0120	93.0	67.1-125	63.9*	20	L678902-01	WG702232
1,2-Dichlorobenzene	mg/kg	0.0219	0.0118	87.4	68.2-123	59.6*	20	L678902-01	WG702232
1,2-Dichloroethane	mg/kg	0.0228	0.0112	91.2	60-126	68.1*	20	L678902-01	WG702232
1,2-Dichloropropane	mg/kg	0.0258	0.0130	103.	64.2-123	66.0*	20	L678902-01	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0206	0.0117	82.3	63.6-132	54.6*	20.5	L678902-01	WG702232
1,3-Dichlorobenzene	mg/kg	0.0194	0.0111	77.6	63.1-131	54.7*	20	L678902-01	WG702232
1,3-Dichloropropane	mg/kg	0.0238	0.0121	95.4	67.9-121	65.4*	20	L678902-01	WG702232
1,4-Dichlorobenzene	mg/kg	0.0210	0.0115	83.8	68.6-123	58.6*	20	L678902-01	WG702232
2,2-Dichloropropane	mg/kg	0.0236	0.0124	94.4	50.5-144	62.0*	21.9	L678902-01	WG702232
2-Butanone (MEK)	mg/kg	0.116	0.0558	92.7	22.4-138	70.0*	27	L678902-01	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.161	0.0784	129.	10-155	68.9*	40	L678902-01	WG702232
2-Chlorotoluene	mg/kg	0.0201	0.0110	80.2	63.6-128	58.7*	20	L678902-01	WG702232
4-Chlorotoluene	mg/kg	0.0205	0.0114	82.1	65.7-127	57.2*	20	L678902-01	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.129	0.0644	103.	60.8-140	66.8*	25.1	L678902-01	WG702232
Acetone	mg/kg	0.0684	0.0379	50.4	10-130	57.4*	27.9	L678902-01	WG702232
Acrylonitrile	mg/kg	0.143	0.0654	114.	49.4-133	74.4*	25.3	L678902-01	WG702232

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Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/kg	0.0248	0.0125	99.4	54.3-133	66.0*	20	L678902-01	WG702232
Bromobenzene	mg/kg	0.0212	0.0118	84.7	63.9-124	57.0*	20	L678902-01	WG702232
Bromodichloromethane	mg/kg	0.0209	0.0109	83.6	63.9-121	62.8*	20	L678902-01	WG702232
Bromoform	mg/kg	0.0211	0.0106	84.3	59.5-134	66.3*	20.8	L678902-01	WG702232
Bromomethane	mg/kg	0.0249	0.0129	99.5	41.7-155	63.7*	20.5	L678902-01	WG702232
Carbon tetrachloride	mg/kg	0.0235	0.0119	94.1	55.7-134	65.9*	20.3	L678902-01	WG702232
Chlorobenzene	mg/kg	0.0223	0.0122	89.1	67-125	58.1*	20	L678902-01	WG702232
Chlorodibromomethane	mg/kg	0.0219	0.0113	87.6	64.3-125	63.9*	20	L678902-01	WG702232
Chloroethane	mg/kg	0.0250	0.0135	100.	51.5-136	59.5*	20.8	L678902-01	WG702232
Chloroform	mg/kg	0.0233	0.0120	93.2	63-129	64.0*	20	L678902-01	WG702232
Chloromethane	mg/kg	0.0278	0.0143	111.	42.4-135	64.3*	20	L678902-01	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0248	0.0121	99.4	59.2-129	68.9*	20	L678902-01	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0248	0.0129	99.4	66.4-125	63.6*	20	L678902-01	WG702232
Di-isopropyl ether	mg/kg	0.0261	0.0131	104.	56.9-136	66.6*	20	L678902-01	WG702232
Dibromomethane	mg/kg	0.0234	0.0114	93.6	68.2-124	68.7*	20	L678902-01	WG702232
Dichlorodifluoromethane	mg/kg	0.0254	0.0131	102.	40.6-144	63.6*	20.2	L678902-01	WG702232
Ethylbenzene	mg/kg	0.0226	0.0122	90.5	61.4-133	59.7*	20	L678902-01	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0194	0.0112	77.4	55.1-136	53.7*	23.6	L678902-01	WG702232
Isopropylbenzene	mg/kg	0.0235	0.0131	93.8	66.8-141	56.7*	20	L678902-01	WG702232
Methyl tert-butyl ether	mg/kg	0.0240	0.0118	95.8	57.7-134	68.3*	20	L678902-01	WG702232
Methylene Chloride	mg/kg	0.0237	0.0122	94.7	58.1-122	63.8*	20	L678902-01	WG702232
n-Butylbenzene	mg/kg	0.0229	0.0127	91.4	62.7-140	57.3*	20	L678902-01	WG702232
n-Propylbenzene	mg/kg	0.0214	0.0118	85.6	10-176	57.7*	26.6	L678902-01	WG702232
Naphthalene	mg/kg	0.0213	0.0111	85.2	58-135	63.0*	25.5	L678902-01	WG702232
p-Isopropyltoluene	mg/kg	0.0212	0.0119	84.9	63.2-139	56.6*	20.4	L678902-01	WG702232
sec-Butylbenzene	mg/kg	0.0210	0.0116	84.0	62.2-136	58.1*	20.3	L678902-01	WG702232
Styrene	mg/kg	0.0222	0.0119	88.9	66.8-133	60.5*	20	L678902-01	WG702232
tert-Butylbenzene	mg/kg	0.0216	0.0120	86.6	63.3-134	57.2*	20.3	L678902-01	WG702232
Tetrachloroethene	mg/kg	0.0225	0.0121	90.1	53-139	60.5*	20	L678902-01	WG702232
Toluene	mg/kg	0.0236	0.0124	94.2	61.4-130	61.8*	20	L678902-01	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0239	0.0124	95.6	56.5-129	63.8*	20	L678902-01	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0235	0.0125	94.2	64.1-128	61.3*	20	L678902-01	WG702232
Trichloroethene	mg/kg	0.0230	0.0119	91.8	44.1-149	63.2*	20	L678902-01	WG702232
Trichlorofluoromethane	mg/kg	0.0219	0.0113	87.8	49.6-145	64.4*	21.2	L678902-01	WG702232
Vinyl chloride	mg/kg	0.0268	0.0136	107.	47.8-137	65.2*	20	L678902-01	WG702232
Xylenes, Total	mg/kg	0.0658	0.0361	87.8	63.3-131	58.5*	20	L678902-01	WG702232
4-Bromofluorobenzene				90.80	71-126				WG702232
Dibromofluoromethane				96.30	78.3-121				WG702232
Toluene-d8				103.0	88.5-111				WG702232
a,a,a-Trifluorotoluene				97.10	85-114				WG702232
TPH (GC/FID) High Fraction	mg/kg	37.0	36.2	61.7	50-150	2.05	20	L678834-02	WG702264
o-Terphenyl				61.00	50-150				WG702264
Antimony	mg/kg	21.1	18.9	39.2*	75-125	11.0	20	L678497-12	WG701908
Arsenic	mg/kg	45.9	47.8	93.5	75-125	4.00	20	L678497-12	WG701908
Beryllium	mg/kg	49.0	50.4	97.1	75-125	3.00	20	L678497-12	WG701908
Chromium	mg/kg	51.2	52.9	96.9	75-125	3.00	20	L678497-12	WG701908
Copper	mg/kg	90.5	94.6	99.6	75-125	4.00	20	L678497-12	WG701908
Lead	mg/kg	50.4	51.4	93.2	75-125	2.00	20	L678497-12	WG701908
Nickel	mg/kg	58.3	60.7	90.8	75-125	4.00	20	L678497-12	WG701908
Selenium	mg/kg	46.6	47.8	96.8	75-125	2.00	20	L678497-12	WG701908
Silver	mg/kg	50.0	51.0	100.	75-125	2.00	20	L678497-12	WG701908
Thallium	mg/kg	46.1	46.1	92.3	75-125	0.0	20	L678497-12	WG701908
Zinc	mg/kg	99.1	99.8	93.1	75-125	1.00	20	L678497-12	WG701908
Cadmium	mg/kg	50.0	50.2	99.6	75-125	0.0	20	L678497-12	WG701908

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Quality Assurance Report
Level II

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January 30, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/kg	0.109	0.106	87.5	64-128	3.00	20	L679466-01	WG703100
1,1,1-Trichloroethane	mg/kg	0.112	0.108	89.3	58.7-134	3.33	20	L679466-01	WG703100
1,1,2,2-Tetrachloroethane	mg/kg	0.105	0.109	83.9	56-132	3.52	22.2	L679466-01	WG703100
1,1,2-Trichloroethane	mg/kg	0.110	0.111	88.3	66.3-125	0.150	20	L679466-01	WG703100
1,1-Dichloroethane	mg/kg	0.114	0.109	90.9	58.5-132	4.07	20	L679466-01	WG703100
1,1-Dichloroethene	mg/kg	0.109	0.103	87.2	51.1-140	5.61	20.2	L679466-01	WG703100
1,1-Dichloropropene	mg/kg	0.109	0.104	87.3	57.3-136	4.57	20	L679466-01	WG703100
1,2,3-Trichlorobenzene	mg/kg	0.100	0.115	79.7	59.1-138	13.6	23.7	L679466-01	WG703100
1,2,3-Trichloropropane	mg/kg	0.108	0.113	86.2	61.4-128	4.55	22.4	L679466-01	WG703100
1,2,4-Trichlorobenzene	mg/kg	0.111	0.123	88.1	63.6-143	10.3	21.9	L679466-01	WG703100
1,2,4-Trimethylbenzene	mg/kg	0.105	0.105	84.3	57.4-137	0.0300	20	L679466-01	WG703100
1,2-Dibromo-3-Chloropropane	mg/kg	0.106	0.121	85.2	57.3-136	12.5	27	L679466-01	WG703100
1,2-Dibromoethane	mg/kg	0.111	0.114	88.5	67.1-125	2.95	20	L679466-01	WG703100
1,2-Dichlorobenzene	mg/kg	0.107	0.113	85.2	68.2-123	5.58	20	L679466-01	WG703100
1,2-Dichloroethane	mg/kg	0.110	0.110	87.8	60-126	0.390	20	L679466-01	WG703100
1,2-Dichloropropane	mg/kg	0.109	0.109	87.0	64.2-123	0.420	20	L679466-01	WG703100
1,3,5-Trimethylbenzene	mg/kg	0.107	0.105	86.0	63.6-132	2.08	20.5	L679466-01	WG703100
1,3-Dichlorobenzene	mg/kg	0.106	0.105	85.0	63.1-131	1.71	20	L679466-01	WG703100
1,3-Dichloropropane	mg/kg	0.103	0.107	82.4	67.9-121	3.99	20	L679466-01	WG703100
1,4-Dichlorobenzene	mg/kg	0.105	0.108	84.4	68.6-123	2.44	20	L679466-01	WG703100
2,2-Dichloropropane	mg/kg	0.113	0.110	90.0	50.5-144	2.64	21.9	L679466-01	WG703100
2-Butanone (MEK)	mg/kg	0.712	0.753	114.	22.4-138	5.63	27	L679466-01	WG703100
2-Chloroethyl vinyl ether	mg/kg	0.597	0.628	95.5	10-155	5.12	40	L679466-01	WG703100
2-Chlorotoluene	mg/kg	0.106	0.104	84.6	63.6-128	1.93	20	L679466-01	WG703100
4-Chlorotoluene	mg/kg	0.108	0.106	86.2	65.7-127	1.64	20	L679466-01	WG703100
4-Methyl-2-pentanone (MIBK)	mg/kg	0.606	0.645	96.9	60.8-140	6.29	25.1	L679466-01	WG703100
Acetone	mg/kg	1.04	1.11	165.*	10-130	6.29	27.9	L679466-01	WG703100
Acrylonitrile	mg/kg	0.574	0.594	91.8	49.4-133	3.55	25.3	L679466-01	WG703100
Benzene	mg/kg	0.108	0.106	86.4	54.3-133	1.73	20	L679466-01	WG703100
Bromobenzene	mg/kg	0.102	0.102	81.6	63.9-124	0.140	20	L679466-01	WG703100
Bromodichloromethane	mg/kg	0.108	0.110	86.7	63.9-121	1.01	20	L679466-01	WG703100
Bromoform	mg/kg	0.112	0.116	89.7	59.5-134	3.51	20.8	L679466-01	WG703100
Bromomethane	mg/kg	0.121	0.119	96.7	41.7-155	1.63	20.5	L679466-01	WG703100
Carbon tetrachloride	mg/kg	0.110	0.106	88.3	55.7-134	4.11	20.3	L679466-01	WG703100
Chlorobenzene	mg/kg	0.108	0.106	86.2	67-125	1.13	20	L679466-01	WG703100
Chlorodibromomethane	mg/kg	0.107	0.109	85.6	64.3-125	2.20	20	L679466-01	WG703100
Chloroethane	mg/kg	0.115	0.103	91.9	51.5-136	11.3	20.8	L679466-01	WG703100
Chloroform	mg/kg	0.111	0.107	88.6	63-129	3.35	20	L679466-01	WG703100
Chloromethane	mg/kg	0.101	0.0951	80.7	42.4-135	5.85	20	L679466-01	WG703100
cis-1,2-Dichloroethene	mg/kg	0.111	0.108	89.0	59.2-129	2.95	20	L679466-01	WG703100
cis-1,3-Dichloropropene	mg/kg	0.109	0.113	87.4	66.4-125	3.74	20	L679466-01	WG703100
Di-isopropyl ether	mg/kg	0.111	0.109	88.7	56.9-136	1.80	20	L679466-01	WG703100
Dibromomethane	mg/kg	0.113	0.117	90.0	68.2-124	4.00	20	L679466-01	WG703100
Dichlorodifluoromethane	mg/kg	0.102	0.0999	81.6	40.6-144	2.09	20.2	L679466-01	WG703100
Ethylbenzene	mg/kg	0.108	0.105	86.1	61.4-133	2.18	20	L679466-01	WG703100
Hexachloro-1,3-butadiene	mg/kg	0.0947	0.101	75.7	55.1-136	5.97	23.6	L679466-01	WG703100
Isopropylbenzene	mg/kg	0.119	0.113	95.1	66.8-141	4.80	20	L679466-01	WG703100
Methyl tert-butyl ether	mg/kg	0.112	0.110	89.3	57.7-134	1.30	20	L679466-01	WG703100
Methylene Chloride	mg/kg	0.101	0.0983	80.3	58.1-122	2.78	20	L679466-01	WG703100
n-Butylbenzene	mg/kg	0.108	0.112	86.8	62.7-140	3.02	20	L679466-01	WG703100
n-Propylbenzene	mg/kg	0.106	0.103	84.8	10-176	2.93	26.6	L679466-01	WG703100
Naphthalene	mg/kg	0.103	0.119	81.6	58-135	14.2	25.5	L679466-01	WG703100
p-Isopropyltoluene	mg/kg	0.108	0.106	86.5	63.2-139	1.94	20.4	L679466-01	WG703100
sec-Butylbenzene	mg/kg	0.106	0.104	85.2	62.2-136	2.71	20.3	L679466-01	WG703100
Styrene	mg/kg	0.118	0.115	94.2	66.8-133	2.38	20	L679466-01	WG703100
tert-Butylbenzene	mg/kg	0.109	0.106	87.2	63.3-134	3.12	20.3	L679466-01	WG703100
Tetrachloroethene	mg/kg	0.103	0.101	82.4	53-139	1.60	20	L679466-01	WG703100
Toluene	mg/kg	0.109	0.108	87.0	61.4-130	0.980	20	L679466-01	WG703100

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678497

January 30, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
trans-1,2-Dichloroethene	mg/kg	0.109	0.103	87.3	56.5-129	5.65	20	L679466-01	WG703100
trans-1,3-Dichloropropene	mg/kg	0.116	0.117	92.5	64.1-128	0.860	20	L679466-01	WG703100
Trichloroethene	mg/kg	0.107	0.107	85.9	44.1-149	0.0100	20	L679466-01	WG703100
Trichlorofluoromethane	mg/kg	0.116	0.108	92.6	49.6-145	7.00	21.2	L679466-01	WG703100
Vinyl chloride	mg/kg	0.107	0.103	85.5	47.8-137	3.97	20	L679466-01	WG703100
Xylenes, Total	mg/kg	0.323	0.316	86.2	63.3-131	2.40	20	L679466-01	WG703100
4-Bromofluorobenzene				101.0	71-126				WG703100
Dibromofluoromethane				107.0	78.3-121				WG703100
Toluene-d8				106.0	88.5-111				WG703100
a,a,a-Trifluorotoluene				103.0	85-114				WG703100
1,2,4-Trichlorobenzene	mg/kg	0.296	0.272	88.9	36.5-114	8.62	28.4	L679355-05	WG703044
2,4,6-Trichlorophenol	mg/kg	1.19	1.17	358.*	33.8-133	2.00	28.1	L679355-05	WG703044
2,4-Dichlorophenol	mg/kg	0.330	0.297	99.2	34.8-134	10.6	27.3	L679355-05	WG703044
2,4-Dimethylphenol	mg/kg	0.305	0.309	91.7	12.3-149	1.06	32.3	L679355-05	WG703044
2,4-Dinitrophenol	mg/kg	1.71	0.0	513.*	10-121	200.*	39.4	L679355-05	WG703044
2,4-Dinitrotoluene	mg/kg	0.253	0.224	76.0	27.8-147	12.2	29.7	L679355-05	WG703044
2,6-Dinitrotoluene	mg/kg	0.276	0.246	83.0	36.5-137	11.7	29.7	L679355-05	WG703044
2-Chloronaphthalene	mg/kg	0.290	0.281	87.0	37.5-123	3.12	26.5	L679355-05	WG703044
2-Chlorophenol	mg/kg	0.274	0.255	82.1	33.2-121	7.11	29.3	L679355-05	WG703044
2-Nitrophenol	mg/kg	0.249	0.225	74.6	29.5-144	10.0	29.9	L679355-05	WG703044
3,3-Dichlorobenzidine	mg/kg	0.228	0.240	68.4	10-129	5.29	40	L679355-05	WG703044
4,6-Dinitro-2-methylphenol	mg/kg	0.583	0.581	175.*	10-144	0.450	32.7	L679355-05	WG703044
4-Bromophenyl-phenylether	mg/kg	0.308	0.313	92.5	39-130	1.47	26	L679355-05	WG703044
4-Chloro-3-methylphenol	mg/kg	0.282	0.323	84.6	27-154	13.6	26.6	L679355-05	WG703044
4-Chlorophenyl-phenylether	mg/kg	0.313	0.296	93.9	37.9-123	5.59	25.9	L679355-05	WG703044
4-Nitrophenol	mg/kg	0.806	0.817	242.*	20-133	1.33	30.2	L679355-05	WG703044
Acenaphthene	mg/kg	0.366	0.355	110.	32.2-134	3.07	27.3	L679355-05	WG703044
Acenaphthylene	mg/kg	0.442	0.374	132.*	38.7-129	16.5	25.9	L679355-05	WG703044
Anthracene	mg/kg	0.522	0.526	157.*	32.3-137	0.790	28.4	L679355-05	WG703044
Benzidine	mg/kg	0.0553	0.00396	16.6	0-49.9	173.*	40	L679355-05	WG703044
Benzo(a)anthracene	mg/kg	1.51	1.47	261.*	33.3-124	2.60	29	L679355-05	WG703044
Benzo(a)pyrene	mg/kg	1.49	1.25	247.*	28.2-128	17.2	28.4	L679355-05	WG703044
Benzo(b)fluoranthene	mg/kg	1.90	1.59	309.*	23.3-133	17.3	30.3	L679355-05	WG703044
Benzo(g,h,i)perylene	mg/kg	1.03	0.954	166.*	10-127	7.63	31.9	L679355-05	WG703044
Benzo(k)fluoranthene	mg/kg	0.955	0.718	287.*	31-129	28.3*	26.7	L679355-05	WG703044
Benzylbutyl phthalate	mg/kg	0.298	0.308	89.4	33.4-128	3.39	28.5	L679355-05	WG703044
Bis(2-chlorethoxy)methane	mg/kg	0.301	0.282	90.5	35-132	6.67	26.1	L679355-05	WG703044
Bis(2-chloroethyl)ether	mg/kg	0.257	0.258	77.3	28.8-128	0.440	33.6	L679355-05	WG703044
Bis(2-chloroisopropyl)ether	mg/kg	0.277	0.287	83.1	31.8-118	3.56	31.7	L679355-05	WG703044
Bis(2-ethylhexyl)phthalate	mg/kg	0.419	0.344	126.	21.8-141	19.7	35.2	L679355-05	WG703044
Chrysene	mg/kg	1.61	1.33	277.*	36.3-129	19.1	28	L679355-05	WG703044
Di-n-butyl phthalate	mg/kg	0.298	0.314	89.6	32.2-133	4.95	25.9	L679355-05	WG703044
Di-n-octyl phthalate	mg/kg	0.364	0.0216	109.	28.5-128	178.*	32.5	L679355-05	WG703044
Dibenz(a,h)anthracene	mg/kg	0.471	0.484	141.*	10.5-128	2.82	29.5	L679355-05	WG703044
Diethyl phthalate	mg/kg	0.326	0.301	97.9	39.4-136	7.93	25.5	L679355-05	WG703044
Dimethyl phthalate	mg/kg	0.300	0.291	90.0	35.8-137	2.93	25.4	L679355-05	WG703044
Fluoranthene	mg/kg	2.54	2.41	386.*	27.9-138	5.19	26.9	L679355-05	WG703044
Fluorene	mg/kg	0.401	0.389	120.	34-133	3.04	27.1	L679355-05	WG703044
Hexachloro-1,3-butadiene	mg/kg	0.356	0.330	107.	36.5-125	7.64	29.7	L679355-05	WG703044
Hexachlorobenzene	mg/kg	0.312	0.342	93.6	34.4-116	9.31	25.4	L679355-05	WG703044
Hexachlorocyclopentadiene	mg/kg	0.0628	0.0564	18.8	10-124	10.8	37.5	L679355-05	WG703044
Hexachloroethane	mg/kg	0.292	0.271	87.7	11.3-143	7.36	31.9	L679355-05	WG703044
Indeno(1,2,3-cd)pyrene	mg/kg	1.06	0.949	193.*	10-128	11.1	31.5	L679355-05	WG703044
Isophorone	mg/kg	0.329	0.311	98.8	25.7-116	5.65	27.7	L679355-05	WG703044
n-Nitrosodi-n-propylamine	mg/kg	0.329	0.349	98.9	33-134	5.91	28.2	L679355-05	WG703044
n-Nitrosodimethylamine	mg/kg	0.450	0.322	135.*	19.2-127	33.1*	32	L679355-05	WG703044
n-Nitrosodiphenylamine	mg/kg	0.293	0.310	88.0	26.8-133	5.64	25.9	L679355-05	WG703044

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Mt. Juliet, TN 37122
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1-800-767-5859
Fax (615) 758-5859

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Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678497

January 30, 2014

		Matrix Spike Duplicate							
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Naphthalene	mg/kg	0.374	0.380	112.	36.4-121	1.43	27.2	L679355-05	WG703044
Nitrobenzene	mg/kg	0.303	0.291	90.9	30.9-134	3.97	27.8	L679355-05	WG703044
Phenanthrene	mg/kg	1.21	1.36	188.*	30.8-137	11.8	26.5	L679355-05	WG703044
Phenol	mg/kg	0.320	0.298	96.1	25.1-130	7.12	29.6	L679355-05	WG703044
Pyrene	mg/kg	2.23	2.04	342.*	24.1-130	8.78	29.9	L679355-05	WG703044
2,4,6-Tribromophenol				100.0	21.6-142				WG703044
2-Fluorobiphenyl				84.90	34.9-129				WG703044
2-Fluorophenol				82.00	21.1-116				WG703044
Nitrobenzene-d5				93.00	21.9-129				WG703044
Phenol-d5				82.20	26.3-121				WG703044
p-Terphenyl-d14				78.30	21.5-128				WG703044
C5-C8 Aliphatics	mg/kg	41.8	43.7	67.8*	70-130	4.45	25	L678497-01	WG703127
C9-C10 Aromatics	mg/kg	12.5	13.2	111.	70-130	4.95	25	L678497-01	WG703127
C9-C12 Aliphatics	mg/kg	73.2	77.2	100.	70-130	5.29	25	L678497-01	WG703127
2,5-Dibromotoluene(FID)				109.0	70-130				WG703127
2,5-Dibromotoluene(PID)				113.0	70-130				WG703127
C19-C36 Aliphatics	mg/kg	77.7	76.1	96.6	40-140	2.12	50	L678497-01	WG703463
C9-C18 Aliphatics	mg/kg	99.1	91.5	85.6	40-140	8.04	50	L678497-01	WG703463
1-Chloro-octadecane				77.90	40-140				WG703463
C11-C22 Aromatics	mg/kg	171.	169.	93.9	40-140	0.840	50	L678497-01	WG703463
2-Bromonaphthalene				86.80	40-140				WG703463
2-Fluorobiphenyl				103.0	40-140				WG703463
o-Terphenyl				114.0	40-140				WG703463
Pentachlorophenol	mg/kg	0.313	0.317	94.0	10-139	1.26	28.3	L680357-02	WG703930
2,4,6-Tribromophenol				120.0	21.6-142				WG703930
2-Fluorobiphenyl				71.80	34.9-129				WG703930
2-Fluorophenol				67.50	21.1-116				WG703930
Nitrobenzene-d5				78.90	21.9-129				WG703930
Phenol-d5				71.50	26.3-121				WG703930
p-Terphenyl-d14				60.20	21.5-128				WG703930

Post Spike

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Quality Assurance Report
Level II

L678497

January 30, 2014

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

WG701954: R2877362: L678497-11 12 13
WG701953: R2877364: L678497-01 02 03 04 05 06 07 08 09 10
WG701904: R2877506: L678497-06 07 08 09 10 11 12
WG702094: R2877529: L678497-01 02 03 04 05
WG701965: R2877659 R2877694: L678497-01 02 03 05
WG701973: R2877683: L678497-12
WG701964: R2877761 R2877932: L678497-13
WG701908: R2877823 R2878346 R2878506: L678497-06 07 08 09 10 11 12
WG702503: R2878181: L678497-14
WG702232: R2878186: L678497-12
WG702264: R2878205 R2878748: L678497-04
WG703100: R2879822: L678497-01
WG703044: R2879956 R2880154 R2880968: L678497-01
WG703127: R2880575: L678497-01
WG703463: R2880577: L678497-01
WG703930: R2880980: L678497-01

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
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Quality Assurance Report
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L678497

January 30, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID #

P.O. #

Collected by (signature): [signature]
Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max.
Email? ___No X Yes
FAX? ___No X ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L678497
C128

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH	Rem./Contaminant	Sample # (lab only)
13-SB-J (8-9')	G	SS	8-9'	1/15/14	0820	9	X	X				X	X	X	X		-01
13-SB-K (8-9')			8-9'		0840												02
13-SB-L (7-8')			7-8'		0930												03
13-SB-M (1-2'			1-2'		1030												04
13-SB-N (7-8')			7-8'		1045												05
6-SB-A (1')			1'		1440	1			X								06
6-SB-B (1')			1'		1450												07
6-SB-C (1')			1'		1500												08
6-SB-D (1')			1'		1510												09
6-SB-E (1')			1'		1520												10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ____

Remarks: Run TPH DRO/GRO 1st w/in 5 days. Then if results ≥10mg/kg run VOCs/SVOCs/EPH/VPH (Hold until then)

pH ____ Temp ____
Flow ____ Other ____

Page 1 of 2

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/15/14	17:30	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/15/14	18:11	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ Suit

Temp: 3.1 °C Bottles Received: 59

Date: 1-16-14 Time: 1445

Hold #

Condition: (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

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YOUR LAB OF CHOICE
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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L678497
Table #
Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
Dup-4 (1')	G	SS	1'	1/15/14	1515	1			X									-11
5-SB-A (12')	↓	↓	12'	↓	1650	6	X	X	X									12
5-SB-A (17')	↓	↓	17'	↓	1700	1	~~X~~	~~X~~	~~X~~		X							13
TB-1	N/A	W	N/A	1/15/14	N/A	1	X											14

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Page 2 of 2

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SUA
[signature]	1/15/14	17:30	[signature]	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1 °C Bottles Received: 59
Relinquished by : (Signature)	Date: 1/15/14	Time: 18:11	Received for lab by: (Signature) [signature]	Date: 1-16-14 Time: 1445

Condition: (lab use only)

COC Seal intact: ___Y ___N ___NA

pH Checked: NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-A 12FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678497-12

Date Collected: 1/15/2014

Lab File ID: 0121_12

Date Analyzed: 1/21/2014

Dilution Factor: 1.03

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 5-SB-A 12FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678497-12

Date Collected: 1/15/2014

Lab File ID: 0119_37

Date Analyzed: 1/19/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 2

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000541-02-6	Cyclopentasiloxane, decamethyl-	5.66	0.054	90.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	2.90	0.169	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-J 8-9FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678497-01

Date Collected: 1/15/2014

Lab File ID: 0124_41

Date Analyzed: 1/24/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 7

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000091-17-8	Naphthalene, decahydro-	7.76	0.039	96.00	J
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	8.87	0.081	94.00	J
002958-76-1	Naphthalene, decahydro-2-methyl-	8.27	0.030	90.00	J
056253-64-6	Benzene, (2-methyl-1-butenyl)-	9.17	0.033	90.00	J
002051-30-1	Octane, 2,6-dimethyl-	6.31	0.029	81.00	J
000769-25-5	Benzene, 2-ethenyl-1,3,5-trimethyl	10.08	0.041	78.00	J
004923-78-8	Cyclohexane, 1-ethyl-2-methyl-, tr	6.18	0.033	76.00	J

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-J 8-9FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678497-01

Date Collected: 1/15/2014

Lab File ID: 0128_25

Date Analyzed: 1/29/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-K 8-9FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678497-02

Date Collected: 1/15/2014

Lab File ID: 0117A_53

Date Analyzed: 1/17/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-L 7-8FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678497-03

Date Collected: 1/15/2014

Lab File ID: 0117A_57

Date Analyzed: 1/18/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-M 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678497-04

Date Collected: 1/15/2014

Lab File ID: 0121_54

Date Analyzed: 1/21/2014

Dilution Factor: 50.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-N 7-8FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678497-05

Date Collected: 1/15/2014

Lab File ID: 0117A_59

Date Analyzed: 1/18/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Divider
Page

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Thursday January 23, 2014

Report Number: L678495
Samples Received: 01/16/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678495-01

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 13:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	84.1	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.26	0.0014	0.024	mg/kg		7471	01/17/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	3.3	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.1	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.39	0.035	0.30	mg/kg		6010C	01/22/14	1
Chromium	19.	0.070	0.59	mg/kg		6010C	01/22/14	1
Copper	26.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	28.	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	7.0	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	1.4	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.0	mg/kg	O	6010C	01/22/14	5
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	57.	0.30	1.8	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.024	mg/kg		8081A	01/20/14	1
Alpha BHC	U	0.0014	0.024	mg/kg		8081A	01/20/14	1
Beta BHC	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Delta BHC	U	0.0014	0.024	mg/kg		8081A	01/20/14	1
Gamma BHC	U	0.0014	0.024	mg/kg		8081A	01/20/14	1
Chlordane	U	0.039	0.24	mg/kg		8081A	01/20/14	1
4,4-DDD	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
4,4-DDE	0.028	0.0015	0.024	mg/kg		8081A	01/20/14	1
4,4-DDT	0.0028	0.0020	0.024	mg/kg	J	8081A	01/20/14	1
Dieldrin	U	0.0015	0.024	mg/kg		8081A	01/20/14	1
Endosulfan I	U	0.0015	0.024	mg/kg		8081A	01/20/14	1
Endosulfan II	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Endosulfan sulfate	U	0.0015	0.024	mg/kg		8081A	01/20/14	1
Endrin	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Endrin aldehyde	U	0.0013	0.024	mg/kg		8081A	01/20/14	1
Endrin ketone	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Hexachlorobenzene	U	0.0018	0.024	mg/kg		8081A	01/20/14	1
Heptachlor	U	0.0015	0.024	mg/kg		8081A	01/20/14	1
Heptachlor epoxide	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Methoxychlor	U	0.0018	0.024	mg/kg		8081A	01/20/14	1
Toxaphene	U	0.036	0.48	mg/kg		8081A	01/20/14	1
Pesticide Surrogates								
Decachlorobiphenyl	26.5			% Rec.		8081A	01/20/14	1
Tetrachloro-m-xylene	43.7			% Rec.		8081A	01/20/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678495-01

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 13:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.083	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	0.95	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.083	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.083	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.083	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.083	mg/kg		8151	01/21/14	1
MCPA	U	2.2	7.7	mg/kg		8151	01/21/14	1
MCPP	U	2.2	7.7	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.083	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.083	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	75.3			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Reported: 01/23/14 14:41 Printed: 01/23/14 14:41

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678495-02

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 14:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	82.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.0018	0.0014	0.024	mg/kg	J	7471	01/17/14	1
Antimony	0.63	0.38	1.2	mg/kg	J	6010C	01/22/14	1
Arsenic	3.4	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	2.0	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.29	0.035	0.30	mg/kg	J	6010C	01/22/14	1
Chromium	31.	0.070	0.60	mg/kg		6010C	01/22/14	1
Copper	36.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	6.8	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	13.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	1.3	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.14	0.60	mg/kg		6010C	01/22/14	1
Thallium	U	1.6	6.0	mg/kg	O	6010C	01/22/14	5
Zinc	62.	0.30	1.8	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.024	mg/kg		8081A	01/20/14	1
Alpha BHC	U	0.0014	0.024	mg/kg		8081A	01/20/14	1
Beta BHC	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Delta BHC	U	0.0014	0.024	mg/kg		8081A	01/20/14	1
Gamma BHC	U	0.0014	0.024	mg/kg		8081A	01/20/14	1
Chlordane	U	0.039	0.24	mg/kg		8081A	01/20/14	1
4,4-DDD	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
4,4-DDE	U	0.0015	0.024	mg/kg		8081A	01/20/14	1
4,4-DDT	U	0.0020	0.024	mg/kg		8081A	01/20/14	1
Dieldrin	U	0.0015	0.024	mg/kg		8081A	01/20/14	1
Endosulfan I	U	0.0015	0.024	mg/kg		8081A	01/20/14	1
Endosulfan II	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Endosulfan sulfate	U	0.0015	0.024	mg/kg		8081A	01/20/14	1
Endrin	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Endrin aldehyde	U	0.0013	0.024	mg/kg		8081A	01/20/14	1
Endrin ketone	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Hexachlorobenzene	U	0.0018	0.024	mg/kg		8081A	01/20/14	1
Heptachlor	U	0.0015	0.024	mg/kg		8081A	01/20/14	1
Heptachlor epoxide	U	0.0016	0.024	mg/kg		8081A	01/20/14	1
Methoxychlor	U	0.0018	0.024	mg/kg		8081A	01/20/14	1
Toxaphene	U	0.036	0.48	mg/kg		8081A	01/20/14	1
Pesticide Surrogates								
Decachlorobiphenyl	33.4			% Rec.		8081A	01/20/14	1
Tetrachloro-m-xylene	54.0			% Rec.		8081A	01/20/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678495-02

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 14:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.085	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	0.97	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.085	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.085	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.085	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.085	mg/kg		8151	01/21/14	1
MCPA	U	2.2	7.9	mg/kg		8151	01/21/14	1
MCPP	U	2.2	7.9	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.085	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.085	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	75.1			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678495-03

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7HA-C 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 15:27

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	79.0	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.095	0.0014	0.025	mg/kg	O1	7471	01/18/14	1
Antimony	U	0.38	1.3	mg/kg		6010C	01/22/14	1
Arsenic	4.6	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	0.72	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.34	0.035	0.32	mg/kg		6010C	01/22/14	1
Chromium	29.	0.070	0.63	mg/kg		6010C	01/22/14	1
Copper	33.	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	26.	0.095	0.32	mg/kg		6010C	01/22/14	1
Nickel	4.3	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	2.3	0.37	1.3	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.2	mg/kg	O	6010C	01/22/14	5
Thallium	0.94	0.32	1.3	mg/kg	J	6010C	01/22/14	1
Zinc	33.	0.30	1.9	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Alpha BHC	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Beta BHC	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Delta BHC	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Gamma BHC	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Chlordane	U	0.039	0.25	mg/kg		8081A	01/20/14	1
4,4-DDD	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
4,4-DDE	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
4,4-DDT	U	0.0020	0.025	mg/kg		8081A	01/20/14	1
Dieldrin	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Endosulfan I	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Endosulfan II	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Endosulfan sulfate	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Endrin	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Endrin aldehyde	U	0.0013	0.025	mg/kg		8081A	01/20/14	1
Endrin ketone	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Hexachlorobenzene	U	0.0018	0.025	mg/kg		8081A	01/20/14	1
Heptachlor	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Heptachlor epoxide	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Methoxychlor	U	0.0018	0.025	mg/kg		8081A	01/20/14	1
Toxaphene	U	0.036	0.51	mg/kg		8081A	01/20/14	1
Pesticide Surrogates								
Decachlorobiphenyl	43.6			% Rec.		8081A	01/20/14	1
Tetrachloro-m-xylene	62.7			% Rec.		8081A	01/20/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678495-03

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7HA-C 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 15:27

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.089	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	1.0	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.089	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.089	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.089	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.089	mg/kg		8151	01/21/14	1
MCPA	U	2.2	8.2	mg/kg		8151	01/21/14	1
MCPP	U	2.2	8.2	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.089	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.089	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	80.0			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678495-04

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7HA-D 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 16:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	78.2	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.015	0.0014	0.026	mg/kg	J	7471	01/18/14	1
Antimony	1.0	0.38	1.3	mg/kg	J	6010C	01/22/14	1
Arsenic	3.1	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	1.7	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.32	0.035	0.32	mg/kg		6010C	01/22/14	1
Chromium	27.	0.070	0.64	mg/kg		6010C	01/22/14	1
Copper	42.	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	7.4	0.095	0.32	mg/kg		6010C	01/22/14	1
Nickel	12.	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	0.73	0.37	1.3	mg/kg	J	6010C	01/22/14	1
Silver	U	0.14	0.64	mg/kg		6010C	01/22/14	1
Thallium	U	1.6	6.4	mg/kg	O	6010C	01/22/14	5
Zinc	59.	0.30	1.9	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.026	mg/kg		8081A	01/20/14	1
Alpha BHC	U	0.0014	0.026	mg/kg		8081A	01/20/14	1
Beta BHC	U	0.0016	0.026	mg/kg		8081A	01/20/14	1
Delta BHC	U	0.0014	0.026	mg/kg		8081A	01/20/14	1
Gamma BHC	U	0.0014	0.026	mg/kg		8081A	01/20/14	1
Chlordane	U	0.039	0.26	mg/kg		8081A	01/20/14	1
4,4-DDD	U	0.0016	0.026	mg/kg		8081A	01/20/14	1
4,4-DDE	U	0.0015	0.026	mg/kg		8081A	01/20/14	1
4,4-DDT	U	0.0020	0.026	mg/kg		8081A	01/20/14	1
Dieldrin	U	0.0015	0.026	mg/kg		8081A	01/20/14	1
Endosulfan I	U	0.0015	0.026	mg/kg		8081A	01/20/14	1
Endosulfan II	U	0.0016	0.026	mg/kg		8081A	01/20/14	1
Endosulfan sulfate	U	0.0015	0.026	mg/kg		8081A	01/20/14	1
Endrin	U	0.0016	0.026	mg/kg		8081A	01/20/14	1
Endrin aldehyde	U	0.0013	0.026	mg/kg		8081A	01/20/14	1
Endrin ketone	U	0.0016	0.026	mg/kg		8081A	01/20/14	1
Hexachlorobenzene	U	0.0018	0.026	mg/kg		8081A	01/20/14	1
Heptachlor	U	0.0015	0.026	mg/kg		8081A	01/20/14	1
Heptachlor epoxide	U	0.0016	0.026	mg/kg		8081A	01/20/14	1
Methoxychlor	U	0.0018	0.026	mg/kg		8081A	01/20/14	1
Toxaphene	U	0.036	0.51	mg/kg		8081A	01/20/14	1
Pesticide Surrogates								
Decachlorobiphenyl	50.7			% Rec.		8081A	01/20/14	1
Tetrachloro-m-xylene	70.9			% Rec.		8081A	01/20/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678495-04

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7HA-D 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 16:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.090	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	1.0	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.090	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.090	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.090	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.090	mg/kg		8151	01/21/14	1
MCPA	U	2.2	8.3	mg/kg		8151	01/21/14	1
MCPP	U	2.2	8.3	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.090	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.090	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	79.9			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23, 2014

ESC Sample # : L678495-05

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-2 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 14:42

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	79.6	0.0333	0.100	%		2540 G-2	01/18/14	1
Mercury	0.0019	0.0014	0.025	mg/kg	J	7471	01/18/14	1
Antimony	0.60	0.38	1.2	mg/kg	J	6010C	01/22/14	1
Arsenic	1.9	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.8	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.29	0.035	0.31	mg/kg	J	6010C	01/22/14	1
Chromium	26.	0.070	0.63	mg/kg		6010C	01/22/14	1
Copper	29.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	15.	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	12.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	1.6	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.14	0.63	mg/kg		6010C	01/22/14	1
Thallium	U	1.6	6.3	mg/kg	O	6010C	01/22/14	5
Zinc	55.	0.30	1.9	mg/kg		6010C	01/22/14	1
Pesticides								
Aldrin	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Alpha BHC	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Beta BHC	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Delta BHC	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Gamma BHC	U	0.0014	0.025	mg/kg		8081A	01/20/14	1
Chlordane	U	0.039	0.25	mg/kg		8081A	01/20/14	1
4,4-DDD	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
4,4-DDE	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
4,4-DDT	U	0.0020	0.025	mg/kg		8081A	01/20/14	1
Dieldrin	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Endosulfan I	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Endosulfan II	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Endosulfan sulfate	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Endrin	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Endrin aldehyde	U	0.0013	0.025	mg/kg		8081A	01/20/14	1
Endrin ketone	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Hexachlorobenzene	U	0.0018	0.025	mg/kg		8081A	01/20/14	1
Heptachlor	U	0.0015	0.025	mg/kg		8081A	01/20/14	1
Heptachlor epoxide	U	0.0016	0.025	mg/kg		8081A	01/20/14	1
Methoxychlor	U	0.0018	0.025	mg/kg		8081A	01/20/14	1
Toxaphene	U	0.036	0.50	mg/kg		8081A	01/20/14	1
Pesticide Surrogates								
Decachlorobiphenyl	33.8			% Rec.		8081A	01/20/14	1
Tetrachloro-m-xylene	56.5			% Rec.		8081A	01/20/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23, 2014

ESC Sample # : L678495-05

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-2 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 14:42

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Herbicides								
2,4-D	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dalapon	U	0.27	1.0	mg/kg		8151	01/21/14	1
2,4-DB	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dicamba	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dichloroprop	U	0.023	0.088	mg/kg		8151	01/21/14	1
Dinoseb	U	0.023	0.088	mg/kg		8151	01/21/14	1
MCPA	U	2.2	8.2	mg/kg		8151	01/21/14	1
MCPP	U	2.2	8.2	mg/kg		8151	01/21/14	1
2,4,5-T	U	0.023	0.088	mg/kg		8151	01/21/14	1
2,4,5-TP (Silvex)	U	0.023	0.088	mg/kg		8151	01/21/14	1
Surrogate Recovery								
2,4-Dichlorophenyl Acetic Acid	77.6			% Rec.		8151	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23, 2014

ESC Sample # : L678495-06

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 16:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	U	0.21	1.0	ug/l		6020	01/20/14	1
Arsenic	U	0.25	1.0	ug/l		6020	01/20/14	1
Lead	U	0.24	1.0	ug/l		6020	01/20/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/20/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/17/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/18/14	1
Cadmium	U	0.70	5.0	ug/l		6010C	01/18/14	1
Chromium	1.9	1.4	10.	ug/l	J	6010C	01/18/14	1
Copper	U	5.3	20.	ug/l		6010C	01/18/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/18/14	1
Selenium	U	7.4	20.	ug/l		6010C	01/18/14	1
Silver	U	2.8	10.	ug/l		6010C	01/18/14	1
Zinc	U	5.9	30.	ug/l		6010C	01/18/14	1
Pesticides								
Aldrin	U	0.010	0.050	ug/l		8081 A	01/17/14	1
Alpha BHC	U	0.0058	0.050	ug/l		8081 A	01/17/14	1
Beta BHC	U	0.0073	0.050	ug/l		8081 A	01/17/14	1
Delta BHC	U	0.0080	0.050	ug/l		8081 A	01/17/14	1
Gamma BHC	U	0.0062	0.050	ug/l		8081 A	01/17/14	1
Chlordane	U	0.11	0.50	ug/l		8081 A	01/17/14	1
4,4-DDD	U	0.0080	0.050	ug/l	J3	8081 A	01/17/14	1
4,4-DDE	U	0.0094	0.050	ug/l		8081 A	01/17/14	1
4,4-DDT	U	0.015	0.050	ug/l		8081 A	01/17/14	1
Dieldrin	U	0.0075	0.050	ug/l		8081 A	01/17/14	1
Endosulfan I	U	0.0083	0.050	ug/l		8081 A	01/17/14	1
Endosulfan II	U	0.0096	0.050	ug/l	J3	8081 A	01/17/14	1
Endosulfan sulfate	U	0.0078	0.050	ug/l		8081 A	01/17/14	1
Endrin	U	0.0076	0.050	ug/l		8081 A	01/17/14	1
Endrin aldehyde	U	0.0078	0.050	ug/l		8081 A	01/17/14	1
Endrin ketone	U	0.0083	0.050	ug/l	J3	8081 A	01/17/14	1
Hexachlorobenzene	U	0.0094	0.050	ug/l		8081 A	01/17/14	1
Heptachlor	U	0.0081	0.050	ug/l		8081 A	01/17/14	1
Heptachlor epoxide	U	0.0076	0.050	ug/l	J3	8081 A	01/17/14	1
Methoxychlor	U	0.024	0.050	ug/l		8081 A	01/17/14	1
Toxaphene	U	0.20	0.50	ug/l		8081 A	01/17/14	1
Pesticides Surrogates								
Decachlorobiphenyl	77.0			% Rec.		8081 A	01/17/14	1
Tetrachloro-m-xylene	80.6			% Rec.		8081 A	01/17/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23, 2014

ESC Sample # : L678495-08

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-4

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 15:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.37	0.21	1.0	ug/l	J	6020	01/22/14	1
Arsenic	0.33	0.25	1.0	ug/l	J	6020	01/21/14	1
Lead	0.91	0.24	1.0	ug/l	J	6020	01/21/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/21/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/21/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/21/14	1
Cadmium	1.3	0.70	5.0	ug/l	J	6010C	01/21/14	1
Chromium	U	1.4	10.	ug/l		6010C	01/21/14	1
Copper	U	5.3	20.	ug/l		6010C	01/21/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/21/14	1
Selenium	8.8	7.4	20.	ug/l	J	6010C	01/21/14	1
Silver	U	2.8	10.	ug/l		6010C	01/21/14	1
Zinc	6.8	5.9	30.	ug/l	J	6010C	01/21/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678495-01	WG701964	SAMP	4,4-DDT	R2877761	J
	WG701908	SAMP	Silver	R2878346	O
L678495-02	WG701885	SAMP	Mercury	R2877227	J
	WG701908	SAMP	Antimony	R2878346	J
	WG701908	SAMP	Cadmium	R2878506	J
	WG701908	SAMP	Thallium	R2878346	O
L678495-03	WG701904	SAMP	Mercury	R2877506	O1
	WG701908	SAMP	Silver	R2878346	O
	WG701908	SAMP	Thallium	R2878346	J
L678495-04	WG701904	SAMP	Mercury	R2877506	J
	WG701908	SAMP	Antimony	R2878346	J
	WG701908	SAMP	Selenium	R2878346	J
	WG701908	SAMP	Thallium	R2878346	O
L678495-05	WG701904	SAMP	Mercury	R2877506	J
	WG701908	SAMP	Antimony	R2878346	J
	WG701908	SAMP	Cadmium	R2878506	J
	WG701908	SAMP	Thallium	R2878346	O
L678495-06	WG701907	SAMP	Chromium	R2877363	J
	WG701853	SAMP	4,4-DDD	R2877707	J3
	WG701853	SAMP	Endosulfan II	R2877707	J3
	WG701853	SAMP	Endrin ketone	R2877707	J3
	WG701853	SAMP	Heptachlor epoxide	R2877707	J3
L678495-08	WG702315	SAMP	Antimony	R2878172	J
	WG702315	SAMP	Arsenic	R2878172	J
	WG702315	SAMP	Lead	R2878172	J
	WG702313	SAMP	Cadmium	R2878353	J
	WG702313	SAMP	Selenium	R2878353	J
	WG702313	SAMP	Zinc	R2878353	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/23/14 at 14:41:57

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678495-01 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/23/14 00:00 RPT Date: 01/23/14 14:41
Delete Trip Blank - jeh
Sample: L678495-02 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/23/14 00:00 RPT Date: 01/23/14 14:41

Sample: L678495-03 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/23/14 00:00 RPT Date: 01/23/14 14:41

Sample: L678495-04 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/23/14 00:00 RPT Date: 01/23/14 14:41

Sample: L678495-05 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/23/14 00:00 RPT Date: 01/23/14 14:41

Sample: L678495-06 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/23/14 00:00 RPT Date: 01/23/14 14:41

Sample: L678495-08 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/23/14 00:00 RPT Date: 01/23/14 14:41

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Cary, NC 27512

Quality Assurance Report
Level II

L678495

January 23, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Mercury	< .0002	mg/l			WG701659	01/17/14 08:07
Mercury	< .02	mg/kg			WG701885	01/17/14 13:19
Beryllium	< .002	mg/l			WG701907	01/17/14 14:07
Cadmium	< .005	mg/l			WG701907	01/17/14 14:07
Chromium	< .01	mg/l			WG701907	01/17/14 14:07
Copper	< .02	mg/l			WG701907	01/17/14 14:07
Nickel	< .02	mg/l			WG701907	01/17/14 14:07
Selenium	< .02	mg/l			WG701907	01/17/14 14:07
Silver	< .01	mg/l			WG701907	01/17/14 14:07
Zinc	< .03	mg/l			WG701907	01/17/14 14:07
Total Solids	< .1	%			WG701950	01/18/14 07:35
Beryllium	< .002	mg/l			WG701907	01/18/14 07:10
Cadmium	< .005	mg/l			WG701907	01/18/14 07:10
Chromium	< .01	mg/l			WG701907	01/18/14 07:10
Copper	< .02	mg/l			WG701907	01/18/14 07:10
Nickel	< .02	mg/l			WG701907	01/18/14 07:10
Selenium	< .02	mg/l			WG701907	01/18/14 07:10
Silver	< .01	mg/l			WG701907	01/18/14 07:10
Zinc	< .03	mg/l			WG701907	01/18/14 07:10
Mercury	< .02	mg/kg			WG701904	01/18/14 17:23
4,4-DDD	< .00005	mg/l			WG701853	01/17/14 11:01
4,4-DDE	< .00005	mg/l			WG701853	01/17/14 11:01
4,4-DDT	< .00005	mg/l			WG701853	01/17/14 11:01
Aldrin	< .00005	mg/l			WG701853	01/17/14 11:01
Alpha BHC	< .00005	mg/l			WG701853	01/17/14 11:01
Beta BHC	< .00005	mg/l			WG701853	01/17/14 11:01
Chlordane	< .005	mg/l			WG701853	01/17/14 11:01
Delta BHC	< .00005	mg/l			WG701853	01/17/14 11:01
Dieldrin	< .00005	mg/l			WG701853	01/17/14 11:01
Endosulfan I	< .00005	mg/l			WG701853	01/17/14 11:01
Endosulfan II	< .00005	mg/l			WG701853	01/17/14 11:01
Endosulfan sulfate	< .00005	mg/l			WG701853	01/17/14 11:01
Endrin	< .00005	mg/l			WG701853	01/17/14 11:01
Endrin aldehyde	< .00005	mg/l			WG701853	01/17/14 11:01
Endrin ketone	< .00005	mg/l			WG701853	01/17/14 11:01
Gamma BHC	< .00005	mg/l			WG701853	01/17/14 11:01
Heptachlor	< .00005	mg/l			WG701853	01/17/14 11:01
Heptachlor epoxide	< .00005	mg/l			WG701853	01/17/14 11:01
Hexachlorobenzene	< .00005	mg/l			WG701853	01/17/14 11:01
Methoxychlor	< .00005	mg/l			WG701853	01/17/14 11:01
Toxaphene	< .0005	mg/l			WG701853	01/17/14 11:01
Decachlorobiphenyl		% Rec.	91.70	10-156	WG701853	01/17/14 11:01
Tetrachloro-m-xylene		% Rec.	72.70	13.9-137	WG701853	01/17/14 11:01
4,4-DDD	< .02	mg/kg			WG701964	01/20/14 11:38
4,4-DDE	< .02	mg/kg			WG701964	01/20/14 11:38

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L678495

January 23, 2014

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
4,4-DDT	< .02	mg/kg			WG701964	01/20/14 11:38
Aldrin	< .02	mg/kg			WG701964	01/20/14 11:38
Alpha BHC	< .02	mg/kg			WG701964	01/20/14 11:38
Beta BHC	< .02	mg/kg			WG701964	01/20/14 11:38
Chlordane	< .2	mg/kg			WG701964	01/20/14 11:38
Delta BHC	< .02	mg/kg			WG701964	01/20/14 11:38
Dieldrin	< .02	mg/kg			WG701964	01/20/14 11:38
Endosulfan I	< .02	mg/kg			WG701964	01/20/14 11:38
Endosulfan II	< .02	mg/kg			WG701964	01/20/14 11:38
Endosulfan sulfate	< .02	mg/kg			WG701964	01/20/14 11:38
Endrin	< .02	mg/kg			WG701964	01/20/14 11:38
Endrin aldehyde	< .02	mg/kg			WG701964	01/20/14 11:38
Endrin ketone	< .02	mg/kg			WG701964	01/20/14 11:38
Gamma BHC	< .02	mg/kg			WG701964	01/20/14 11:38
Heptachlor	< .02	mg/kg			WG701964	01/20/14 11:38
Heptachlor epoxide	< .02	mg/kg			WG701964	01/20/14 11:38
Hexachlorobenzene	< .02	mg/kg			WG701964	01/20/14 11:38
Methoxychlor	< .02	mg/kg			WG701964	01/20/14 11:38
Toxaphene	< .4	mg/kg			WG701964	01/20/14 11:38
Decachlorobiphenyl		% Rec.	97.20	10-145	WG701964	01/20/14 11:38
Tetrachloro-m-xylene		% Rec.	106.0	21.1-148	WG701964	01/20/14 11:38
Arsenic	< 1	mg/kg			WG701908	01/18/14 01:54
Beryllium	< .1	mg/kg			WG701908	01/18/14 01:54
Cadmium	< .25	mg/kg			WG701908	01/18/14 01:54
Chromium	< .5	mg/kg			WG701908	01/18/14 01:54
Copper	< 1	mg/kg			WG701908	01/18/14 01:54
Lead	< .25	mg/kg			WG701908	01/18/14 01:54
Nickel	< 1	mg/kg			WG701908	01/18/14 01:54
Selenium	< 1	mg/kg			WG701908	01/18/14 01:54
Silver	< .5	mg/kg			WG701908	01/18/14 01:54
Thallium	< 1	mg/kg			WG701908	01/18/14 01:54
Zinc	< 1.5	mg/kg			WG701908	01/18/14 01:54
Beryllium	< .002	mg/l			WG702313	01/20/14 18:10
Cadmium	< .005	mg/l			WG702313	01/20/14 18:10
Chromium	< .01	mg/l			WG702313	01/20/14 18:10
Copper	< .02	mg/l			WG702313	01/20/14 18:10
Nickel	< .02	mg/l			WG702313	01/20/14 18:10
Selenium	< .02	mg/l			WG702313	01/20/14 18:10
Silver	< .01	mg/l			WG702313	01/20/14 18:10
Zinc	< .03	mg/l			WG702313	01/20/14 18:10
Antimony	< .001	mg/l			WG701916	01/20/14 16:26
Arsenic	< .001	mg/l			WG701916	01/20/14 16:26
Lead	< .001	mg/l			WG701916	01/20/14 16:26
Thallium	< .001	mg/l			WG701916	01/20/14 16:26
Mercury	< .0002	mg/l			WG702302	01/21/14 10:59
Arsenic	< .001	mg/l			WG702315	01/21/14 00:25
Lead	< .001	mg/l			WG702315	01/21/14 00:25
Thallium	< .001	mg/l			WG702315	01/21/14 00:25

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For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

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January 23, 2014

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
2,4,5-T	< .07	mg/kg			WG702320	01/21/14 17:43
2,4,5-TP (Silvex)	< .07	mg/kg			WG702320	01/21/14 17:43
2,4-D	< .07	mg/kg			WG702320	01/21/14 17:43
2,4-DB	< .07	mg/kg			WG702320	01/21/14 17:43
Dalapon	< .8	mg/kg			WG702320	01/21/14 17:43
Dicamba	< .07	mg/kg			WG702320	01/21/14 17:43
Dichloroprop	< .07	mg/kg			WG702320	01/21/14 17:43
Dinoseb	< .07	mg/kg			WG702320	01/21/14 17:43
MCPA	< 6.5	mg/kg			WG702320	01/21/14 17:43
MCPP	< 6.5	mg/kg			WG702320	01/21/14 17:43
2,4-Dichlorophenyl Acetic Acid		% Rec.	87.00	20.1-127	WG702320	01/21/14 17:43
Antimony	< 1	mg/kg			WG701908	01/22/14 05:22
Arsenic	< 1	mg/kg			WG701908	01/22/14 05:22
Beryllium	< .1	mg/kg			WG701908	01/22/14 05:22
Chromium	< .5	mg/kg			WG701908	01/22/14 05:22
Copper	< 1	mg/kg			WG701908	01/22/14 05:22
Lead	< .25	mg/kg			WG701908	01/22/14 05:22
Nickel	< 1	mg/kg			WG701908	01/22/14 05:22
Selenium	< 1	mg/kg			WG701908	01/22/14 05:22
Silver	< .5	mg/kg			WG701908	01/22/14 05:22
Thallium	< 1	mg/kg			WG701908	01/22/14 05:22
Zinc	< 1.5	mg/kg			WG701908	01/22/14 05:22
Cadmium	< .25	mg/kg			WG701908	01/22/14 14:03
Antimony	< .001	mg/l			WG702315	01/22/14 16:05

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Mercury	mg/l	0.0	0.0000378	14.0	20	L678226-10	WG701659
Mercury	mg/kg	0.0330	0.0352	7.00	20	L678417-04	WG701885
Beryllium	mg/l	0.0	-0.00000575	307.*	20	L678361-10	WG701907
Cadmium	mg/l	0.0	-0.00121	39.0*	20	L678361-10	WG701907
Chromium	mg/l	0.0	-0.000786	2.00	20	L678361-10	WG701907
Copper	mg/l	0.0	0.00258	27.0*	20	L678361-10	WG701907
Nickel	mg/l	0.0	-0.00232	75.0*	20	L678361-10	WG701907
Selenium	mg/l	0.0260	0.0281	6.00	20	L678361-10	WG701907
Silver	mg/l	0.0	0.00147	56.0*	20	L678361-10	WG701907
Zinc	mg/l	0.0	0.00379	11.0	20	L678361-10	WG701907
Total Solids	%	80.1	79.6	0.529	5	L678495-05	WG701950
Beryllium	mg/l	0.0	-0.0000586	5.00	20	L678361-10	WG701907
Cadmium	mg/l	0.0	0.000179	693.*	20	L678361-10	WG701907
Chromium	mg/l	0.0	0.00189	3.00	20	L678361-10	WG701907
Copper	mg/l	0.0	-0.00299	5.00	20	L678361-10	WG701907
Nickel	mg/l	0.0	-0.00236	119.*	20	L678361-10	WG701907
Selenium	mg/l	0.0	-0.0135	38.0*	20	L678361-10	WG701907
Silver	mg/l	0.0	-0.00183	228.*	20	L678361-10	WG701907

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Fax (615) 758-5859

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Cary, NC 27512

Quality Assurance Report
Level II

L678495

January 23, 2014

Analyte	Units	Result	Duplicate Duplicate	RPD	Limit	Ref Samp	Batch
Zinc	mg/l	0.0	0.0153	56.0*	20	L678361-10	WG701907
Mercury	mg/kg	0.0740	0.0749	1.00	20	L678495-03	WG701904
Arsenic	mg/kg	1.90	2.47	26.0*	20	L678497-12	WG701908
Beryllium	mg/kg	0.470	0.493	6.00	20	L678497-12	WG701908
Cadmium	mg/kg	0.0	-0.314	20.0	20	L678497-12	WG701908
Chromium	mg/kg	3.00	3.12	3.00	20	L678497-12	WG701908
Copper	mg/kg	45.0	45.0	1.00	20	L678497-12	WG701908
Lead	mg/kg	4.80	4.87	1.00	20	L678497-12	WG701908
Nickel	mg/kg	14.0	14.0	1.00	20	L678497-12	WG701908
Selenium	mg/kg	0.0	-0.728	143.*	20	L678497-12	WG701908
Silver	mg/kg	0.710	0.719	1.00	20	L678497-12	WG701908
Thallium	mg/kg	2.10	2.61	23.0*	20	L678497-12	WG701908
Zinc	mg/kg	53.0	54.2	2.00	20	L678497-12	WG701908
Beryllium	mg/l	0.0	0.000302	47.0*	20	L678726-01	WG702313
Cadmium	mg/l	0.0	0.000479	12.0	20	L678726-01	WG702313
Chromium	mg/l	0.0	0.000706	91.0*	20	L678726-01	WG702313
Copper	mg/l	0.0	0.0000103	202.*	20	L678726-01	WG702313
Nickel	mg/l	0.0	0.00249	63.0*	20	L678726-01	WG702313
Selenium	mg/l	0.0	0.00319	99.0*	20	L678726-01	WG702313
Silver	mg/l	0.0	-0.00307	618.*	20	L678726-01	WG702313
Zinc	mg/l	0.0	0.00271	13.0	20	L678726-01	WG702313
Antimony	mg/l	0.0	0.0	0.0	20	L678495-06	WG701916
Arsenic	mg/l	0.0	0.0	0.0	20	L678495-06	WG701916
Lead	mg/l	0.0	0.0	0.0	20	L678495-06	WG701916
Thallium	mg/l	0.0	0.0	0.0	20	L678495-06	WG701916
Mercury	mg/l	0.0	0.0000536	1.00	20	L678913-02	WG702302
Arsenic	mg/l	0.00170	0.00170	0.0	20	L678603-04	WG702315
Lead	mg/l	0.00150	0.00160	6.45	20	L678603-04	WG702315
Thallium	mg/l	0.0	0.0	0.0	20	L678603-04	WG702315
Cadmium	mg/kg	0.0	0.217	15.0	20	L678497-12	WG701908
Antimony	mg/kg	0.0	1.53	47.0*	20	L678497-12	WG701908
Arsenic	mg/kg	0.0	-0.903	59.0*	20	L678497-12	WG701908
Beryllium	mg/kg	0.440	0.457	4.00	20	L678497-12	WG701908
Chromium	mg/kg	2.60	2.73	5.00	20	L678497-12	WG701908
Copper	mg/kg	40.0	40.7	0.0	20	L678497-12	WG701908
Lead	mg/kg	3.30	3.78	14.0	20	L678497-12	WG701908
Nickel	mg/kg	13.0	12.9	1.00	20	L678497-12	WG701908
Selenium	mg/kg	0.0	-1.79	3.00	20	L678497-12	WG701908
Silver	mg/kg	0.0	-0.256	39.0*	20	L678497-12	WG701908
Thallium	mg/kg	0.0	-0.0403	184.*	20	L678497-12	WG701908
Zinc	mg/kg	52.0	52.6	1.00	20	L678497-12	WG701908
Antimony	mg/l	0.0	0.0	0.0	20	L678603-04	WG702315

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Quality Assurance Report
Level II

L678495

January 23, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Mercury	mg/l	.003	0.00290	97.0	85-115	WG701659
Mercury	mg/kg	12.4	15.5	125.	71.6-128	WG701885
Beryllium	mg/l	1	1.02	102.	85-115	WG701907
Cadmium	mg/l	1	0.992	99.0	85-115	WG701907
Chromium	mg/l	1	1.01	101.	85-115	WG701907
Copper	mg/l	1	1.02	102.	85-115	WG701907
Nickel	mg/l	1	0.983	98.0	85-115	WG701907
Selenium	mg/l	1	1.02	102.	85-115	WG701907
Silver	mg/l	1	1.02	102.	85-115	WG701907
Zinc	mg/l	1	1.02	102.	85-115	WG701907
Total Solids	%	50	49.5	99.0	85-115	WG701950
Beryllium	mg/l	1	1.02	102.	85-115	WG701907
Cadmium	mg/l	1	1.04	104.	85-115	WG701907
Chromium	mg/l	1	1.05	105.	85-115	WG701907
Copper	mg/l	1	1.04	104.	85-115	WG701907
Nickel	mg/l	1	0.935	94.0	85-115	WG701907
Selenium	mg/l	1	0.999	100.	85-115	WG701907
Silver	mg/l	1	1.00	100.	85-115	WG701907
Zinc	mg/l	1	1.03	103.	85-115	WG701907
Mercury	mg/kg	12.4	15.4	124.	71.6-128	WG701904
4,4-DDD	mg/l	.0002	0.000143	71.3	47.6-144	WG701853
4,4-DDE	mg/l	.0002	0.000214	107.	45-124	WG701853
4,4-DDT	mg/l	.0002	0.000168	83.9	49.8-130	WG701853
Aldrin	mg/l	.0002	0.000192	95.8	10-120	WG701853
Alpha BHC	mg/l	.0002	0.000217	109.	53.6-125	WG701853
Beta BHC	mg/l	.0002	0.000220	110.	55.8-130	WG701853
Delta BHC	mg/l	.0002	0.000216	108.	42.2-135	WG701853
Dieldrin	mg/l	.0002	0.000223	111.	55-127	WG701853
Endosulfan I	mg/l	.0002	0.000218	109.	54.7-127	WG701853
Endosulfan II	mg/l	.0002	0.000162	80.9	53.1-135	WG701853
Endosulfan sulfate	mg/l	.0002	0.000212	106.	51.5-132	WG701853
Endrin	mg/l	.0002	0.000147	73.7	50.1-131	WG701853
Endrin aldehyde	mg/l	.0002	0.000193	96.7	39.5-137	WG701853
Endrin ketone	mg/l	.0002	0.000116	57.9	53.5-139	WG701853
Gamma BHC	mg/l	.0002	0.000219	110.	54.7-125	WG701853
Heptachlor	mg/l	.0002	0.000198	99.2	20.7-127	WG701853
Heptachlor epoxide	mg/l	.0002	0.000239	119.	56.4-124	WG701853
Hexachlorobenzene	mg/l	.0002	0.000179	89.6	26.7-114	WG701853
Methoxychlor	mg/l	.0002	0.000209	105.	48.2-144	WG701853
Decachlorobiphenyl				82.40	10-156	WG701853
Tetrachloro-m-xylene				77.60	13.9-137	WG701853
4,4-DDD	mg/kg	.067	0.0640	95.6	70.3-111	WG701964
4,4-DDE	mg/kg	.067	0.0641	95.7	69.9-113	WG701964
4,4-DDT	mg/kg	.067	0.0618	92.3	68.1-111	WG701964
Aldrin	mg/kg	.067	0.0618	92.2	66.9-111	WG701964
Alpha BHC	mg/kg	.067	0.0613	91.5	65.1-111	WG701964

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L678495

January 23, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Beta BHC	mg/kg	.067	0.0634	94.6	69.6-112	WG701964
Delta BHC	mg/kg	.067	0.0639	95.3	68.3-114	WG701964
Dieldrin	mg/kg	.067	0.0632	94.4	70.2-112	WG701964
Endosulfan I	mg/kg	.067	0.0631	94.2	69.8-113	WG701964
Endosulfan II	mg/kg	.067	0.0641	95.7	69.2-113	WG701964
Endosulfan sulfate	mg/kg	.067	0.0642	95.8	62-123	WG701964
Endrin	mg/kg	.067	0.0657	98.0	65.9-115	WG701964
Endrin aldehyde	mg/kg	.067	0.0568	84.8	47.6-124	WG701964
Endrin ketone	mg/kg	.067	0.0673	100.	69-120	WG701964
Gamma BHC	mg/kg	.067	0.0639	95.4	68.2-111	WG701964
Heptachlor	mg/kg	.067	0.0624	93.1	65.9-111	WG701964
Heptachlor epoxide	mg/kg	.067	0.0646	96.4	69.7-113	WG701964
Hexachlorobenzene	mg/kg	.067	0.0593	88.5	59.6-113	WG701964
Methoxychlor	mg/kg	.067	0.0663	98.9	66.2-114	WG701964
Decachlorobiphenyl				83.50	10-145	WG701964
Tetrachloro-m-xylene				89.10	21.1-148	WG701964
Arsenic	mg/kg	237	255.	108.	83.1-117	WG701908
Beryllium	mg/kg	93.3	97.8	105.	83.3-117	WG701908
Cadmium	mg/kg	191	183.	96.0	83.2-117	WG701908
Chromium	mg/kg	128	129.	101.	81.3-118	WG701908
Copper	mg/kg	123	128.	104.	83.7-116	WG701908
Lead	mg/kg	103	102.	99.0	83.1-117	WG701908
Nickel	mg/kg	118	119.	101.	82-118	WG701908
Selenium	mg/kg	110	120.	109.	78.7-122	WG701908
Silver	mg/kg	47.3	48.8	103.	66.2-134	WG701908
Thallium	mg/kg	158	154.	98.0	81-119	WG701908
Zinc	mg/kg	183	181.	99.0	82-118	WG701908
Beryllium	mg/l	1	1.04	104.	85-115	WG702313
Cadmium	mg/l	1	1.04	104.	85-115	WG702313
Chromium	mg/l	1	1.06	106.	85-115	WG702313
Copper	mg/l	1	1.03	103.	85-115	WG702313
Nickel	mg/l	1	0.946	95.0	85-115	WG702313
Selenium	mg/l	1	1.01	101.	85-115	WG702313
Silver	mg/l	1	1.00	100.	85-115	WG702313
Zinc	mg/l	1	1.02	102.	85-115	WG702313
Antimony	mg/l	.05	0.0523	105.	85-115	WG701916
Arsenic	mg/l	.05	0.0530	106.	85-115	WG701916
Lead	mg/l	.05	0.0540	108.	85-115	WG701916
Thallium	mg/l	.05	0.0528	106.	85-115	WG701916
Mercury	mg/l	.003	0.00306	102.	85-115	WG702302
Arsenic	mg/l	.05	0.0492	98.4	85-115	WG702315
Lead	mg/l	.05	0.0492	98.4	85-115	WG702315
Thallium	mg/l	.05	0.0500	100.	85-115	WG702315
2,4,5-T	mg/kg	.1667	0.135	80.9	39.4-109	WG702320
2,4,5-TP (Silvex)	mg/kg	.1667	0.140	83.9	45.7-123	WG702320
2,4-D	mg/kg	.1667	0.111	66.3	39.3-100	WG702320
2,4-DB	mg/kg	.1667	0.128	76.9	34.2-120	WG702320

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Dalapon	mg/kg	.1667	0.116	69.5	38.6-98	WG702320
Dicamba	mg/kg	.1667	0.145	86.9	48.1-111	WG702320
Dichloroprop	mg/kg	.1667	0.112	67.0	27.8-124	WG702320
Dinoseb	mg/kg	.1667	0.112	67.3	32.1-121	WG702320
MCPA	mg/kg	16.666	11.0	65.8	22.1-130	WG702320
MCPP	mg/kg	16.666	13.1	78.9	24.5-186	WG702320
2,4-Dichlorophenyl Acetic Acid				110.0	20.1-127	WG702320
Antimony	mg/kg	113	56.7	50.0	0.88-223	WG701908
Arsenic	mg/kg	237	232.	98.0	83.1-117	WG701908
Beryllium	mg/kg	93.3	89.0	95.0	83.3-117	WG701908
Chromium	mg/kg	128	125.	98.0	81.3-118	WG701908
Copper	mg/kg	123	123.	100.	83.7-116	WG701908
Lead	mg/kg	103	94.9	92.0	83.1-117	WG701908
Nickel	mg/kg	118	109.	92.0	82-118	WG701908
Selenium	mg/kg	110	109.	99.0	78.7-122	WG701908
Silver	mg/kg	47.3	46.5	98.0	66.2-134	WG701908
Thallium	mg/kg	158	150.	95.0	81-119	WG701908
Zinc	mg/kg	183	176.	96.0	82-118	WG701908
Cadmium	mg/kg	191	176.	92.0	83.2-117	WG701908
Antimony	mg/l	.05	0.0443	88.6	85-115	WG702315

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
4,4-DDD	mg/l	0.000179	0.000143	90.0	47.6-144	22.8	24.3	WG701853
4,4-DDE	mg/l	0.000227	0.000214	113.	45-124	5.59	25.7	WG701853
4,4-DDT	mg/l	0.000208	0.000168	104.	49.8-130	21.5	25.4	WG701853
Aldrin	mg/l	0.000192	0.000192	96.0	10-120	0.240	33.9	WG701853
Alpha BHC	mg/l	0.000213	0.000217	106.	53.6-125	2.27	22.3	WG701853
Beta BHC	mg/l	0.000224	0.000220	112.	55.8-130	1.98	20.6	WG701853
Delta BHC	mg/l	0.000206	0.000216	103.	42.2-135	4.86	23.3	WG701853
Dieldrin	mg/l	0.000228	0.000223	114.	55-127	2.08	22.9	WG701853
Endosulfan I	mg/l	0.000226	0.000218	113.	54.7-127	3.73	24.3	WG701853
Endosulfan II	mg/l	0.000210	0.000162	105.	53.1-135	25.8*	23.5	WG701853
Endosulfan sulfate	mg/l	0.000214	0.000212	107.	51.5-132	0.820	26.3	WG701853
Endrin	mg/l	0.000195	0.000147	97.0	50.1-131	27.7	29.1	WG701853
Endrin aldehyde	mg/l	0.000202	0.000193	101.	39.5-137	4.38	28.4	WG701853
Endrin ketone	mg/l	0.000173	0.000116	86.0	53.5-139	39.5*	28.4	WG701853
Gamma BHC	mg/l	0.000221	0.000219	110.	54.7-125	0.490	21.1	WG701853
Heptachlor	mg/l	0.000194	0.000198	97.0	20.7-127	2.51	30.5	WG701853
Heptachlor epoxide	mg/l	0.000241	0.000239	120.	56.4-124	0.910	23.1	WG701853
Hexachlorobenzene	mg/l	0.000175	0.000179	87.0	26.7-114	2.48	27.6	WG701853
Methoxychlor	mg/l	0.000216	0.000209	108.	48.2-144	3.26	27.8	WG701853
Decachlorobiphenyl				75.70	10-156			WG701853
Tetrachloro-m-xylene				76.60	13.9-137			WG701853
4,4-DDD	mg/kg	0.0638	0.0640	95.0	70.3-111	0.390	20	WG701964
4,4-DDE	mg/kg	0.0641	0.0641	96.0	69.9-113	0.0900	20	WG701964
4,4-DDT	mg/kg	0.0623	0.0618	93.0	68.1-111	0.770	20	WG701964
Aldrin	mg/kg	0.0620	0.0618	92.0	66.9-111	0.380	20	WG701964
Alpha BHC	mg/kg	0.0621	0.0613	93.0	65.1-111	1.35	20	WG701964
Beta BHC	mg/kg	0.0632	0.0634	94.0	69.6-112	0.350	20	WG701964
Delta BHC	mg/kg	0.0638	0.0639	95.0	68.3-114	0.100	20	WG701964
Dieldrin	mg/kg	0.0633	0.0632	94.0	70.2-112	0.160	20	WG701964

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Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Endosulfan I	mg/kg	0.0634	0.0631	95.0	69.8-113	0.480	20	WG701964
Endosulfan II	mg/kg	0.0638	0.0641	95.0	69.2-113	0.540	20	WG701964
Endosulfan sulfate	mg/kg	0.0638	0.0642	95.0	62-123	0.610	20	WG701964
Endrin	mg/kg	0.0663	0.0657	99.0	65.9-115	0.870	20	WG701964
Endrin aldehyde	mg/kg	0.0557	0.0568	83.0	47.6-124	1.99	20	WG701964
Endrin ketone	mg/kg	0.0664	0.0673	99.0	69-120	1.26	20	WG701964
Gamma BHC	mg/kg	0.0643	0.0639	96.0	68.2-111	0.690	20	WG701964
Heptachlor	mg/kg	0.0621	0.0624	93.0	65.9-111	0.380	20	WG701964
Heptachlor epoxide	mg/kg	0.0647	0.0646	96.0	69.7-113	0.180	20	WG701964
Hexachlorobenzene	mg/kg	0.0602	0.0593	90.0	59.6-113	1.50	20	WG701964
Methoxychlor	mg/kg	0.0666	0.0663	99.0	66.2-114	0.470	20	WG701964
Decachlorobiphenyl				82.80	10-145			WG701964
Tetrachloro-m-xylene				91.10	21.1-148			WG701964
2,4,5-T	mg/kg	0.150	0.135	90.0	39.4-109	10.4	26.8	WG702320
2,4,5-TP (Silvex)	mg/kg	0.131	0.140	78.0	45.7-123	6.78	27	WG702320
2,4-D	mg/kg	0.121	0.111	73.0	39.3-100	9.14	26.2	WG702320
2,4-DB	mg/kg	0.148	0.128	89.0	34.2-120	14.6	28.5	WG702320
Dalapon	mg/kg	0.111	0.116	66.0	38.6-98	4.66	31.1	WG702320
Dicamba	mg/kg	0.150	0.145	90.0	48.1-111	3.51	23.6	WG702320
Dichloroprop	mg/kg	0.122	0.112	73.0	27.8-124	8.59	29.7	WG702320
Dinoseb	mg/kg	0.112	0.112	67.0	32.1-121	0.0900	35.9	WG702320
MCPA	mg/kg	13.4	11.0	81.0	22.1-130	20.2	32.8	WG702320
MCPP	mg/kg	11.9	13.1	71.0	24.5-186	9.89	26.3	WG702320
2,4-Dichlorophenyl Acetic Acid				101.0	20.1-127			WG702320

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/l	0.00310	0.0000378	.003	100.	80-120	L678226-10	WG701659
Mercury	mg/kg	0.291	0.0352	.25	100.	80-120	L678417-04	WG701885
Beryllium	mg/l	1.01	-0.000005	1	100.	75-125	L678361-10	WG701907
Cadmium	mg/l	0.961	-0.00121	1	96.0	75-125	L678361-10	WG701907
Chromium	mg/l	0.985	-0.000786	1	98.0	75-125	L678361-10	WG701907
Copper	mg/l	1.04	0.00258	1	100.	75-125	L678361-10	WG701907
Nickel	mg/l	1.01	-0.00232	1	100.	75-125	L678361-10	WG701907
Selenium	mg/l	1.10	0.0281	1	110.	75-125	L678361-10	WG701907
Silver	mg/l	0.251	0.00147	1	25.0*	75-125	L678361-10	WG701907
Zinc	mg/l	1.04	0.00379	1	100.	75-125	L678361-10	WG701907
Beryllium	mg/l	1.03	-0.000058	1	100.	75-125	L678361-10	WG701907
Cadmium	mg/l	1.00	0.000179	1	100.	75-125	L678361-10	WG701907
Chromium	mg/l	1.04	0.00189	1	100.	75-125	L678361-10	WG701907
Copper	mg/l	1.07	-0.00299	1	110.	75-125	L678361-10	WG701907
Nickel	mg/l	0.936	-0.00236	1	94.0	75-125	L678361-10	WG701907
Selenium	mg/l	1.00	-0.0135	1	100.	75-125	L678361-10	WG701907
Silver	mg/l	0.0892	-0.00183	1	9.00*	75-125	L678361-10	WG701907
Zinc	mg/l	1.05	0.0153	1	100.	75-125	L678361-10	WG701907
Mercury	mg/kg	0.329	0.0749	.25	100.	80-120	L678495-03	WG701904
Arsenic	mg/kg	54.8	2.47	50	100.	75-125	L678497-12	WG701908
Beryllium	mg/kg	55.2	0.493	50	110.	75-125	L678497-12	WG701908

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Quality Assurance Report
Level II

L678495

January 23, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Cadmium	mg/kg	49.9	-0.314	50	100.	75-125	L678497-12	WG701908
Chromium	mg/kg	54.5	3.12	50	100.	75-125	L678497-12	WG701908
Copper	mg/kg	100.	45.0	50	110.	75-125	L678497-12	WG701908
Lead	mg/kg	56.8	4.87	50	100.	75-125	L678497-12	WG701908
Nickel	mg/kg	65.0	14.0	50	100.	75-125	L678497-12	WG701908
Selenium	mg/kg	54.5	-0.728	50	110.	75-125	L678497-12	WG701908
Silver	mg/kg	52.7	0.719	50	100.	75-125	L678497-12	WG701908
Thallium	mg/kg	50.4	2.61	50	95.0	75-125	L678497-12	WG701908
Zinc	mg/kg	102.	54.2	50	96.0	75-125	L678497-12	WG701908
Antimony	mg/l	0.0532	0.0	.05	110.	75-125	L678495-06	WG701916
Arsenic	mg/l	0.0519	0.0	.05	100.	75-125	L678495-06	WG701916
Lead	mg/l	0.0534	0.0	.05	110.	75-125	L678495-06	WG701916
Thallium	mg/l	0.0528	0.0	.05	100.	75-125	L678495-06	WG701916
4,4-DDD	mg/kg	0.0452	0.0	.067	67.0	23.4-145	L678442-02	WG701964
4,4-DDE	mg/kg	0.125	0.0563	.067	100.	16.4-147	L678442-02	WG701964
4,4-DDT	mg/kg	0.0689	0.0197	.067	73.0	26.7-129	L678442-02	WG701964
Aldrin	mg/kg	0.0433	0.0	.067	65.0	40.2-116	L678442-02	WG701964
Alpha BHC	mg/kg	0.0636	0.0	.067	95.0	53.6-109	L678442-02	WG701964
Beta BHC	mg/kg	0.0702	0.0	.067	100.	38.3-126	L678442-02	WG701964
Delta BHC	mg/kg	0.0692	0.0	.067	100.	44.8-125	L678442-02	WG701964
Dieldrin	mg/kg	0.0479	0.0	.067	71.0	31.4-137	L678442-02	WG701964
Endosulfan I	mg/kg	0.0478	0.0	.067	71.0	40.3-120	L678442-02	WG701964
Endosulfan II	mg/kg	0.0527	0.0	.067	79.0	29.1-140	L678442-02	WG701964
Endosulfan sulfate	mg/kg	0.0546	0.0	.067	81.0	43.3-129	L678442-02	WG701964
Endrin	mg/kg	0.0461	0.0	.067	69.0	34.9-125	L678442-02	WG701964
Endrin aldehyde	mg/kg	0.0558	0.0	.067	83.0	15.6-139	L678442-02	WG701964
Endrin ketone	mg/kg	0.0590	0.0	.067	88.0	35.4-137	L678442-02	WG701964
Gamma BHC	mg/kg	0.0671	0.0	.067	100.	55.3-110	L678442-02	WG701964
Heptachlor	mg/kg	0.0459	0.0	.067	68.0	41.6-115	L678442-02	WG701964
Heptachlor epoxide	mg/kg	0.0500	0.0	.067	75.0	34.8-128	L678442-02	WG701964
Hexachlorobenzene	mg/kg	0.0482	0.0	.067	72.0	40.2-119	L678442-02	WG701964
Methoxychlor	mg/kg	0.0377	0.0	.067	56.0	16-134	L678442-02	WG701964
Decachlorobiphenyl					48.40	10-145		WG701964
Tetrachloro-m-xylene					61.90	21.1-148		WG701964
Mercury	mg/l	0.00291	0.0000536	.003	95.0	80-120	L678913-02	WG702302
Arsenic	mg/l	0.0535	0.00170	.05	100.	75-125	L678603-04	WG702315
Lead	mg/l	0.0481	0.00160	.05	93.0	75-125	L678603-04	WG702315
Thallium	mg/l	0.0483	0.0	.05	97.0	75-125	L678603-04	WG702315
Beryllium	mg/l	1.01	0.000302	1	100.	75-125	L678726-01	WG702313
Cadmium	mg/l	1.01	0.000479	1	100.	75-125	L678726-01	WG702313
Chromium	mg/l	1.01	0.000706	1	100.	75-125	L678726-01	WG702313
Copper	mg/l	1.02	0.0000103	1	100.	75-125	L678726-01	WG702313
Nickel	mg/l	0.942	0.00249	1	94.0	75-125	L678726-01	WG702313
Selenium	mg/l	0.997	0.00319	1	99.0	75-125	L678726-01	WG702313
Silver	mg/l	0.156	-0.00307	1	16.0*	75-125	L678726-01	WG702313
Zinc	mg/l	1.03	0.00271	1	100.	75-125	L678726-01	WG702313
2,4,5-T	mg/kg	0.139	0.0	.1667	84.0	20.3-119	L678607-08	WG702320

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Quality Assurance Report
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January 23, 2014

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
			Matrix Spike					
2,4,5-TP (Silvex)	mg/kg	0.124	0.0	.1667	74.0	23.6-133	L678607-08	WG702320
2,4-D	mg/kg	0.121	0.0	.1667	73.0	10-141	L678607-08	WG702320
2,4-DB	mg/kg	0.148	0.0	.1667	89.0	24.8-132	L678607-08	WG702320
Dalapon	mg/kg	0.138	0.0	.1667	83.0	10-115	L678607-08	WG702320
Dicamba	mg/kg	0.143	0.0	.1667	86.0	23-124	L678607-08	WG702320
Dichloroprop	mg/kg	0.113	0.0	.1667	68.0	17.5-129	L678607-08	WG702320
Dinoseb	mg/kg	0.117	0.0	.1667	70.0	26.2-129	L678607-08	WG702320
MCPA	mg/kg	13.1	0.0	16.666	79.0	10-159	L678607-08	WG702320
MCPP	mg/kg	13.9	0.0	16.666	83.0	10-200	L678607-08	WG702320
2,4-Dichlorophenyl Acetic Acid					95.20	20.1-127		WG702320
Cadmium	mg/kg	50.2	0.217	50	100.	75-125	L678497-12	WG701908
Antimony	mg/kg	18.9	1.53	50	35.0*	75-125	L678497-12	WG701908
Arsenic	mg/kg	47.8	-0.903	50	96.0	75-125	L678497-12	WG701908
Beryllium	mg/kg	50.4	0.457	50	100.	75-125	L678497-12	WG701908
Chromium	mg/kg	52.9	2.73	50	100.	75-125	L678497-12	WG701908
Copper	mg/kg	94.6	40.7	50	110.	75-125	L678497-12	WG701908
Lead	mg/kg	51.4	3.78	50	95.0	75-125	L678497-12	WG701908
Nickel	mg/kg	60.7	12.9	50	96.0	75-125	L678497-12	WG701908
Selenium	mg/kg	47.8	-1.79	50	96.0	75-125	L678497-12	WG701908
Silver	mg/kg	51.0	-0.256	50	100.	75-125	L678497-12	WG701908
Thallium	mg/kg	46.1	-0.0403	50	92.0	75-125	L678497-12	WG701908
Zinc	mg/kg	99.8	52.6	50	94.0	75-125	L678497-12	WG701908
Antimony	mg/l	0.0463	0.0	.05	93.0	75-125	L678603-04	WG702315

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
			Matrix Spike Duplicate						
Mercury	mg/l	0.00311	0.00310	102.	80-120	0.0	20	L678226-10	WG701659
Mercury	mg/kg	0.310	0.291	110.	80-120	6.00	20	L678417-04	WG701885
Beryllium	mg/l	1.01	1.01	101.	75-125	0.0	20	L678361-10	WG701907
Cadmium	mg/l	0.966	0.961	96.8	75-125	1.00	20	L678361-10	WG701907
Chromium	mg/l	0.993	0.985	99.4	75-125	1.00	20	L678361-10	WG701907
Copper	mg/l	1.05	1.04	105.	75-125	1.00	20	L678361-10	WG701907
Nickel	mg/l	1.01	1.01	101.	75-125	0.0	20	L678361-10	WG701907
Selenium	mg/l	1.08	1.10	105.	75-125	2.00	20	L678361-10	WG701907
Silver	mg/l	0.190	0.251	18.9*	75-125	27.0*	20	L678361-10	WG701907
Zinc	mg/l	1.05	1.04	104.	75-125	0.0	20	L678361-10	WG701907
Beryllium	mg/l	1.03	1.03	103.	75-125	0.0	20	L678361-10	WG701907
Cadmium	mg/l	0.997	1.00	99.7	75-125	0.0	20	L678361-10	WG701907
Chromium	mg/l	1.02	1.04	102.	75-125	2.00	20	L678361-10	WG701907
Copper	mg/l	1.06	1.07	106.	75-125	0.0	20	L678361-10	WG701907
Nickel	mg/l	0.918	0.936	92.0	75-125	2.00	20	L678361-10	WG701907
Selenium	mg/l	0.978	1.00	99.2	75-125	2.00	20	L678361-10	WG701907
Silver	mg/l	0.129	0.0892	13.1*	75-125	37.0*	20	L678361-10	WG701907
Zinc	mg/l	1.05	1.05	103.	75-125	0.0	20	L678361-10	WG701907
Mercury	mg/kg	0.353	0.329	111.	80-120	7.00	20	L678495-03	WG701904
Arsenic	mg/kg	51.2	54.8	97.5	75-125	7.00	20	L678497-12	WG701908

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Quality Assurance Report
Level II

L678495

January 23, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Beryllium	mg/kg	52.0	55.2	103.	75-125	6.00	20	L678497-12	WG701908
Cadmium	mg/kg	47.4	49.9	95.4	75-125	5.00	20	L678497-12	WG701908
Chromium	mg/kg	51.0	54.5	95.7	75-125	7.00	20	L678497-12	WG701908
Copper	mg/kg	94.0	100.	98.1	75-125	6.00	20	L678497-12	WG701908
Lead	mg/kg	52.9	56.8	96.1	75-125	7.00	20	L678497-12	WG701908
Nickel	mg/kg	60.6	65.0	93.1	75-125	7.00	20	L678497-12	WG701908
Selenium	mg/kg	51.6	54.5	104.	75-125	6.00	20	L678497-12	WG701908
Silver	mg/kg	50.0	52.7	98.5	75-125	5.00	20	L678497-12	WG701908
Thallium	mg/kg	47.3	50.4	89.3	75-125	6.00	20	L678497-12	WG701908
Zinc	mg/kg	99.8	102.	91.4	75-125	3.00	20	L678497-12	WG701908
Antimony	mg/l	0.0523	0.0532	105.	75-125	1.71	20	L678495-06	WG701916
Arsenic	mg/l	0.0519	0.0519	104.	75-125	0.0	20	L678495-06	WG701916
Lead	mg/l	0.0527	0.0534	105.	75-125	1.32	20	L678495-06	WG701916
Thallium	mg/l	0.0527	0.0528	105.	75-125	0.190	20	L678495-06	WG701916
4,4-DDD	mg/kg	0.0395	0.0452	59.0	23.4-145	13.4	20	L678442-02	WG701964
4,4-DDE	mg/kg	0.112	0.125	83.6	16.4-147	10.4	20	L678442-02	WG701964
4,4-DDT	mg/kg	0.0617	0.0689	62.8	26.7-129	10.9	23.8	L678442-02	WG701964
Aldrin	mg/kg	0.0374	0.0433	55.8	40.2-116	14.6	20	L678442-02	WG701964
Alpha BHC	mg/kg	0.0559	0.0636	83.4	53.6-109	12.9	20	L678442-02	WG701964
Beta BHC	mg/kg	0.0649	0.0702	96.9	38.3-126	7.73	20	L678442-02	WG701964
Delta BHC	mg/kg	0.0634	0.0692	94.7	44.8-125	8.72	20	L678442-02	WG701964
Dieldrin	mg/kg	0.0412	0.0479	61.5	31.4-137	14.9	20	L678442-02	WG701964
Endosulfan I	mg/kg	0.0403	0.0478	60.1	40.3-120	17.1	20	L678442-02	WG701964
Endosulfan II	mg/kg	0.0457	0.0527	68.2	29.1-140	14.4	20	L678442-02	WG701964
Endosulfan sulfate	mg/kg	0.0478	0.0546	71.3	43.3-129	13.2	21.5	L678442-02	WG701964
Endrin	mg/kg	0.0384	0.0461	57.3	34.9-125	18.2	21.2	L678442-02	WG701964
Endrin aldehyde	mg/kg	0.0484	0.0558	72.2	15.6-139	14.2	20	L678442-02	WG701964
Endrin ketone	mg/kg	0.0501	0.0590	74.8	35.4-137	16.3	20	L678442-02	WG701964
Gamma BHC	mg/kg	0.0596	0.0671	89.0	55.3-110	11.8	20	L678442-02	WG701964
Heptachlor	mg/kg	0.0396	0.0459	59.2	41.6-115	14.7	20	L678442-02	WG701964
Heptachlor epoxide	mg/kg	0.0433	0.0500	64.6	34.8-128	14.4	20	L678442-02	WG701964
Hexachlorobenzene	mg/kg	0.0394	0.0482	58.8	40.2-119	20.1*	20	L678442-02	WG701964
Methoxychlor	mg/kg	0.0337	0.0377	50.2	16-134	11.5	25.4	L678442-02	WG701964
Decachlorobiphenyl				50.70	10-145				WG701964
Tetrachloro-m-xylene				64.60	21.1-148				WG701964
Mercury	mg/l	0.00275	0.00291	89.7	80-120	6.00	20	L678913-02	WG702302
Arsenic	mg/l	0.0541	0.0535	105.	75-125	1.12	20	L678603-04	WG702315
Lead	mg/l	0.0488	0.0481	94.4	75-125	1.44	20	L678603-04	WG702315
Thallium	mg/l	0.0492	0.0483	98.4	75-125	1.85	20	L678603-04	WG702315
Beryllium	mg/l	1.04	1.01	104.	75-125	3.00	20	L678726-01	WG702313
Cadmium	mg/l	1.04	1.01	104.	75-125	4.00	20	L678726-01	WG702313
Chromium	mg/l	1.02	1.01	102.	75-125	1.00	20	L678726-01	WG702313
Copper	mg/l	1.05	1.02	105.	75-125	2.00	20	L678726-01	WG702313
Nickel	mg/l	0.950	0.942	94.7	75-125	1.00	20	L678726-01	WG702313
Selenium	mg/l	0.993	0.997	98.9	75-125	0.0	20	L678726-01	WG702313
Silver	mg/l	0.546	0.156	54.9*	75-125	111.*	20	L678726-01	WG702313
Zinc	mg/l	1.06	1.03	106.	75-125	3.00	20	L678726-01	WG702313

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Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Antimony	mg/kg	21.1	18.9	39.2*	75-125	11.0	20	L678497-12	WG701908
Arsenic	mg/kg	45.9	47.8	93.5	75-125	4.00	20	L678497-12	WG701908
Beryllium	mg/kg	49.0	50.4	97.1	75-125	3.00	20	L678497-12	WG701908
Chromium	mg/kg	51.2	52.9	96.9	75-125	3.00	20	L678497-12	WG701908
Copper	mg/kg	90.5	94.6	99.6	75-125	4.00	20	L678497-12	WG701908
Lead	mg/kg	50.4	51.4	93.2	75-125	2.00	20	L678497-12	WG701908
Nickel	mg/kg	58.3	60.7	90.8	75-125	4.00	20	L678497-12	WG701908
Selenium	mg/kg	46.6	47.8	96.8	75-125	2.00	20	L678497-12	WG701908
Silver	mg/kg	50.0	51.0	100.	75-125	2.00	20	L678497-12	WG701908
Thallium	mg/kg	46.1	46.1	92.3	75-125	0.0	20	L678497-12	WG701908
Zinc	mg/kg	99.1	99.8	93.1	75-125	1.00	20	L678497-12	WG701908
2,4,5-T	mg/kg	0.125	0.139	75.1	20.3-119	10.5	30	L678607-08	WG702320
2,4,5-TP (Silvex)	mg/kg	0.113	0.124	67.9	23.6-133	8.89	29.4	L678607-08	WG702320
2,4-D	mg/kg	0.111	0.121	66.9	10-141	8.14	36	L678607-08	WG702320
2,4-DB	mg/kg	0.125	0.148	75.2	24.8-132	16.8	34.5	L678607-08	WG702320
Dalapon	mg/kg	0.147	0.138	88.2	10-115	6.17	37.4	L678607-08	WG702320
Dicamba	mg/kg	0.139	0.143	83.5	23-124	2.86	27.4	L678607-08	WG702320
Dichloroprop	mg/kg	0.108	0.113	64.6	17.5-129	4.66	31.8	L678607-08	WG702320
Dinoseb	mg/kg	0.0966	0.117	57.9	26.2-129	19.4	34.1	L678607-08	WG702320
MCPA	mg/kg	12.2	13.1	73.3	10-159	7.07	40	L678607-08	WG702320
MCPP	mg/kg	14.7	13.9	88.4	10-200	5.96	40	L678607-08	WG702320
2,4-Dichlorophenyl Acetic Acid				94.30	20.1-127				WG702320
Cadmium	mg/kg	50.0	50.2	99.6	75-125	0.0	20	L678497-12	WG701908
Antimony	mg/l	0.0473	0.0463	94.6	75-125	2.14	20	L678603-04	WG702315

Post Spike

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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(615) 758-5858
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Fax (615) 758-5859

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678495

January 23, 2014

Post Spike

Serial Dilution

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L678495

January 23, 2014

Serial Dilution

Batch number /Run number / Sample number cross reference

WG701659: R2877125: L678495-06
WG701853: R2877200 R2877707: L678495-06
WG701885: R2877227: L678495-01 02
WG701907: R2877253 R2877363: L678495-06
WG701950: R2877360: L678495-01 02 03 04 05
WG701904: R2877506: L678495-03 04 05
WG701964: R2877761 R2877932: L678495-01 02 03 04 05
WG701908: R2877823 R2878346 R2878506: L678495-01 02 03 04 05
WG702313: R2877886 R2878353: L678495-08
WG701916: R2878021: L678495-06
WG702302: R2878087: L678495-08
WG702315: R2878172: L678495-08
WG702320: R2878185: L678495-01 02 03 04 05

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678495

January 23, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project #: 201336

Lab Project #

Collected by (print): Phillip Jones

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No ✓Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

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YOUR LAB OF CHOICE
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Mount Juliet, TN 37122
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Phone: 800-767-5859
Fax: 615-758-5859

L# 678495
C125

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Contaminant	Sample # (lab only)
7HA-A (6-12")	G	SS	6-12"	1/15/14	1350	3			X	X		X						-01
7HA-B (6-12")					1435				X	X		X						-02
7HA-C (6-12")					1527				X	X		X						-03
7HA-D (6-12")					1600				X	X		X						-04
DUP-2 (6-12")					1442				X	X		X						-05
EB-2		OT			1620				X	X								-06
TRIP Blank						1	X										NoTICs	-07
EB-4 (SW)				1/15/14 (SW)	1530 (SW)				X									-08

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ~~distill~~ WME DI water

Remarks:

pH ___ Temp ___
Flow ___ Other ___

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA	Condition: (lab use only)
[signature]	1/15/14	17:30	[signature]		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1 °C Bottles Received: 19	COC Seal Intact: ___Y ___N ___NA
Relinquished by: (Signature) [signature]	Date: 1/15/14	Time: 18:11	Received for lab by: (Signature) [signature]	Date: 1-16-14 Time: 1445	pH Checked: <2 NCF: YES

ESC
L·A·B S·C·I·E·N·C·E·S

NON-CONFORMANCE FORM

Login No.: L678495

Date: 1/16/14

Evaluated by: DAKOTA

Client: DUNDUNNC

Non-Conformance (check applicable items)

- ☐ Parameter(s) past holding time
- ☐ Improper temperature
- ☐ Improper container type
- ☐ Improper preservation
- ☐ Container lid not intact
- X Login Clarification Needed
- ☐ Chain of custody is incomplete
- ☐ Chain of Custody is missing (see below)
- ☐ Broken container(s) (See below)
- ☐ Broken container: sufficient sample volume remains for analysis requested (See below)

If no COC: Received by_____
Date:_____Time:_____
Temp:_____Cont. Rec_____ pH:_____
☐ Fedex ☐ UPS ☐SWA ☐ Other_____
Tracking #_____

- ☐ Insufficient packing material around container
- ☐ Insufficient packing material inside cooler
- ☐ Improper handling by carrier (FedEx / UPS / Courier
- ☐ Sample was frozen

Comments:

RECEIVED EB-4 AT 1/15/14 1530 NOT ON COC.
1-500ML PLASTIC HNO3

Client informed by call / **email** / fax / voice mail date: __1/17/14__ time: _1256__ **TSR Initials:** _jeh__
Client contact: Daphne Jones

Login Instructions: Add to COC and analyze for M6010PP.

Divider
Page

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Friday January 24, 2014

Report Number: L678902
Samples Received: 01/18/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-A 4-5FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	76.6	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.039	0.0014	0.026	mg/kg		7471	01/22/14	1
Antimony	U	0.38	1.3	mg/kg		6010C	01/22/14	1
Arsenic	4.0	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	1.1	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.36	0.035	0.33	mg/kg		6010C	01/22/14	1
Chromium	25.	0.070	0.65	mg/kg		6010C	01/22/14	1
Copper	54.	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	6.8	0.095	0.33	mg/kg		6010C	01/22/14	1
Nickel	16.	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	0.48	0.37	1.3	mg/kg	J	6010C	01/22/14	1
Silver	U	0.70	3.3	mg/kg	O	6010C	01/22/14	5
Thallium	U	0.32	1.3	mg/kg		6010C	01/22/14	1
Zinc	30.	0.30	2.0	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.065	mg/kg	J3	8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.013	mg/kg	J4J3	8260B	01/21/14	1
Benzene	U	0.00027	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Bromoform	U	0.00042	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Bromomethane	U	0.0013	0.0065	mg/kg	J3	8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0013	mg/kg	J6J3	8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0013	mg/kg	J6J3	8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Chloroethane	U	0.00095	0.0065	mg/kg	J3	8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.065	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0065	mg/kg	J6J3	8260B	01/21/14	1
Chloromethane	U	0.00038	0.0033	mg/kg	J3	8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0013	mg/kg	J6J3	8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0065	mg/kg	J6J3	8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0013	mg/kg	J6J3	8260B	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-A 4-5FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0065	mg/kg	J3	8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0013	mg/kg	J6J3	8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0013	mg/kg	J6J3	8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0013	mg/kg	J6J3	8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0013	mg/kg	J6J3	8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0013	mg/kg	J6J3	8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0013	mg/kg	J6J3	8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0013	mg/kg	J6J3	8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.013	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0065	mg/kg	J6J3	8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.013	mg/kg	J6J3	8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Naphthalene	U	0.0010	0.0065	mg/kg	J6J3	8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0013	mg/kg	J3	8260B	01/21/14	1
Styrene	U	0.00023	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Toluene	U	0.00043	0.0065	mg/kg	J6J3	8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0013	mg/kg	J3	8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0065	mg/kg	J6J3	8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0033	mg/kg	J6J3	8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0013	mg/kg	J6J3	8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0013	mg/kg	J6J3	8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0013	mg/kg	J3	8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0039	mg/kg	J3J6	8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	101.			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	99.0			% Rec.		8260B	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-A 4-5FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	101.			% Rec.		8260B	01/21/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.043	mg/kg		8270D	01/23/14	1
Acenaphthylene	U	0.0067	0.043	mg/kg		8270D	01/23/14	1
Anthracene	U	0.0063	0.043	mg/kg		8270D	01/23/14	1
Benzidine	U	0.064	0.43	mg/kg		8270D	01/23/14	1
Benzo(a)anthracene	U	0.0043	0.043	mg/kg		8270D	01/23/14	1
Benzo(b)fluoranthene	U	0.0070	0.043	mg/kg		8270D	01/23/14	1
Benzo(k)fluoranthene	U	0.0058	0.043	mg/kg		8270D	01/23/14	1
Benzo(g,h,i)perylene	U	0.0072	0.043	mg/kg		8270D	01/23/14	1
Benzo(a)pyrene	U	0.0055	0.043	mg/kg		8270D	01/23/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.43	mg/kg		8270D	01/23/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.43	mg/kg		8270D	01/23/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.43	mg/kg		8270D	01/23/14	1
4-Bromophenyl-phenylether	U	0.011	0.43	mg/kg		8270D	01/23/14	1
2-Chloronaphthalene	U	0.0064	0.043	mg/kg		8270D	01/23/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.43	mg/kg		8270D	01/23/14	1
Chrysene	U	0.0056	0.043	mg/kg		8270D	01/23/14	1
Dibenz(a,h)anthracene	U	0.0082	0.043	mg/kg		8270D	01/23/14	1
3,3-Dichlorobenzidine	U	0.079	0.43	mg/kg		8270D	01/23/14	1
2,4-Dinitrotoluene	U	0.0061	0.43	mg/kg		8270D	01/23/14	1
2,6-Dinitrotoluene	U	0.0074	0.43	mg/kg		8270D	01/23/14	1
Fluoranthene	U	0.0050	0.043	mg/kg		8270D	01/23/14	1
Fluorene	U	0.0068	0.043	mg/kg		8270D	01/23/14	1
Hexachlorobenzene	U	0.0086	0.43	mg/kg		8270D	01/23/14	1
Hexachloro-1,3-butadiene	U	0.010	0.43	mg/kg		8270D	01/23/14	1
Hexachlorocyclopentadiene	U	0.059	0.43	mg/kg		8270D	01/23/14	1
Hexachloroethane	U	0.013	0.43	mg/kg		8270D	01/23/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.043	mg/kg		8270D	01/23/14	1
Isophorone	U	0.0052	0.43	mg/kg		8270D	01/23/14	1
Naphthalene	U	0.0089	0.043	mg/kg		8270D	01/23/14	1
Nitrobenzene	U	0.0070	0.43	mg/kg		8270D	01/23/14	1
n-Nitrosodimethylamine	U	0.065	0.43	mg/kg		8270D	01/23/14	1
n-Nitrosodiphenylamine	U	0.0059	0.43	mg/kg		8270D	01/23/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.43	mg/kg		8270D	01/23/14	1
Phenanthrene	U	0.0053	0.043	mg/kg		8270D	01/23/14	1
Benzylbutyl phthalate	U	0.010	0.43	mg/kg		8270D	01/23/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.43	mg/kg		8270D	01/23/14	1
Di-n-butyl phthalate	U	0.011	0.43	mg/kg		8270D	01/23/14	1
Diethyl phthalate	U	0.0069	0.43	mg/kg		8270D	01/23/14	1
Dimethyl phthalate	U	0.0054	0.43	mg/kg		8270D	01/23/14	1
Di-n-octyl phthalate	U	0.0091	0.43	mg/kg		8270D	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-A 4-5FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.043	mg/kg		8270D	01/23/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.43	mg/kg		8270D	01/23/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.43	mg/kg		8270D	01/23/14	1
2-Chlorophenol	U	0.0083	0.43	mg/kg		8270D	01/23/14	1
2,4-Dichlorophenol	U	0.0075	0.43	mg/kg		8270D	01/23/14	1
2,4-Dimethylphenol	U	0.047	0.43	mg/kg		8270D	01/23/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.43	mg/kg		8270D	01/23/14	1
2,4-Dinitrophenol	U	0.098	0.43	mg/kg		8270D	01/23/14	1
2-Nitrophenol	U	0.013	0.43	mg/kg		8270D	01/23/14	1
4-Nitrophenol	U	0.052	0.43	mg/kg		8270D	01/23/14	1
Pentachlorophenol	U	0.048	0.43	mg/kg		8270D	01/23/14	1
Phenol	U	0.0070	0.43	mg/kg		8270D	01/23/14	1
2,4,6-Trichlorophenol	U	0.0078	0.43	mg/kg		8270D	01/23/14	1
Surrogate Recovery								
2-Fluorophenol	60.3			% Rec.		8270D	01/23/14	1
Phenol-d5	63.4			% Rec.		8270D	01/23/14	1
Nitrobenzene-d5	62.1			% Rec.		8270D	01/23/14	1
2-Fluorobiphenyl	62.8			% Rec.		8270D	01/23/14	1
2,4,6-Tribromophenol	91.3			% Rec.		8270D	01/23/14	1
p-Terphenyl-d14	61.2			% Rec.		8270D	01/23/14	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-B 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	78.8	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.018	0.0014	0.025	mg/kg	JO1	7471	01/22/14	1
Antimony	U	0.38	1.3	mg/kg		6010C	01/22/14	1
Arsenic	6.0	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	1.6	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.44	0.035	0.32	mg/kg		6010C	01/22/14	1
Chromium	30.	0.070	0.63	mg/kg		6010C	01/22/14	1
Copper	76.	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	7.7	0.095	0.32	mg/kg		6010C	01/22/14	1
Nickel	12.	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.3	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.2	mg/kg	O	6010C	01/22/14	5
Thallium	1.2	0.32	1.3	mg/kg	J	6010C	01/22/14	1
Zinc	30.	0.30	1.9	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.063	mg/kg		8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.013	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0013	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0063	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0013	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0013	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0063	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.063	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0063	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0032	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0063	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-B 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0063	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.013	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0063	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.013	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0063	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0063	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0013	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0013	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0063	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0032	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0038	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	101.			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	99.7			% Rec.		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-B 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	99.2			% Rec.		8260B	01/21/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.042	mg/kg		8270D	01/23/14	1
Acenaphthylene	U	0.0067	0.042	mg/kg		8270D	01/23/14	1
Anthracene	U	0.0063	0.042	mg/kg		8270D	01/23/14	1
Benzidine	U	0.064	0.42	mg/kg		8270D	01/23/14	1
Benzo(a)anthracene	U	0.0043	0.042	mg/kg		8270D	01/23/14	1
Benzo(b)fluoranthene	U	0.0070	0.042	mg/kg		8270D	01/23/14	1
Benzo(k)fluoranthene	U	0.0058	0.042	mg/kg		8270D	01/23/14	1
Benzo(g,h,i)perylene	U	0.0072	0.042	mg/kg		8270D	01/23/14	1
Benzo(a)pyrene	U	0.0055	0.042	mg/kg		8270D	01/23/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.42	mg/kg		8270D	01/23/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.42	mg/kg		8270D	01/23/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.42	mg/kg		8270D	01/23/14	1
4-Bromophenyl-phenylether	U	0.011	0.42	mg/kg		8270D	01/23/14	1
2-Chloronaphthalene	U	0.0064	0.042	mg/kg		8270D	01/23/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.42	mg/kg		8270D	01/23/14	1
Chrysene	U	0.0056	0.042	mg/kg		8270D	01/23/14	1
Dibenz(a,h)anthracene	U	0.0082	0.042	mg/kg		8270D	01/23/14	1
3,3-Dichlorobenzidine	U	0.079	0.42	mg/kg		8270D	01/23/14	1
2,4-Dinitrotoluene	U	0.0061	0.42	mg/kg		8270D	01/23/14	1
2,6-Dinitrotoluene	U	0.0074	0.42	mg/kg		8270D	01/23/14	1
Fluoranthene	U	0.0050	0.042	mg/kg		8270D	01/23/14	1
Fluorene	U	0.0068	0.042	mg/kg		8270D	01/23/14	1
Hexachlorobenzene	U	0.0086	0.42	mg/kg		8270D	01/23/14	1
Hexachloro-1,3-butadiene	U	0.010	0.42	mg/kg		8270D	01/23/14	1
Hexachlorocyclopentadiene	U	0.059	0.42	mg/kg		8270D	01/23/14	1
Hexachloroethane	U	0.013	0.42	mg/kg		8270D	01/23/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.042	mg/kg		8270D	01/23/14	1
Isophorone	U	0.0052	0.42	mg/kg		8270D	01/23/14	1
Naphthalene	U	0.0089	0.042	mg/kg		8270D	01/23/14	1
Nitrobenzene	U	0.0070	0.42	mg/kg		8270D	01/23/14	1
n-Nitrosodimethylamine	U	0.065	0.42	mg/kg		8270D	01/23/14	1
n-Nitrosodiphenylamine	U	0.0059	0.42	mg/kg		8270D	01/23/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.42	mg/kg		8270D	01/23/14	1
Phenanthrene	U	0.0053	0.042	mg/kg		8270D	01/23/14	1
Benzylbutyl phthalate	U	0.010	0.42	mg/kg		8270D	01/23/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.42	mg/kg		8270D	01/23/14	1
Di-n-butyl phthalate	U	0.011	0.42	mg/kg		8270D	01/23/14	1
Diethyl phthalate	U	0.0069	0.42	mg/kg		8270D	01/23/14	1
Dimethyl phthalate	U	0.0054	0.42	mg/kg		8270D	01/23/14	1
Di-n-octyl phthalate	U	0.0091	0.42	mg/kg		8270D	01/23/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-B 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.042	mg/kg		8270D	01/23/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.42	mg/kg		8270D	01/23/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.42	mg/kg		8270D	01/23/14	1
2-Chlorophenol	U	0.0083	0.42	mg/kg		8270D	01/23/14	1
2,4-Dichlorophenol	U	0.0075	0.42	mg/kg		8270D	01/23/14	1
2,4-Dimethylphenol	U	0.047	0.42	mg/kg		8270D	01/23/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.42	mg/kg		8270D	01/23/14	1
2,4-Dinitrophenol	U	0.098	0.42	mg/kg		8270D	01/23/14	1
2-Nitrophenol	U	0.013	0.42	mg/kg		8270D	01/23/14	1
4-Nitrophenol	U	0.052	0.42	mg/kg		8270D	01/23/14	1
Pentachlorophenol	U	0.048	0.42	mg/kg		8270D	01/23/14	1
Phenol	U	0.0070	0.42	mg/kg		8270D	01/23/14	1
2,4,6-Trichlorophenol	U	0.0078	0.42	mg/kg		8270D	01/23/14	1
Surrogate Recovery								
2-Fluorophenol	29.8			% Rec.		8270D	01/23/14	1
Phenol-d5	32.0			% Rec.		8270D	01/23/14	1
Nitrobenzene-d5	32.4			% Rec.		8270D	01/23/14	1
2-Fluorobiphenyl	36.5			% Rec.		8270D	01/23/14	1
2,4,6-Tribromophenol	84.2			% Rec.		8270D	01/23/14	1
p-Terphenyl-d14	56.0			% Rec.		8270D	01/23/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-C 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	76.6	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.051	0.0014	0.026	mg/kg		7471	01/22/14	1
Antimony	U	0.38	1.3	mg/kg		6010C	01/22/14	1
Arsenic	5.9	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	1.3	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.35	0.035	0.33	mg/kg		6010C	01/22/14	1
Chromium	27.	0.070	0.65	mg/kg		6010C	01/22/14	1
Copper	44.	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	12.	0.095	0.33	mg/kg		6010C	01/22/14	1
Nickel	11.	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	1.4	0.37	1.3	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.3	mg/kg	O	6010C	01/22/14	5
Thallium	U	0.32	1.3	mg/kg		6010C	01/22/14	1
Zinc	35.	0.30	2.0	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.065	mg/kg		8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.013	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0013	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0065	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0013	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0013	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0065	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.065	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0065	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0033	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0065	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-C 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0065	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.013	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0065	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.013	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0065	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0065	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0013	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0013	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0065	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0033	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0039	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	97.9			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	98.6			% Rec.		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-C 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	94.5			% Rec.		8260B	01/21/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.13	0.86	mg/kg	O	8270D	01/23/14	20
Acenaphthylene	U	0.13	0.86	mg/kg	O	8270D	01/23/14	20
Anthracene	U	0.13	0.86	mg/kg	O	8270D	01/23/14	20
Benzidine	U	1.3	8.7	mg/kg	O	8270D	01/23/14	20
Benzo(a)anthracene	U	0.086	0.86	mg/kg	O	8270D	01/23/14	20
Benzo(b)fluoranthene	U	0.14	0.86	mg/kg	O	8270D	01/23/14	20
Benzo(k)fluoranthene	U	0.12	0.86	mg/kg	O	8270D	01/23/14	20
Benzo(g,h,i)perylene	U	0.14	0.86	mg/kg	O	8270D	01/23/14	20
Benzo(a)pyrene	U	0.11	0.86	mg/kg	O	8270D	01/23/14	20
Bis(2-chlorethoxy)methane	U	0.15	8.7	mg/kg	O	8270D	01/23/14	20
Bis(2-chloroethyl)ether	U	0.18	8.7	mg/kg	O	8270D	01/23/14	20
Bis(2-chloroisopropyl)ether	U	0.15	8.7	mg/kg	O	8270D	01/23/14	20
4-Bromophenyl-phenylether	U	0.23	8.7	mg/kg	O	8270D	01/23/14	20
2-Chloronaphthalene	U	0.13	0.86	mg/kg	O	8270D	01/23/14	20
4-Chlorophenyl-phenylether	U	0.12	8.7	mg/kg	O	8270D	01/23/14	20
Chrysene	U	0.11	0.86	mg/kg	O	8270D	01/23/14	20
Dibenz(a,h)anthracene	U	0.16	0.86	mg/kg	O	8270D	01/23/14	20
3,3-Dichlorobenzidine	U	1.6	8.7	mg/kg	O	8270D	01/23/14	20
2,4-Dinitrotoluene	U	0.12	8.7	mg/kg	O	8270D	01/23/14	20
2,6-Dinitrotoluene	U	0.15	8.7	mg/kg	O	8270D	01/23/14	20
Fluoranthene	U	0.099	0.86	mg/kg	O	8270D	01/23/14	20
Fluorene	U	0.14	0.86	mg/kg	O	8270D	01/23/14	20
Hexachlorobenzene	U	0.17	8.7	mg/kg	O	8270D	01/23/14	20
Hexachloro-1,3-butadiene	U	0.20	8.7	mg/kg	O	8270D	01/23/14	20
Hexachlorocyclopentadiene	U	1.2	8.7	mg/kg	O	8270D	01/23/14	20
Hexachloroethane	U	0.27	8.7	mg/kg	O	8270D	01/23/14	20
Indeno(1,2,3-cd)pyrene	U	0.15	0.86	mg/kg	O	8270D	01/23/14	20
Isophorone	U	0.10	8.7	mg/kg	O	8270D	01/23/14	20
Naphthalene	U	0.18	0.86	mg/kg	O	8270D	01/23/14	20
Nitrobenzene	U	0.14	8.7	mg/kg	O	8270D	01/23/14	20
n-Nitrosodimethylamine	U	1.3	8.7	mg/kg	O	8270D	01/23/14	20
n-Nitrosodiphenylamine	U	0.12	8.7	mg/kg	O	8270D	01/23/14	20
n-Nitrosodi-n-propylamine	U	0.18	8.7	mg/kg	O	8270D	01/23/14	20
Phenanthrene	U	0.10	0.86	mg/kg	O	8270D	01/23/14	20
Benzylbutyl phthalate	U	0.21	8.7	mg/kg	O	8270D	01/23/14	20
Bis(2-ethylhexyl)phthalate	U	0.24	8.7	mg/kg	O	8270D	01/23/14	20
Di-n-butyl phthalate	U	0.22	8.7	mg/kg	O	8270D	01/23/14	20
Diethyl phthalate	U	0.14	8.7	mg/kg	O	8270D	01/23/14	20
Dimethyl phthalate	U	0.11	8.7	mg/kg	O	8270D	01/23/14	20
Di-n-octyl phthalate	U	0.18	8.7	mg/kg	O	8270D	01/23/14	20

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-C 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.25	0.86	mg/kg	O	8270D	01/23/14	20
1,2,4-Trichlorobenzene	U	0.18	8.7	mg/kg	O	8270D	01/23/14	20
Acid Extractables								
4-Chloro-3-methylphenol	U	0.095	8.7	mg/kg	O	8270D	01/23/14	20
2-Chlorophenol	U	0.17	8.7	mg/kg	O	8270D	01/23/14	20
2,4-Dichlorophenol	U	0.15	8.7	mg/kg	O	8270D	01/23/14	20
2,4-Dimethylphenol	U	0.94	8.7	mg/kg	OJ	8270D	01/23/14	20
4,6-Dinitro-2-methylphenol	U	2.5	8.7	mg/kg	O	8270D	01/23/14	20
2,4-Dinitrophenol	U	2.0	8.7	mg/kg	O	8270D	01/23/14	20
2-Nitrophenol	U	0.26	8.7	mg/kg	O	8270D	01/23/14	20
4-Nitrophenol	U	1.0	8.7	mg/kg	O	8270D	01/23/14	20
Pentachlorophenol	U	0.96	8.7	mg/kg	O	8270D	01/23/14	20
Phenol	U	0.14	8.7	mg/kg	O	8270D	01/23/14	20
2,4,6-Trichlorophenol	U	0.16	8.7	mg/kg	O	8270D	01/23/14	20
Surrogate Recovery								
2-Fluorophenol	61.9			% Rec.	J7	8270D	01/23/14	20
Phenol-d5	61.4			% Rec.	J7	8270D	01/23/14	20
Nitrobenzene-d5	61.2			% Rec.	J7	8270D	01/23/14	20
2-Fluorobiphenyl	75.0			% Rec.	J7	8270D	01/23/14	20
2,4,6-Tribromophenol	51.4			% Rec.	J7	8270D	01/23/14	20
p-Terphenyl-d14	55.3			% Rec.	J7	8270D	01/23/14	20

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-D 2-3FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	73.7	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.028	0.0014	0.027	mg/kg		7471	01/22/14	1
Antimony	7.9	0.38	1.4	mg/kg		6010C	01/22/14	1
Arsenic	24.	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	1.2	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	0.91	0.18	1.7	mg/kg	J	6010C	01/22/14	5
Chromium	42.	0.070	0.68	mg/kg		6010C	01/22/14	1
Copper	73.	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	9.8	0.48	1.7	mg/kg		6010C	01/22/14	5
Nickel	39.	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	6.8	mg/kg	O	6010C	01/22/14	5
Silver	1.0	0.14	0.68	mg/kg		6010C	01/22/14	1
Thallium	U	1.6	6.8	mg/kg	O	6010C	01/22/14	5
Zinc	38.	0.30	2.0	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.068	mg/kg		8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0068	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0068	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.068	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0068	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0034	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0068	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/21/14	1

Results listed are dry weight basis.
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Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-D 2-3FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0068	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0068	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0068	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0068	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0068	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0034	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0041	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	92.6			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	97.5			% Rec.		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-D 2-3FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	95.9			% Rec.		8260B	01/21/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.045	mg/kg		8270D	01/23/14	1
Acenaphthylene	U	0.0067	0.045	mg/kg		8270D	01/23/14	1
Anthracene	U	0.0063	0.045	mg/kg		8270D	01/23/14	1
Benzidine	U	0.064	0.45	mg/kg		8270D	01/23/14	1
Benzo(a)anthracene	U	0.0043	0.045	mg/kg		8270D	01/23/14	1
Benzo(b)fluoranthene	U	0.0070	0.045	mg/kg		8270D	01/23/14	1
Benzo(k)fluoranthene	U	0.0058	0.045	mg/kg		8270D	01/23/14	1
Benzo(g,h,i)perylene	U	0.0072	0.045	mg/kg		8270D	01/23/14	1
Benzo(a)pyrene	U	0.0055	0.045	mg/kg		8270D	01/23/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.45	mg/kg		8270D	01/23/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.45	mg/kg		8270D	01/23/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.45	mg/kg		8270D	01/23/14	1
4-Bromophenyl-phenylether	U	0.011	0.45	mg/kg		8270D	01/23/14	1
2-Chloronaphthalene	U	0.0064	0.045	mg/kg		8270D	01/23/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.45	mg/kg		8270D	01/23/14	1
Chrysene	U	0.0056	0.045	mg/kg		8270D	01/23/14	1
Dibenz(a,h)anthracene	U	0.0082	0.045	mg/kg		8270D	01/23/14	1
3,3-Dichlorobenzidine	U	0.079	0.45	mg/kg		8270D	01/23/14	1
2,4-Dinitrotoluene	U	0.0061	0.45	mg/kg		8270D	01/23/14	1
2,6-Dinitrotoluene	U	0.0074	0.45	mg/kg		8270D	01/23/14	1
Fluoranthene	U	0.0050	0.045	mg/kg		8270D	01/23/14	1
Fluorene	U	0.0068	0.045	mg/kg		8270D	01/23/14	1
Hexachlorobenzene	U	0.0086	0.45	mg/kg		8270D	01/23/14	1
Hexachloro-1,3-butadiene	U	0.010	0.45	mg/kg		8270D	01/23/14	1
Hexachlorocyclopentadiene	U	0.059	0.45	mg/kg		8270D	01/23/14	1
Hexachloroethane	U	0.013	0.45	mg/kg		8270D	01/23/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.045	mg/kg		8270D	01/23/14	1
Isophorone	U	0.0052	0.45	mg/kg		8270D	01/23/14	1
Naphthalene	U	0.0089	0.045	mg/kg		8270D	01/23/14	1
Nitrobenzene	U	0.0070	0.45	mg/kg		8270D	01/23/14	1
n-Nitrosodimethylamine	U	0.065	0.45	mg/kg		8270D	01/23/14	1
n-Nitrosodiphenylamine	U	0.0059	0.45	mg/kg		8270D	01/23/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.45	mg/kg		8270D	01/23/14	1
Phenanthrene	U	0.0053	0.045	mg/kg		8270D	01/23/14	1
Benzylbutyl phthalate	U	0.010	0.45	mg/kg		8270D	01/23/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.45	mg/kg		8270D	01/23/14	1
Di-n-butyl phthalate	U	0.011	0.45	mg/kg		8270D	01/23/14	1
Diethyl phthalate	U	0.0069	0.45	mg/kg		8270D	01/23/14	1
Dimethyl phthalate	U	0.0054	0.45	mg/kg		8270D	01/23/14	1
Di-n-octyl phthalate	U	0.0091	0.45	mg/kg		8270D	01/23/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-D 2-3FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 14:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.045	mg/kg		8270D	01/23/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.45	mg/kg		8270D	01/23/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.45	mg/kg		8270D	01/23/14	1
2-Chlorophenol	U	0.0083	0.45	mg/kg		8270D	01/23/14	1
2,4-Dichlorophenol	U	0.0075	0.45	mg/kg		8270D	01/23/14	1
2,4-Dimethylphenol	U	0.047	0.45	mg/kg		8270D	01/23/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.45	mg/kg		8270D	01/23/14	1
2,4-Dinitrophenol	U	0.098	0.45	mg/kg		8270D	01/23/14	1
2-Nitrophenol	U	0.013	0.45	mg/kg		8270D	01/23/14	1
4-Nitrophenol	U	0.052	0.45	mg/kg		8270D	01/23/14	1
Pentachlorophenol	U	0.048	0.45	mg/kg		8270D	01/23/14	1
Phenol	U	0.0070	0.45	mg/kg		8270D	01/23/14	1
2,4,6-Trichlorophenol	U	0.0078	0.45	mg/kg		8270D	01/23/14	1
Surrogate Recovery								
2-Fluorophenol	58.7			% Rec.		8270D	01/23/14	1
Phenol-d5	63.9			% Rec.		8270D	01/23/14	1
Nitrobenzene-d5	61.5			% Rec.		8270D	01/23/14	1
2-Fluorobiphenyl	59.3			% Rec.		8270D	01/23/14	1
2,4,6-Tribromophenol	88.9			% Rec.		8270D	01/23/14	1
p-Terphenyl-d14	46.3			% Rec.		8270D	01/23/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-A 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	71.6	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.034	0.0014	0.028	mg/kg		7471	01/22/14	1
Antimony	9.2	0.38	1.4	mg/kg		6010C	01/22/14	1
Arsenic	18.	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	0.85	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	0.53	0.035	0.35	mg/kg		6010C	01/22/14	1
Chromium	31.	0.070	0.70	mg/kg		6010C	01/22/14	1
Copper	110	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	9.1	0.095	0.35	mg/kg		6010C	01/22/14	1
Nickel	11.	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	7.0	mg/kg	O	6010C	01/22/14	5
Silver	1.2	0.14	0.70	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.4	mg/kg		6010C	01/22/14	1
Zinc	31.	0.30	2.1	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.070	mg/kg		8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0070	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0070	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.070	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0070	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0035	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0070	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

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Cary, NC 27512

January 24,2014

ESC Sample # : L678902-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-A 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0070	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0070	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0070	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0070	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0070	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0035	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0042	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	94.2			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	98.3			% Rec.		8260B	01/21/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-A 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	93.1			% Rec.		8260B	01/21/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.046	mg/kg		8270D	01/23/14	1
Acenaphthylene	U	0.0067	0.046	mg/kg		8270D	01/23/14	1
Anthracene	U	0.0063	0.046	mg/kg		8270D	01/23/14	1
Benzidine	U	0.064	0.46	mg/kg		8270D	01/23/14	1
Benzo(a)anthracene	U	0.0043	0.046	mg/kg		8270D	01/23/14	1
Benzo(b)fluoranthene	U	0.0070	0.046	mg/kg		8270D	01/23/14	1
Benzo(k)fluoranthene	U	0.0058	0.046	mg/kg		8270D	01/23/14	1
Benzo(g,h,i)perylene	U	0.0072	0.046	mg/kg		8270D	01/23/14	1
Benzo(a)pyrene	U	0.0055	0.046	mg/kg		8270D	01/23/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.46	mg/kg		8270D	01/23/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.46	mg/kg		8270D	01/23/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.46	mg/kg		8270D	01/23/14	1
4-Bromophenyl-phenylether	U	0.011	0.46	mg/kg		8270D	01/23/14	1
2-Chloronaphthalene	U	0.0064	0.046	mg/kg		8270D	01/23/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.46	mg/kg		8270D	01/23/14	1
Chrysene	U	0.0056	0.046	mg/kg		8270D	01/23/14	1
Dibenz(a,h)anthracene	U	0.0082	0.046	mg/kg		8270D	01/23/14	1
3,3-Dichlorobenzidine	U	0.079	0.46	mg/kg		8270D	01/23/14	1
2,4-Dinitrotoluene	U	0.0061	0.46	mg/kg		8270D	01/23/14	1
2,6-Dinitrotoluene	U	0.0074	0.46	mg/kg		8270D	01/23/14	1
Fluoranthene	U	0.0050	0.046	mg/kg		8270D	01/23/14	1
Fluorene	U	0.0068	0.046	mg/kg		8270D	01/23/14	1
Hexachlorobenzene	U	0.0086	0.46	mg/kg		8270D	01/23/14	1
Hexachloro-1,3-butadiene	U	0.010	0.46	mg/kg		8270D	01/23/14	1
Hexachlorocyclopentadiene	U	0.059	0.46	mg/kg		8270D	01/23/14	1
Hexachloroethane	U	0.013	0.46	mg/kg		8270D	01/23/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.046	mg/kg		8270D	01/23/14	1
Isophorone	U	0.0052	0.46	mg/kg		8270D	01/23/14	1
Naphthalene	U	0.0089	0.046	mg/kg		8270D	01/23/14	1
Nitrobenzene	U	0.0070	0.46	mg/kg		8270D	01/23/14	1
n-Nitrosodimethylamine	U	0.065	0.46	mg/kg		8270D	01/23/14	1
n-Nitrosodiphenylamine	U	0.0059	0.46	mg/kg		8270D	01/23/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.46	mg/kg		8270D	01/23/14	1
Phenanthrene	U	0.0053	0.046	mg/kg		8270D	01/23/14	1
Benzylbutyl phthalate	U	0.010	0.46	mg/kg		8270D	01/23/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.46	mg/kg		8270D	01/23/14	1
Di-n-butyl phthalate	U	0.011	0.46	mg/kg		8270D	01/23/14	1
Diethyl phthalate	U	0.0069	0.46	mg/kg		8270D	01/23/14	1
Dimethyl phthalate	U	0.0054	0.46	mg/kg		8270D	01/23/14	1
Di-n-octyl phthalate	U	0.0091	0.46	mg/kg		8270D	01/23/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-A 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.046	mg/kg		8270D	01/23/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.46	mg/kg		8270D	01/23/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.46	mg/kg		8270D	01/23/14	1
2-Chlorophenol	U	0.0083	0.46	mg/kg		8270D	01/23/14	1
2,4-Dichlorophenol	U	0.0075	0.46	mg/kg		8270D	01/23/14	1
2,4-Dimethylphenol	U	0.047	0.46	mg/kg		8270D	01/23/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.46	mg/kg		8270D	01/23/14	1
2,4-Dinitrophenol	U	0.098	0.46	mg/kg		8270D	01/23/14	1
2-Nitrophenol	U	0.013	0.46	mg/kg		8270D	01/23/14	1
4-Nitrophenol	U	0.052	0.46	mg/kg		8270D	01/23/14	1
Pentachlorophenol	U	0.048	0.46	mg/kg		8270D	01/23/14	1
Phenol	U	0.0070	0.46	mg/kg		8270D	01/23/14	1
2,4,6-Trichlorophenol	U	0.0078	0.46	mg/kg		8270D	01/23/14	1
Surrogate Recovery								
2-Fluorophenol	70.1			% Rec.		8270D	01/23/14	1
Phenol-d5	70.7			% Rec.		8270D	01/23/14	1
Nitrobenzene-d5	71.3			% Rec.		8270D	01/23/14	1
2-Fluorobiphenyl	67.7			% Rec.		8270D	01/23/14	1
2,4,6-Tribromophenol	92.6			% Rec.		8270D	01/23/14	1
p-Terphenyl-d14	59.2			% Rec.		8270D	01/23/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-B 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	76.8	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.022	0.0014	0.026	mg/kg	J	7471	01/22/14	1
Antimony	3.8	0.38	1.3	mg/kg		6010C	01/22/14	1
Arsenic	9.1	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	0.68	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.20	0.035	0.32	mg/kg	J	6010C	01/22/14	1
Chromium	16.	0.070	0.65	mg/kg		6010C	01/22/14	1
Copper	22.	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	18.	0.095	0.32	mg/kg		6010C	01/22/14	1
Nickel	7.2	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	6.5	mg/kg	O	6010C	01/22/14	5
Silver	0.49	0.14	0.65	mg/kg	J	6010C	01/22/14	1
Thallium	U	0.32	1.3	mg/kg		6010C	01/22/14	1
Zinc	26.	0.30	2.0	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.065	mg/kg		8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.013	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0013	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0065	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0013	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0013	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0065	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.065	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0065	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0032	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0065	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-B 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0065	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.013	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0065	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.013	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0065	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0065	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0013	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0013	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0065	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0032	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0039	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	97.6			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	98.2			% Rec.		8260B	01/21/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
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PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-B 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	96.9			% Rec.		8260B	01/21/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.043	mg/kg		8270D	01/23/14	1
Acenaphthylene	U	0.0067	0.043	mg/kg		8270D	01/23/14	1
Anthracene	U	0.0063	0.043	mg/kg		8270D	01/23/14	1
Benzidine	U	0.064	0.43	mg/kg		8270D	01/23/14	1
Benzo(a)anthracene	U	0.0043	0.043	mg/kg		8270D	01/23/14	1
Benzo(b)fluoranthene	U	0.0070	0.043	mg/kg		8270D	01/23/14	1
Benzo(k)fluoranthene	U	0.0058	0.043	mg/kg		8270D	01/23/14	1
Benzo(g,h,i)perylene	U	0.0072	0.043	mg/kg		8270D	01/23/14	1
Benzo(a)pyrene	U	0.0055	0.043	mg/kg		8270D	01/23/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.43	mg/kg		8270D	01/23/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.43	mg/kg		8270D	01/23/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.43	mg/kg		8270D	01/23/14	1
4-Bromophenyl-phenylether	U	0.011	0.43	mg/kg		8270D	01/23/14	1
2-Chloronaphthalene	U	0.0064	0.043	mg/kg		8270D	01/23/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.43	mg/kg		8270D	01/23/14	1
Chrysene	U	0.0056	0.043	mg/kg		8270D	01/23/14	1
Dibenz(a,h)anthracene	U	0.0082	0.043	mg/kg		8270D	01/23/14	1
3,3-Dichlorobenzidine	U	0.079	0.43	mg/kg		8270D	01/23/14	1
2,4-Dinitrotoluene	U	0.0061	0.43	mg/kg		8270D	01/23/14	1
2,6-Dinitrotoluene	U	0.0074	0.43	mg/kg		8270D	01/23/14	1
Fluoranthene	U	0.0050	0.043	mg/kg		8270D	01/23/14	1
Fluorene	U	0.0068	0.043	mg/kg		8270D	01/23/14	1
Hexachlorobenzene	U	0.0086	0.43	mg/kg		8270D	01/23/14	1
Hexachloro-1,3-butadiene	U	0.010	0.43	mg/kg		8270D	01/23/14	1
Hexachlorocyclopentadiene	U	0.059	0.43	mg/kg		8270D	01/23/14	1
Hexachloroethane	U	0.013	0.43	mg/kg		8270D	01/23/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.043	mg/kg		8270D	01/23/14	1
Isophorone	U	0.0052	0.43	mg/kg		8270D	01/23/14	1
Naphthalene	U	0.0089	0.043	mg/kg		8270D	01/23/14	1
Nitrobenzene	U	0.0070	0.43	mg/kg		8270D	01/23/14	1
n-Nitrosodimethylamine	U	0.065	0.43	mg/kg		8270D	01/23/14	1
n-Nitrosodiphenylamine	U	0.0059	0.43	mg/kg		8270D	01/23/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.43	mg/kg		8270D	01/23/14	1
Phenanthrene	U	0.0053	0.043	mg/kg		8270D	01/23/14	1
Benzylbutyl phthalate	U	0.010	0.43	mg/kg		8270D	01/23/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.43	mg/kg		8270D	01/23/14	1
Di-n-butyl phthalate	U	0.011	0.43	mg/kg		8270D	01/23/14	1
Diethyl phthalate	U	0.0069	0.43	mg/kg		8270D	01/23/14	1
Dimethyl phthalate	U	0.0054	0.43	mg/kg		8270D	01/23/14	1
Di-n-octyl phthalate	U	0.0091	0.43	mg/kg		8270D	01/23/14	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-B 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.043	mg/kg		8270D	01/23/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.43	mg/kg		8270D	01/23/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.43	mg/kg		8270D	01/23/14	1
2-Chlorophenol	U	0.0083	0.43	mg/kg		8270D	01/23/14	1
2,4-Dichlorophenol	U	0.0075	0.43	mg/kg		8270D	01/23/14	1
2,4-Dimethylphenol	U	0.047	0.43	mg/kg		8270D	01/23/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.43	mg/kg		8270D	01/23/14	1
2,4-Dinitrophenol	U	0.098	0.43	mg/kg		8270D	01/23/14	1
2-Nitrophenol	U	0.013	0.43	mg/kg		8270D	01/23/14	1
4-Nitrophenol	U	0.052	0.43	mg/kg		8270D	01/23/14	1
Pentachlorophenol	U	0.048	0.43	mg/kg		8270D	01/23/14	1
Phenol	U	0.0070	0.43	mg/kg		8270D	01/23/14	1
2,4,6-Trichlorophenol	U	0.0078	0.43	mg/kg		8270D	01/23/14	1
Surrogate Recovery								
2-Fluorophenol	57.1			% Rec.		8270D	01/23/14	1
Phenol-d5	64.2			% Rec.		8270D	01/23/14	1
Nitrobenzene-d5	61.5			% Rec.		8270D	01/23/14	1
2-Fluorobiphenyl	64.6			% Rec.		8270D	01/23/14	1
2,4,6-Tribromophenol	91.3			% Rec.		8270D	01/23/14	1
p-Terphenyl-d14	55.4			% Rec.		8270D	01/23/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-C 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	70.6	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.034	0.0014	0.028	mg/kg		7471	01/22/14	1
Antimony	U	1.9	7.1	mg/kg	O	6010C	01/23/14	5
Arsenic	12.	0.32	1.4	mg/kg		6010C	01/23/14	1
Beryllium	1.6	0.035	0.14	mg/kg		6010C	01/23/14	1
Cadmium	U	0.035	0.35	mg/kg		6010C	01/23/14	1
Chromium	55.	0.070	0.71	mg/kg		6010C	01/23/14	1
Copper	95.	0.26	1.4	mg/kg		6010C	01/23/14	1
Lead	7.9	0.095	0.35	mg/kg		6010C	01/23/14	1
Nickel	30.	0.24	1.4	mg/kg		6010C	01/23/14	1
Selenium	16.	1.8	7.1	mg/kg		6010C	01/23/14	5
Silver	1.4	0.14	0.71	mg/kg		6010C	01/23/14	1
Thallium	U	0.32	1.4	mg/kg		6010C	01/23/14	1
Zinc	34.	0.30	2.1	mg/kg		6010C	01/23/14	1
Volatile Organics								
Acetone	U	0.010	0.071	mg/kg		8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0071	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0071	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.071	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0071	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0035	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0071	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-C 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0071	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0071	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0071	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0071	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0071	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0035	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0042	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	95.5			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	97.8			% Rec.		8260B	01/21/14	1

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PO Box 639
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January 24,2014

ESC Sample # : L678902-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-C 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	96.0			% Rec.		8260B	01/21/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.047	mg/kg		8270D	01/23/14	1
Acenaphthylene	U	0.0067	0.047	mg/kg		8270D	01/23/14	1
Anthracene	U	0.0063	0.047	mg/kg		8270D	01/23/14	1
Benzidine	U	0.064	0.47	mg/kg		8270D	01/23/14	1
Benzo(a)anthracene	U	0.0043	0.047	mg/kg		8270D	01/23/14	1
Benzo(b)fluoranthene	U	0.0070	0.047	mg/kg		8270D	01/23/14	1
Benzo(k)fluoranthene	U	0.0058	0.047	mg/kg		8270D	01/23/14	1
Benzo(g,h,i)perylene	U	0.0072	0.047	mg/kg		8270D	01/23/14	1
Benzo(a)pyrene	U	0.0055	0.047	mg/kg		8270D	01/23/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.47	mg/kg		8270D	01/23/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.47	mg/kg		8270D	01/23/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.47	mg/kg		8270D	01/23/14	1
4-Bromophenyl-phenylether	U	0.011	0.47	mg/kg		8270D	01/23/14	1
2-Chloronaphthalene	U	0.0064	0.047	mg/kg		8270D	01/23/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.47	mg/kg		8270D	01/23/14	1
Chrysene	U	0.0056	0.047	mg/kg		8270D	01/23/14	1
Dibenz(a,h)anthracene	U	0.0082	0.047	mg/kg		8270D	01/23/14	1
3,3-Dichlorobenzidine	U	0.079	0.47	mg/kg		8270D	01/23/14	1
2,4-Dinitrotoluene	U	0.0061	0.47	mg/kg		8270D	01/23/14	1
2,6-Dinitrotoluene	U	0.0074	0.47	mg/kg		8270D	01/23/14	1
Fluoranthene	U	0.0050	0.047	mg/kg		8270D	01/23/14	1
Fluorene	U	0.0068	0.047	mg/kg		8270D	01/23/14	1
Hexachlorobenzene	U	0.0086	0.47	mg/kg		8270D	01/23/14	1
Hexachloro-1,3-butadiene	U	0.010	0.47	mg/kg		8270D	01/23/14	1
Hexachlorocyclopentadiene	U	0.059	0.47	mg/kg		8270D	01/23/14	1
Hexachloroethane	U	0.013	0.47	mg/kg		8270D	01/23/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.047	mg/kg		8270D	01/23/14	1
Isophorone	U	0.0052	0.47	mg/kg		8270D	01/23/14	1
Naphthalene	U	0.0089	0.047	mg/kg		8270D	01/23/14	1
Nitrobenzene	U	0.0070	0.47	mg/kg		8270D	01/23/14	1
n-Nitrosodimethylamine	U	0.065	0.47	mg/kg		8270D	01/23/14	1
n-Nitrosodiphenylamine	U	0.0059	0.47	mg/kg		8270D	01/23/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.47	mg/kg		8270D	01/23/14	1
Phenanthrene	U	0.0053	0.047	mg/kg		8270D	01/23/14	1
Benzylbutyl phthalate	U	0.010	0.47	mg/kg		8270D	01/23/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.47	mg/kg		8270D	01/23/14	1
Di-n-butyl phthalate	U	0.011	0.47	mg/kg		8270D	01/23/14	1
Diethyl phthalate	U	0.0069	0.47	mg/kg		8270D	01/23/14	1
Dimethyl phthalate	U	0.0054	0.47	mg/kg		8270D	01/23/14	1
Di-n-octyl phthalate	U	0.0091	0.47	mg/kg		8270D	01/23/14	1

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-C 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 15:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.047	mg/kg		8270D	01/23/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.47	mg/kg		8270D	01/23/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.47	mg/kg		8270D	01/23/14	1
2-Chlorophenol	U	0.0083	0.47	mg/kg		8270D	01/23/14	1
2,4-Dichlorophenol	U	0.0075	0.47	mg/kg		8270D	01/23/14	1
2,4-Dimethylphenol	U	0.047	0.47	mg/kg		8270D	01/23/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.47	mg/kg		8270D	01/23/14	1
2,4-Dinitrophenol	U	0.098	0.47	mg/kg		8270D	01/23/14	1
2-Nitrophenol	U	0.013	0.47	mg/kg		8270D	01/23/14	1
4-Nitrophenol	U	0.052	0.47	mg/kg		8270D	01/23/14	1
Pentachlorophenol	U	0.048	0.47	mg/kg		8270D	01/23/14	1
Phenol	U	0.0070	0.47	mg/kg		8270D	01/23/14	1
2,4,6-Trichlorophenol	U	0.0078	0.47	mg/kg		8270D	01/23/14	1
Surrogate Recovery								
2-Fluorophenol	69.2			% Rec.		8270D	01/23/14	1
Phenol-d5	73.3			% Rec.		8270D	01/23/14	1
Nitrobenzene-d5	69.7			% Rec.		8270D	01/23/14	1
2-Fluorobiphenyl	73.1			% Rec.		8270D	01/23/14	1
2,4,6-Tribromophenol	105.			% Rec.		8270D	01/23/14	1
p-Terphenyl-d14	59.9			% Rec.		8270D	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-D 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 16:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	73.4	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.26	0.0014	0.027	mg/kg		7471	01/22/14	1
Antimony	6.5	0.38	1.4	mg/kg		6010C	01/22/14	1
Arsenic	56.	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	1.2	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	0.48	0.035	0.34	mg/kg		6010C	01/22/14	1
Chromium	30.	0.070	0.68	mg/kg		6010C	01/22/14	1
Copper	61.	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	94.	0.095	0.34	mg/kg		6010C	01/22/14	1
Nickel	10.	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	6.8	mg/kg	O	6010C	01/22/14	5
Silver	0.67	0.14	0.68	mg/kg	J	6010C	01/22/14	1
Thallium	U	0.32	1.4	mg/kg		6010C	01/22/14	1
Zinc	130	0.30	2.0	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.068	mg/kg		8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0068	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0068	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.068	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0068	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0034	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0068	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-D 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 16:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0068	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0068	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0068	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0068	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0068	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0034	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0041	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	96.8			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	97.4			% Rec.		8260B	01/21/14	1

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PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678902-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-D 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 16:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	97.2			% Rec.		8260B	01/21/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.032	0.22	mg/kg		8270D	01/23/14	5
Acenaphthylene	U	0.034	0.22	mg/kg		8270D	01/23/14	5
Anthracene	U	0.032	0.22	mg/kg		8270D	01/23/14	5
Benzidine	U	0.32	2.3	mg/kg		8270D	01/23/14	5
Benzo(a)anthracene	0.18	0.021	0.22	mg/kg	J	8270D	01/23/14	5
Benzo(b)fluoranthene	0.23	0.035	0.22	mg/kg		8270D	01/23/14	5
Benzo(k)fluoranthene	0.065	0.029	0.22	mg/kg	J	8270D	01/23/14	5
Benzo(g,h,i)perylene	0.11	0.036	0.22	mg/kg	J	8270D	01/23/14	5
Benzo(a)pyrene	0.16	0.027	0.22	mg/kg	J	8270D	01/23/14	5
Bis(2-chlorethoxy)methane	U	0.038	2.3	mg/kg		8270D	01/23/14	5
Bis(2-chloroethyl)ether	U	0.045	2.3	mg/kg		8270D	01/23/14	5
Bis(2-chloroisopropyl)ether	U	0.038	2.3	mg/kg		8270D	01/23/14	5
4-Bromophenyl-phenylether	U	0.057	2.3	mg/kg		8270D	01/23/14	5
2-Chloronaphthalene	U	0.032	0.22	mg/kg		8270D	01/23/14	5
4-Chlorophenyl-phenylether	U	0.031	2.3	mg/kg		8270D	01/23/14	5
Chrysene	0.18	0.028	0.22	mg/kg	J	8270D	01/23/14	5
Dibenz(a,h)anthracene	U	0.041	0.22	mg/kg		8270D	01/23/14	5
3,3-Dichlorobenzidine	U	0.40	2.3	mg/kg		8270D	01/23/14	5
2,4-Dinitrotoluene	U	0.030	2.3	mg/kg		8270D	01/23/14	5
2,6-Dinitrotoluene	U	0.037	2.3	mg/kg		8270D	01/23/14	5
Fluoranthene	0.31	0.025	0.22	mg/kg		8270D	01/23/14	5
Fluorene	U	0.034	0.22	mg/kg		8270D	01/23/14	5
Hexachlorobenzene	U	0.043	2.3	mg/kg		8270D	01/23/14	5
Hexachloro-1,3-butadiene	U	0.050	2.3	mg/kg		8270D	01/23/14	5
Hexachlorocyclopentadiene	U	0.29	2.3	mg/kg		8270D	01/23/14	5
Hexachloroethane	U	0.067	2.3	mg/kg		8270D	01/23/14	5
Indeno(1,2,3-cd)pyrene	0.097	0.039	0.22	mg/kg	J	8270D	01/23/14	5
Isophorone	U	0.026	2.3	mg/kg		8270D	01/23/14	5
Naphthalene	U	0.044	0.22	mg/kg		8270D	01/23/14	5
Nitrobenzene	U	0.035	2.3	mg/kg		8270D	01/23/14	5
n-Nitrosodimethylamine	U	0.32	2.3	mg/kg		8270D	01/23/14	5
n-Nitrosodiphenylamine	U	0.030	2.3	mg/kg		8270D	01/23/14	5
n-Nitrosodi-n-propylamine	U	0.045	2.3	mg/kg		8270D	01/23/14	5
Phenanthrene	0.12	0.026	0.22	mg/kg	J	8270D	01/23/14	5
Benzylbutyl phthalate	U	0.052	2.3	mg/kg		8270D	01/23/14	5
Bis(2-ethylhexyl)phthalate	U	0.060	2.3	mg/kg		8270D	01/23/14	5
Di-n-butyl phthalate	U	0.054	2.3	mg/kg		8270D	01/23/14	5
Diethyl phthalate	U	0.034	2.3	mg/kg		8270D	01/23/14	5
Dimethyl phthalate	U	0.027	2.3	mg/kg		8270D	01/23/14	5
Di-n-octyl phthalate	U	0.045	2.3	mg/kg		8270D	01/23/14	5

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REPORT OF ANALYSIS

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January 24,2014

ESC Sample # : L678902-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-D 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 16:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	0.29	0.062	0.22	mg/kg		8270D	01/23/14	5
1,2,4-Trichlorobenzene	U	0.044	2.3	mg/kg		8270D	01/23/14	5
Acid Extractables								
4-Chloro-3-methylphenol	U	0.024	2.3	mg/kg		8270D	01/23/14	5
2-Chlorophenol	U	0.042	2.3	mg/kg		8270D	01/23/14	5
2,4-Dichlorophenol	U	0.037	2.3	mg/kg		8270D	01/23/14	5
2,4-Dimethylphenol	U	0.24	2.3	mg/kg		8270D	01/23/14	5
4,6-Dinitro-2-methylphenol	U	0.62	2.3	mg/kg		8270D	01/23/14	5
2,4-Dinitrophenol	U	0.49	2.3	mg/kg		8270D	01/23/14	5
2-Nitrophenol	U	0.065	2.3	mg/kg		8270D	01/23/14	5
4-Nitrophenol	U	0.26	2.3	mg/kg		8270D	01/23/14	5
Pentachlorophenol	U	0.24	2.3	mg/kg		8270D	01/23/14	5
Phenol	U	0.035	2.3	mg/kg		8270D	01/23/14	5
2,4,6-Trichlorophenol	U	0.039	2.3	mg/kg		8270D	01/23/14	5
Surrogate Recovery								
2-Fluorophenol	50.2			% Rec.		8270D	01/23/14	5
Phenol-d5	55.2			% Rec.		8270D	01/23/14	5
Nitrobenzene-d5	64.7			% Rec.		8270D	01/23/14	5
2-Fluorobiphenyl	53.5			% Rec.		8270D	01/23/14	5
2,4,6-Tribromophenol	66.8			% Rec.		8270D	01/23/14	5
p-Terphenyl-d14	34.2			% Rec.		8270D	01/23/14	5

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678902-09

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-E 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 16:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	85.0	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	1.5	0.0070	0.12	mg/kg		7471	01/22/14	5
Antimony	6.8	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	25.	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.0	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.47	0.035	0.29	mg/kg		6010C	01/22/14	1
Chromium	26.	0.070	0.59	mg/kg		6010C	01/22/14	1
Copper	60.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	59.	0.095	0.29	mg/kg		6010C	01/22/14	1
Nickel	9.9	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	U	1.8	5.9	mg/kg	O	6010C	01/22/14	5
Silver	0.78	0.14	0.59	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	92.	0.30	1.8	mg/kg		6010C	01/22/14	1
Volatile Organics								
Acetone	U	0.010	0.059	mg/kg		8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.012	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0012	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0012	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0059	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0012	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0012	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0012	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0059	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.059	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0059	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0029	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0059	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0012	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0012	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0012	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678902-09

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-E 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 16:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0059	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0012	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0012	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0012	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0012	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0012	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0012	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.012	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0059	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.012	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0059	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0012	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0012	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0059	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0012	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0012	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0012	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0059	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0029	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0012	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0035	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	96.2			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	97.7			% Rec.		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678902-09

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-E 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 16:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	96.1			% Rec.		8260B	01/21/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.039	mg/kg		8270D	01/23/14	1
Acenaphthylene	U	0.0067	0.039	mg/kg		8270D	01/23/14	1
Anthracene	U	0.0063	0.039	mg/kg		8270D	01/23/14	1
Benzidine	U	0.064	0.39	mg/kg		8270D	01/23/14	1
Benzo(a)anthracene	0.015	0.0043	0.039	mg/kg	J	8270D	01/23/14	1
Benzo(b)fluoranthene	0.015	0.0070	0.039	mg/kg	J	8270D	01/23/14	1
Benzo(k)fluoranthene	U	0.0058	0.039	mg/kg		8270D	01/23/14	1
Benzo(g,h,i)perylene	0.0085	0.0072	0.039	mg/kg	J	8270D	01/23/14	1
Benzo(a)pyrene	0.013	0.0055	0.039	mg/kg	J	8270D	01/23/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.39	mg/kg		8270D	01/23/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.39	mg/kg		8270D	01/23/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.39	mg/kg		8270D	01/23/14	1
4-Bromophenyl-phenylether	U	0.011	0.39	mg/kg		8270D	01/23/14	1
2-Chloronaphthalene	U	0.0064	0.039	mg/kg		8270D	01/23/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.39	mg/kg		8270D	01/23/14	1
Chrysene	0.015	0.0056	0.039	mg/kg	J	8270D	01/23/14	1
Dibenz(a,h)anthracene	U	0.0082	0.039	mg/kg		8270D	01/23/14	1
3,3-Dichlorobenzidine	U	0.079	0.39	mg/kg		8270D	01/23/14	1
2,4-Dinitrotoluene	U	0.0061	0.39	mg/kg		8270D	01/23/14	1
2,6-Dinitrotoluene	U	0.0074	0.39	mg/kg		8270D	01/23/14	1
Fluoranthene	0.020	0.0050	0.039	mg/kg	J	8270D	01/23/14	1
Fluorene	U	0.0068	0.039	mg/kg		8270D	01/23/14	1
Hexachlorobenzene	U	0.0086	0.39	mg/kg		8270D	01/23/14	1
Hexachloro-1,3-butadiene	U	0.010	0.39	mg/kg		8270D	01/23/14	1
Hexachlorocyclopentadiene	U	0.059	0.39	mg/kg		8270D	01/23/14	1
Hexachloroethane	U	0.013	0.39	mg/kg		8270D	01/23/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.039	mg/kg		8270D	01/23/14	1
Isophorone	U	0.0052	0.39	mg/kg		8270D	01/23/14	1
Naphthalene	U	0.0089	0.039	mg/kg		8270D	01/23/14	1
Nitrobenzene	U	0.0070	0.39	mg/kg		8270D	01/23/14	1
n-Nitrosodimethylamine	U	0.065	0.39	mg/kg		8270D	01/23/14	1
n-Nitrosodiphenylamine	U	0.0059	0.39	mg/kg		8270D	01/23/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.39	mg/kg		8270D	01/23/14	1
Phenanthrene	0.021	0.0053	0.039	mg/kg	J	8270D	01/23/14	1
Benzylbutyl phthalate	U	0.010	0.39	mg/kg		8270D	01/23/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.39	mg/kg		8270D	01/23/14	1
Di-n-butyl phthalate	U	0.011	0.39	mg/kg		8270D	01/23/14	1
Diethyl phthalate	U	0.0069	0.39	mg/kg		8270D	01/23/14	1
Dimethyl phthalate	U	0.0054	0.39	mg/kg		8270D	01/23/14	1
Di-n-octyl phthalate	U	0.0091	0.39	mg/kg		8270D	01/23/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678902-09

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-E 1-2FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 16:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	0.021	0.012	0.039	mg/kg	J	8270D	01/23/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.39	mg/kg		8270D	01/23/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.39	mg/kg		8270D	01/23/14	1
2-Chlorophenol	U	0.0083	0.39	mg/kg		8270D	01/23/14	1
2,4-Dichlorophenol	U	0.0075	0.39	mg/kg		8270D	01/23/14	1
2,4-Dimethylphenol	U	0.047	0.39	mg/kg		8270D	01/23/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.39	mg/kg		8270D	01/23/14	1
2,4-Dinitrophenol	U	0.098	0.39	mg/kg		8270D	01/23/14	1
2-Nitrophenol	U	0.013	0.39	mg/kg		8270D	01/23/14	1
4-Nitrophenol	U	0.052	0.39	mg/kg		8270D	01/23/14	1
Pentachlorophenol	U	0.048	0.39	mg/kg		8270D	01/23/14	1
Phenol	U	0.0070	0.39	mg/kg		8270D	01/23/14	1
2,4,6-Trichlorophenol	U	0.0078	0.39	mg/kg		8270D	01/23/14	1
Surrogate Recovery								
2-Fluorophenol	58.2			% Rec.		8270D	01/23/14	1
Phenol-d5	61.9			% Rec.		8270D	01/23/14	1
Nitrobenzene-d5	64.6			% Rec.		8270D	01/23/14	1
2-Fluorobiphenyl	58.8			% Rec.		8270D	01/23/14	1
2,4,6-Tribromophenol	79.5			% Rec.		8270D	01/23/14	1
p-Terphenyl-d14	42.3			% Rec.		8270D	01/23/14	1

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REPORT OF ANALYSIS

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PO Box 639
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January 24, 2014

ESC Sample # : L678902-10

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/21/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/21/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/21/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/21/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/21/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/21/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/21/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/21/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/21/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/21/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/21/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/21/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/21/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/21/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/21/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/21/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/21/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/21/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/21/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/21/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/21/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/21/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/21/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/21/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/21/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/21/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/21/14	1

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January 24, 2014

ESC Sample # : L678902-10

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/21/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/21/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/21/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/21/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/21/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/21/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/21/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/21/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/21/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	94.5			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	100.			% Rec.		8260B	01/21/14	1
4-Bromofluorobenzene	99.6			% Rec.		8260B	01/21/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
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Reported: 01/24/14 12:03 Printed: 01/24/14 12:04

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678902-01	WG702232	SAMP	Acetone	R2878186	J3
	WG702232	SAMP	Acrylonitrile	R2878186	J4J3
	WG702232	SAMP	Benzene	R2878186	J6J3
	WG702232	SAMP	Bromobenzene	R2878186	J6J3
	WG702232	SAMP	Bromodichloromethane	R2878186	J6J3
	WG702232	SAMP	Bromoform	R2878186	J6J3
	WG702232	SAMP	Bromomethane	R2878186	J3
	WG702232	SAMP	n-Butylbenzene	R2878186	J6J3
	WG702232	SAMP	sec-Butylbenzene	R2878186	J6J3
	WG702232	SAMP	tert-Butylbenzene	R2878186	J6J3
	WG702232	SAMP	Carbon tetrachloride	R2878186	J6J3
	WG702232	SAMP	Chlorobenzene	R2878186	J6J3
	WG702232	SAMP	Chlorodibromomethane	R2878186	J6J3
	WG702232	SAMP	Chloroethane	R2878186	J3
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	Chloroform	R2878186	J6J3
	WG702232	SAMP	Chloromethane	R2878186	J3
	WG702232	SAMP	2-Chlorotoluene	R2878186	J6J3
	WG702232	SAMP	4-Chlorotoluene	R2878186	J6J3
	WG702232	SAMP	1,2-Dibromo-3-Chloropropane	R2878186	J6J3
	WG702232	SAMP	1,2-Dibromoethane	R2878186	J6J3
	WG702232	SAMP	Dibromomethane	R2878186	J6J3
	WG702232	SAMP	1,2-Dichlorobenzene	R2878186	J6J3
	WG702232	SAMP	1,3-Dichlorobenzene	R2878186	J6J3
	WG702232	SAMP	1,4-Dichlorobenzene	R2878186	J6J3
	WG702232	SAMP	Dichlorodifluoromethane	R2878186	J3
	WG702232	SAMP	1,1-Dichloroethane	R2878186	J6J3
	WG702232	SAMP	1,2-Dichloroethane	R2878186	J6J3
	WG702232	SAMP	1,1-Dichloroethene	R2878186	J6J3
	WG702232	SAMP	cis-1,2-Dichloroethene	R2878186	J6J3
	WG702232	SAMP	trans-1,2-Dichloroethene	R2878186	J6J3
	WG702232	SAMP	1,2-Dichloropropane	R2878186	J6J3
	WG702232	SAMP	1,1-Dichloropropene	R2878186	J6J3
	WG702232	SAMP	1,3-Dichloropropane	R2878186	J6J3
	WG702232	SAMP	cis-1,3-Dichloropropene	R2878186	J6J3
	WG702232	SAMP	trans-1,3-Dichloropropene	R2878186	J6J3
	WG702232	SAMP	2,2-Dichloropropane	R2878186	J6J3
	WG702232	SAMP	Di-isopropyl ether	R2878186	J6J3
	WG702232	SAMP	Ethylbenzene	R2878186	J6J3
	WG702232	SAMP	Hexachloro-1,3-butadiene	R2878186	J6J3
	WG702232	SAMP	Isopropylbenzene	R2878186	J6J3
	WG702232	SAMP	p-Isopropyltoluene	R2878186	J6J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702232	SAMP	Methylene Chloride	R2878186	J6J3
	WG702232	SAMP	4-Methyl-2-pentanone (MIBK)	R2878186	J6J3
	WG702232	SAMP	Methyl tert-butyl ether	R2878186	J6J3
	WG702232	SAMP	Naphthalene	R2878186	J6J3
	WG702232	SAMP	n-Propylbenzene	R2878186	J3
	WG702232	SAMP	Styrene	R2878186	J6J3
	WG702232	SAMP	1,1,1,2-Tetrachloroethane	R2878186	J6J3
	WG702232	SAMP	1,1,2,2-Tetrachloroethane	R2878186	J6J3
	WG702232	SAMP	Tetrachloroethene	R2878186	J6J3
	WG702232	SAMP	Toluene	R2878186	J6J3
	WG702232	SAMP	1,2,3-Trichlorobenzene	R2878186	J6J3
	WG702232	SAMP	1,2,4-Trichlorobenzene	R2878186	J6J3
	WG702232	SAMP	1,1,1-Trichloroethane	R2878186	J6J3
	WG702232	SAMP	1,1,2-Trichloroethane	R2878186	J6J3
	WG702232	SAMP	Trichloroethene	R2878186	J3
	WG702232	SAMP	Trichlorofluoromethane	R2878186	J6J3
	WG702232	SAMP	1,2,3-Trichloropropane	R2878186	J6J3
	WG702232	SAMP	1,2,4-Trimethylbenzene	R2878186	J6J3
	WG702232	SAMP	1,3,5-Trimethylbenzene	R2878186	J6J3
	WG702232	SAMP	Vinyl chloride	R2878186	J3
	WG702232	SAMP	Xylenes, Total	R2878186	J3J6
	WG702285	SAMP	Selenium	R2878638	J
	WG702285	SAMP	Silver	R2878638	O
L678902-02	WG702461	SAMP	Mercury	R2878320	JO1
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702285	SAMP	Silver	R2878638	O
	WG702285	SAMP	Thallium	R2878638	J
L678902-03	WG702802	SAMP	Acenaphthene	R2878861	O
	WG702802	SAMP	Acenaphthylene	R2878861	O
	WG702802	SAMP	Anthracene	R2878861	O
	WG702802	SAMP	Benzidine	R2878861	O
	WG702802	SAMP	Benzo(a)anthracene	R2878861	O
	WG702802	SAMP	Benzo(b)fluoranthene	R2878861	O
	WG702802	SAMP	Benzo(k)fluoranthene	R2878861	O
	WG702802	SAMP	Benzo(g,h,i)perylene	R2878861	O
	WG702802	SAMP	Benzo(a)pyrene	R2878861	O
	WG702802	SAMP	Bis(2-chlorethoxy)methane	R2878861	O
	WG702802	SAMP	Bis(2-chloroethyl)ether	R2878861	O
	WG702802	SAMP	Bis(2-chloroisopropyl)ether	R2878861	O
	WG702802	SAMP	4-Bromophenyl-phenylether	R2878861	O
	WG702802	SAMP	2-Chloronaphthalene	R2878861	O
	WG702802	SAMP	4-Chlorophenyl-phenylether	R2878861	O
	WG702802	SAMP	Chrysene	R2878861	O
	WG702802	SAMP	Dibenz(a,h)anthracene	R2878861	O
	WG702802	SAMP	3,3-Dichlorobenzidine	R2878861	O
	WG702802	SAMP	2,4-Dinitrotoluene	R2878861	O
	WG702802	SAMP	2,6-Dinitrotoluene	R2878861	O
	WG702802	SAMP	Fluoranthene	R2878861	O
	WG702802	SAMP	Fluorene	R2878861	O
	WG702802	SAMP	Hexachlorobenzene	R2878861	O
	WG702802	SAMP	Hexachloro-1,3-butadiene	R2878861	O
	WG702802	SAMP	Hexachlorocyclopentadiene	R2878861	O
	WG702802	SAMP	Hexachloroethane	R2878861	O
	WG702802	SAMP	Indeno(1,2,3-cd)pyrene	R2878861	O
	WG702802	SAMP	Isophorone	R2878861	O
	WG702802	SAMP	Naphthalene	R2878861	O
	WG702802	SAMP	Nitrobenzene	R2878861	O
	WG702802	SAMP	n-Nitrosodimethylamine	R2878861	O
	WG702802	SAMP	n-Nitrosodiphenylamine	R2878861	O
	WG702802	SAMP	n-Nitrosodi-n-propylamine	R2878861	O
	WG702802	SAMP	Phenanthrene	R2878861	O
	WG702802	SAMP	Benzylbutyl phthalate	R2878861	O
	WG702802	SAMP	Bis(2-ethylhexyl)phthalate	R2878861	O
	WG702802	SAMP	Di-n-butyl phthalate	R2878861	O
	WG702802	SAMP	Diethyl phthalate	R2878861	O
	WG702802	SAMP	Dimethyl phthalate	R2878861	O
	WG702802	SAMP	Di-n-octyl phthalate	R2878861	O
	WG702802	SAMP	Pyrene	R2878861	O
	WG702802	SAMP	1,2,4-Trichlorobenzene	R2878861	O
	WG702802	SAMP	4-Chloro-3-methylphenol	R2878861	O
	WG702802	SAMP	2-Chlorophenol	R2878861	O
	WG702802	SAMP	2,4-Dichlorophenol	R2878861	O
	WG702802	SAMP	2,4-Dimethylphenol	R2878861	OJ
	WG702802	SAMP	4,6-Dinitro-2-methylphenol	R2878861	O
	WG702802	SAMP	2,4-Dinitrophenol	R2878861	O
	WG702802	SAMP	2-Nitrophenol	R2878861	O
	WG702802	SAMP	4-Nitrophenol	R2878861	O
	WG702802	SAMP	Pentachlorophenol	R2878861	O
	WG702802	SAMP	Phenol	R2878861	O
	WG702802	SAMP	2,4,6-Trichlorophenol	R2878861	O
	WG702802	SAMP	2-Fluorophenol	R2878861	J7
	WG702802	SAMP	Phenol-d5	R2878861	J7
	WG702802	SAMP	Nitrobenzene-d5	R2878861	J7
	WG702802	SAMP	2-Fluorobiphenyl	R2878861	J7
	WG702802	SAMP	2,4,6-Tribromophenol	R2878861	J7
	WG702802	SAMP	p-Terphenyl-d14	R2878861	J7
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702285	SAMP	Silver	R2878638	O
L678902-04	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702286	SAMP	Cadmium	R2878381	J

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
	WG702286	SAMP	Selenium	R2878381	O
	WG702286	SAMP	Thallium	R2878381	O
L678902-05	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702286	SAMP	Selenium	R2878381	O
L678902-06	WG702461	SAMP	Mercury	R2878320	J
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702286	SAMP	Cadmium	R2878381	J
	WG702286	SAMP	Selenium	R2878381	O
	WG702286	SAMP	Silver	R2878381	J
L678902-07	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702327	SAMP	Antimony	R2879060	O
L678902-08	WG702802	SAMP	Benzo(a)anthracene	R2878823	J
	WG702802	SAMP	Benzo(k)fluoranthene	R2878823	J
	WG702802	SAMP	Benzo(g,h,i)perylene	R2878823	J
	WG702802	SAMP	Benzo(a)pyrene	R2878823	J
	WG702802	SAMP	Chrysene	R2878823	J
	WG702802	SAMP	Indeno(1,2,3-cd)pyrene	R2878823	J
	WG702802	SAMP	Phenanthrene	R2878823	J
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702286	SAMP	Selenium	R2878381	O
	WG702286	SAMP	Silver	R2878381	J
L678902-09	WG702802	SAMP	Benzo(a)anthracene	R2878823	J
	WG702802	SAMP	Benzo(b)fluoranthene	R2878823	J
	WG702802	SAMP	Benzo(g,h,i)perylene	R2878823	J
	WG702802	SAMP	Benzo(a)pyrene	R2878823	J
	WG702802	SAMP	Chrysene	R2878823	J
	WG702802	SAMP	Fluoranthene	R2878823	J
	WG702802	SAMP	Phenanthrene	R2878823	J
	WG702802	SAMP	Pyrene	R2878823	J
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702286	SAMP	Selenium	R2878381	O

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/24/14 at 12:04:58

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678902-01 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

Sample: L678902-02 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

Sample: L678902-03 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

Sample: L678902-04 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

Sample: L678902-05 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

Sample: L678902-06 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

Sample: L678902-07 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

Sample: L678902-08 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

Sample: L678902-09 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

Sample: L678902-10 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/24/14 12:03

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678902

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,1-Trichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,2-Trichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,3-Trichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,3-Trichloropropane	< .0025	mg/kg			WG702232	01/21/14 12:10
1,2,4-Trichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,4-Trimethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG702232	01/21/14 12:10
1,2-Dibromoethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
1,3,5-Trimethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,3-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,3-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
1,4-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
2,2-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
2-Butanone (MEK)	< .01	mg/kg			WG702232	01/21/14 12:10
2-Chloroethyl vinyl ether	< .05	mg/kg			WG702232	01/21/14 12:10
2-Chlorotoluene	< .001	mg/kg			WG702232	01/21/14 12:10
4-Chlorotoluene	< .001	mg/kg			WG702232	01/21/14 12:10
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG702232	01/21/14 12:10
Acetone	< .05	mg/kg			WG702232	01/21/14 12:10
Acrylonitrile	< .01	mg/kg			WG702232	01/21/14 12:10
Benzene	< .001	mg/kg			WG702232	01/21/14 12:10
Bromobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Bromodichloromethane	< .001	mg/kg			WG702232	01/21/14 12:10
Bromoform	< .001	mg/kg			WG702232	01/21/14 12:10
Bromomethane	< .005	mg/kg			WG702232	01/21/14 12:10
Carbon tetrachloride	< .001	mg/kg			WG702232	01/21/14 12:10
Chlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Chlorodibromomethane	< .001	mg/kg			WG702232	01/21/14 12:10
Chloroethane	< .005	mg/kg			WG702232	01/21/14 12:10
Chloroform	< .005	mg/kg			WG702232	01/21/14 12:10
Chloromethane	< .0025	mg/kg			WG702232	01/21/14 12:10
cis-1,2-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
cis-1,3-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
Di-isopropyl ether	< .001	mg/kg			WG702232	01/21/14 12:10
Dibromomethane	< .001	mg/kg			WG702232	01/21/14 12:10
Dichlorodifluoromethane	< .005	mg/kg			WG702232	01/21/14 12:10
Ethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Hexachloro-1,3-butadiene	< .001	mg/kg			WG702232	01/21/14 12:10
Isopropylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Methyl tert-butyl ether	< .001	mg/kg			WG702232	01/21/14 12:10
Methylene Chloride	< .005	mg/kg			WG702232	01/21/14 12:10
n-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
n-Propylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Naphthalene	< .005	mg/kg			WG702232	01/21/14 12:10
p-Isopropyltoluene	< .001	mg/kg			WG702232	01/21/14 12:10
sec-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Styrene	< .001	mg/kg			WG702232	01/21/14 12:10
tert-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Tetrachloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
Toluene	< .005	mg/kg			WG702232	01/21/14 12:10
trans-1,2-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10

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Quality Assurance Report
Level II

L678902

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
trans-1,3-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
Trichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
Trichlorofluoromethane	< .005	mg/kg			WG702232	01/21/14 12:10
Vinyl chloride	< .001	mg/kg			WG702232	01/21/14 12:10
Xylenes, Total	< .003	mg/kg			WG702232	01/21/14 12:10
4-Bromofluorobenzene		% Rec.	99.50	71-126	WG702232	01/21/14 12:10
Dibromofluoromethane		% Rec.	98.00	78.3-121	WG702232	01/21/14 12:10
Toluene-d8		% Rec.	104.0	88.5-111	WG702232	01/21/14 12:10
a,a,a-Trifluorotoluene		% Rec.	101.0	85-114	WG702232	01/21/14 12:10
Total Solids	< .1	%			WG702527	01/22/14 08:42
Total Solids	< .1	%			WG702528	01/22/14 08:47
Mercury	< .02	mg/kg			WG702461	01/22/14 08:33
Antimony	< 1	mg/kg			WG702286	01/22/14 04:43
Arsenic	< 1	mg/kg			WG702286	01/22/14 04:43
Beryllium	< .1	mg/kg			WG702286	01/22/14 04:43
Cadmium	< .25	mg/kg			WG702286	01/22/14 04:43
Chromium	< .5	mg/kg			WG702286	01/22/14 04:43
Copper	< 1	mg/kg			WG702286	01/22/14 04:43
Lead	< .25	mg/kg			WG702286	01/22/14 04:43
Nickel	< 1	mg/kg			WG702286	01/22/14 04:43
Selenium	< 1	mg/kg			WG702286	01/22/14 04:43
Silver	< .5	mg/kg			WG702286	01/22/14 04:43
Thallium	< 1	mg/kg			WG702286	01/22/14 04:43
Zinc	< 1.5	mg/kg			WG702286	01/22/14 04:43
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1,1-Trichloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1,2-Trichloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1-Dichloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1-Dichloroethene	< .001	mg/l			WG702215	01/21/14 22:24
1,1-Dichloropropene	< .001	mg/l			WG702215	01/21/14 22:24
1,2,3-Trichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,2,3-Trichloropropane	< .001	mg/l			WG702215	01/21/14 22:24
1,2,4-Trichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,2,4-Trimethylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG702215	01/21/14 22:24
1,2-Dibromoethane	< .001	mg/l			WG702215	01/21/14 22:24
1,2-Dichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,2-Dichloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,2-Dichloropropane	< .001	mg/l			WG702215	01/21/14 22:24
1,3,5-Trimethylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,3-Dichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,3-Dichloropropane	< .001	mg/l			WG702215	01/21/14 22:24
1,4-Dichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
2,2-Dichloropropane	< .001	mg/l			WG702215	01/21/14 22:24
2-Butanone (MEK)	< .01	mg/l			WG702215	01/21/14 22:24
2-Chloroethyl vinyl ether	< .05	mg/l			WG702215	01/21/14 22:24
2-Chlorotoluene	< .001	mg/l			WG702215	01/21/14 22:24
4-Chlorotoluene	< .001	mg/l			WG702215	01/21/14 22:24

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Quality Assurance Report
Level II

L678902

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG702215	01/21/14 22:24
Acetone	< .05	mg/l			WG702215	01/21/14 22:24
Acrolein	< .025	mg/l			WG702215	01/21/14 22:24
Acrylonitrile	< .01	mg/l			WG702215	01/21/14 22:24
Benzene	< .001	mg/l			WG702215	01/21/14 22:24
Bromobenzene	< .001	mg/l			WG702215	01/21/14 22:24
Bromodichloromethane	< .001	mg/l			WG702215	01/21/14 22:24
Bromoform	< .001	mg/l			WG702215	01/21/14 22:24
Bromomethane	< .005	mg/l			WG702215	01/21/14 22:24
Carbon tetrachloride	< .001	mg/l			WG702215	01/21/14 22:24
Chlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
Chlorodibromomethane	< .001	mg/l			WG702215	01/21/14 22:24
Chloroethane	< .005	mg/l			WG702215	01/21/14 22:24
Chloroform	< .005	mg/l			WG702215	01/21/14 22:24
Chloromethane	< .0025	mg/l			WG702215	01/21/14 22:24
cis-1,2-Dichloroethene	< .001	mg/l			WG702215	01/21/14 22:24
cis-1,3-Dichloropropene	< .001	mg/l			WG702215	01/21/14 22:24
Di-isopropyl ether	< .001	mg/l			WG702215	01/21/14 22:24
Dibromomethane	< .001	mg/l			WG702215	01/21/14 22:24
Dichlorodifluoromethane	< .005	mg/l			WG702215	01/21/14 22:24
Ethylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Hexachloro-1,3-butadiene	< .001	mg/l			WG702215	01/21/14 22:24
Isopropylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Methyl tert-butyl ether	< .001	mg/l			WG702215	01/21/14 22:24
Methylene Chloride	< .005	mg/l			WG702215	01/21/14 22:24
n-Butylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
n-Propylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Naphthalene	< .005	mg/l			WG702215	01/21/14 22:24
p-Isopropyltoluene	< .001	mg/l			WG702215	01/21/14 22:24
sec-Butylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Styrene	< .001	mg/l			WG702215	01/21/14 22:24
tert-Butylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Tetrachloroethene	< .001	mg/l			WG702215	01/21/14 22:24
Toluene	< .005	mg/l			WG702215	01/21/14 22:24
trans-1,2-Dichloroethene	< .001	mg/l			WG702215	01/21/14 22:24
trans-1,3-Dichloropropene	< .001	mg/l			WG702215	01/21/14 22:24
Trichloroethene	< .001	mg/l			WG702215	01/21/14 22:24
Trichlorofluoromethane	< .005	mg/l			WG702215	01/21/14 22:24
Vinyl chloride	< .001	mg/l			WG702215	01/21/14 22:24
Xylenes, Total	< .003	mg/l			WG702215	01/21/14 22:24
4-Bromofluorobenzene		% Rec.	101.0	71-126	WG702215	01/21/14 22:24
Dibromofluoromethane		% Rec.	99.00	78.3-121	WG702215	01/21/14 22:24
Toluene-d8		% Rec.	103.0	88.5-111	WG702215	01/21/14 22:24
a,a,a-Trifluorotoluene		% Rec.	102.0	85-114	WG702215	01/21/14 22:24
Mercury	< .02	mg/kg			WG702460	01/22/14 16:08
Antimony	< 1	mg/kg			WG702285	01/22/14 16:04
Arsenic	< 1	mg/kg			WG702285	01/22/14 16:04
Beryllium	< .1	mg/kg			WG702285	01/22/14 16:04
Cadmium	< .25	mg/kg			WG702285	01/22/14 16:04
Chromium	< .5	mg/kg			WG702285	01/22/14 16:04
Copper	< 1	mg/kg			WG702285	01/22/14 16:04
Lead	< .25	mg/kg			WG702285	01/22/14 16:04
Nickel	< 1	mg/kg			WG702285	01/22/14 16:04
Selenium	< 1	mg/kg			WG702285	01/22/14 16:04
Silver	< .5	mg/kg			WG702285	01/22/14 16:04

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Quality Assurance Report
Level II

L678902

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Thallium	< 1	mg/kg			WG702285	01/22/14 16:04
Zinc	< 1.5	mg/kg			WG702285	01/22/14 16:04
1,2,4-Trichlorobenzene	< .333	mg/kg			WG702802	01/23/14 04:31
2,4,6-Trichlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dichlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dimethylphenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dinitrophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dinitrotoluene	< .333	mg/kg			WG702802	01/23/14 04:31
2,6-Dinitrotoluene	< .333	mg/kg			WG702802	01/23/14 04:31
2-Chloronaphthalene	< .033	mg/kg			WG702802	01/23/14 04:31
2-Chlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2-Nitrophenol	< .333	mg/kg			WG702802	01/23/14 04:31
3,3-Dichlorobenzidine	< .333	mg/kg			WG702802	01/23/14 04:31
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG702802	01/23/14 04:31
4-Bromophenyl-phenylether	< .333	mg/kg			WG702802	01/23/14 04:31
4-Chloro-3-methylphenol	< .333	mg/kg			WG702802	01/23/14 04:31
4-Chlorophenyl-phenylether	< .333	mg/kg			WG702802	01/23/14 04:31
4-Nitrophenol	< .333	mg/kg			WG702802	01/23/14 04:31
Acenaphthene	< .033	mg/kg			WG702802	01/23/14 04:31
Acenaphthylene	< .033	mg/kg			WG702802	01/23/14 04:31
Anthracene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzidine	< .333	mg/kg			WG702802	01/23/14 04:31
Benzo(a)anthracene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(a)pyrene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(b)fluoranthene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(g,h,i)perylene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(k)fluoranthene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzylbutyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-chloroethyl)ether	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Chrysene	< .033	mg/kg			WG702802	01/23/14 04:31
Di-n-butyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Di-n-octyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Dibenz(a,h)anthracene	< .033	mg/kg			WG702802	01/23/14 04:31
Diethyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Dimethyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Fluoranthene	< .033	mg/kg			WG702802	01/23/14 04:31
Fluorene	< .033	mg/kg			WG702802	01/23/14 04:31
Hexachloro-1,3-butadiene	< .333	mg/kg			WG702802	01/23/14 04:31
Hexachlorobenzene	< .333	mg/kg			WG702802	01/23/14 04:31
Hexachlorocyclopentadiene	< .333	mg/kg			WG702802	01/23/14 04:31
Hexachloroethane	< .333	mg/kg			WG702802	01/23/14 04:31
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG702802	01/23/14 04:31
Isophorone	< .333	mg/kg			WG702802	01/23/14 04:31
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG702802	01/23/14 04:31
n-Nitrosodimethylamine	< .333	mg/kg			WG702802	01/23/14 04:31
n-Nitrosodiphenylamine	< .333	mg/kg			WG702802	01/23/14 04:31
Naphthalene	< .033	mg/kg			WG702802	01/23/14 04:31
Nitrobenzene	< .333	mg/kg			WG702802	01/23/14 04:31
Pentachlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
Phenanthrene	< .033	mg/kg			WG702802	01/23/14 04:31
Phenol	< .333	mg/kg			WG702802	01/23/14 04:31
Pyrene	< .033	mg/kg			WG702802	01/23/14 04:31
2,4,6-Tribromophenol		% Rec.	93.60	21.6-142	WG702802	01/23/14 04:31
2-Fluorobiphenyl		% Rec.	68.00	34.9-129	WG702802	01/23/14 04:31

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Quality Assurance Report
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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
2-Fluorophenol		% Rec.	70.60	21.1-116		01/23/14 04:31
Nitrobenzene-d5		% Rec.	72.10	21.9-129		01/23/14 04:31
Phenol-d5		% Rec.	76.70	26.3-121		01/23/14 04:31
p-Terphenyl-d14		% Rec.	77.40	21.5-128		01/23/14 04:31
Antimony	< 1	mg/kg			WG702327	01/23/14 12:15
Arsenic	< 1	mg/kg			WG702327	01/23/14 12:15
Beryllium	< .1	mg/kg			WG702327	01/23/14 12:15
Cadmium	< .25	mg/kg			WG702327	01/23/14 12:15
Chromium	< .5	mg/kg			WG702327	01/23/14 12:15
Copper	< 1	mg/kg			WG702327	01/23/14 12:15
Lead	< .25	mg/kg			WG702327	01/23/14 12:15
Nickel	< 1	mg/kg			WG702327	01/23/14 12:15
Selenium	< 1	mg/kg			WG702327	01/23/14 12:15
Silver	< .5	mg/kg			WG702327	01/23/14 12:15
Thallium	< 1	mg/kg			WG702327	01/23/14 12:15
Zinc	< 1.5	mg/kg			WG702327	01/23/14 12:15

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	76.9	76.6	0.331	5	L678902-01	WG702527
Total Solids	%	81.8	78.9	3.64	5	L678922-01	WG702528
Mercury	mg/kg	0.0	0.0141	5.00	20	L678902-02	WG702461
Antimony	mg/kg	6.80	5.19	27.0*	20	L678779-03	WG702286
Arsenic	mg/kg	16.0	12.8	19.0	20	L678779-03	WG702286
Beryllium	mg/kg	0.830	0.638	26.0*	20	L678779-03	WG702286
Cadmium	mg/kg	0.490	0.364	30.0*	20	L678779-03	WG702286
Chromium	mg/kg	130.	68.0	65.0*	20	L678779-03	WG702286
Copper	mg/kg	2.50	2.08	18.0	20	L678779-03	WG702286
Lead	mg/kg	6.30	4.72	29.0*	20	L678779-03	WG702286
Nickel	mg/kg	3.30	3.36	2.00	20	L678779-03	WG702286
Silver	mg/kg	0.790	0.565	34.0*	20	L678779-03	WG702286
Thallium	mg/kg	1.00	1.34	24.0*	20	L678779-03	WG702286
Zinc	mg/kg	28.0	19.6	34.0*	20	L678779-03	WG702286
Selenium	mg/kg	0.0	-4.87	42.0*	20	L678779-03	WG702286
Mercury	mg/kg	0.0	0.0866	175.*	20	L678967-01	WG702460
Antimony	mg/kg	0.0	0.0762	48.0*	20	L678894-01	WG702285
Arsenic	mg/kg	2.80	2.89	3.00	20	L678894-01	WG702285
Beryllium	mg/kg	0.390	0.432	11.0	20	L678894-01	WG702285
Cadmium	mg/kg	0.0	0.235	16.0	20	L678894-01	WG702285
Chromium	mg/kg	9.70	12.2	23.0*	20	L678894-01	WG702285
Copper	mg/kg	13.0	15.1	16.0	20	L678894-01	WG702285
Lead	mg/kg	35.0	29.6	17.0	20	L678894-01	WG702285
Nickel	mg/kg	4.90	5.88	19.0	20	L678894-01	WG702285
Selenium	mg/kg	0.0	0.583	10.0	20	L678894-01	WG702285
Silver	mg/kg	0.0	-0.439	28.0*	20	L678894-01	WG702285
Thallium	mg/kg	0.0	0.316	682.*	20	L678894-01	WG702285
Zinc	mg/kg	37.0	32.0	14.0	20	L678894-01	WG702285

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Quality Assurance Report
Level II

L678902

January 24, 2014

Analyte	Units	Result	Duplicate Duplicate	RPD	Limit	Ref Samp	Batch
Antimony	mg/kg	0.0	-0.552	9.00	20	L678849-01	WG702327
Arsenic	mg/kg	6.30	6.62	5.00	20	L678849-01	WG702327
Beryllium	mg/kg	0.800	0.899	11.0	20	L678849-01	WG702327
Cadmium	mg/kg	0.0	0.170	16.0	20	L678849-01	WG702327
Chromium	mg/kg	15.0	16.4	7.00	20	L678849-01	WG702327
Copper	mg/kg	18.0	17.5	4.00	20	L678849-01	WG702327
Lead	mg/kg	11.0	11.5	7.00	20	L678849-01	WG702327
Nickel	mg/kg	13.0	14.3	6.00	20	L678849-01	WG702327
Selenium	mg/kg	1.60	1.84	16.0	20	L678849-01	WG702327
Silver	mg/kg	0.0	0.00795	111.*	20	L678849-01	WG702327
Thallium	mg/kg	0.0	-1.55	14.0	20	L678849-01	WG702327
Zinc	mg/kg	43.0	46.7	8.00	20	L678849-01	WG702327

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0243	97.3	72.9-124	WG702232
1,1,1-Trichloroethane	mg/kg	.025	0.0261	104.	73.7-124	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0250	100.	69.4-122	WG702232
1,1,2-Trichloroethane	mg/kg	.025	0.0273	109.	79.1-118	WG702232
1,1-Dichloroethane	mg/kg	.025	0.0280	112.	75-124	WG702232
1,1-Dichloroethene	mg/kg	.025	0.0251	101.	70.4-129	WG702232
1,1-Dichloropropene	mg/kg	.025	0.0275	110.	74.9-124	WG702232
1,2,3-Trichlorobenzene	mg/kg	.025	0.0254	102.	69.3-131	WG702232
1,2,3-Trichloropropane	mg/kg	.025	0.0247	98.6	71.4-123	WG702232
1,2,4-Trichlorobenzene	mg/kg	.025	0.0264	106.	71.9-137	WG702232
1,2,4-Trimethylbenzene	mg/kg	.025	0.0239	95.4	75.5-122	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0268	107.	62.8-133	WG702232
1,2-Dibromoethane	mg/kg	.025	0.0279	111.	78.6-120	WG702232
1,2-Dichlorobenzene	mg/kg	.025	0.0245	97.8	78.3-118	WG702232
1,2-Dichloroethane	mg/kg	.025	0.0247	98.9	70.1-124	WG702232
1,2-Dichloropropane	mg/kg	.025	0.0281	112.	77.9-119	WG702232
1,3,5-Trimethylbenzene	mg/kg	.025	0.0244	97.7	75.9-124	WG702232
1,3-Dichlorobenzene	mg/kg	.025	0.0233	93.3	72-126	WG702232
1,3-Dichloropropane	mg/kg	.025	0.0276	110.	79.1-117	WG702232
1,4-Dichlorobenzene	mg/kg	.025	0.0239	95.5	78.3-117	WG702232
2,2-Dichloropropane	mg/kg	.025	0.0244	97.7	61.3-136	WG702232
2-Butanone (MEK)	mg/kg	.125	0.160	128.	53.7-153	WG702232
2-Chloroethyl vinyl ether	mg/kg	.125	0.179	144.	37.7-157	WG702232
2-Chlorotoluene	mg/kg	.025	0.0228	91.4	75.6-121	WG702232
4-Chlorotoluene	mg/kg	.025	0.0241	96.6	77.3-120	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.150	120.	70.4-137	WG702232
Acetone	mg/kg	.125	0.116	92.9	35.1-175	WG702232
Acrylonitrile	mg/kg	.125	0.167	134.*	56.4-128	WG702232
Benzene	mg/kg	.025	0.0268	107.	77.1-121	WG702232
Bromobenzene	mg/kg	.025	0.0247	98.7	78.2-115	WG702232
Bromodichloromethane	mg/kg	.025	0.0230	92.1	74.9-115	WG702232
Bromoform	mg/kg	.025	0.0249	99.8	65.9-132	WG702232
Bromomethane	mg/kg	.025	0.0267	107.	48.7-165	WG702232
Carbon tetrachloride	mg/kg	.025	0.0259	104.	70-124	WG702232
Chlorobenzene	mg/kg	.025	0.0259	104.	79.1-119	WG702232
Chlorodibromomethane	mg/kg	.025	0.0256	102.	73.5-121	WG702232
Chloroethane	mg/kg	.025	0.0269	108.	66.2-132	WG702232
Chloroform	mg/kg	.025	0.0253	101.	76.7-122	WG702232
Chloromethane	mg/kg	.025	0.0304	121.	63.4-131	WG702232
cis-1,2-Dichloroethene	mg/kg	.025	0.0266	106.	78.2-119	WG702232
cis-1,3-Dichloropropene	mg/kg	.025	0.0281	112.	79.6-120	WG702232
Di-isopropyl ether	mg/kg	.025	0.0284	114.	70.4-133	WG702232

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Quality Assurance Report
Level II

L678902

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Dibromomethane	mg/kg	.025	0.0258	103.	79.4-120	WG702232
Dichlorodifluoromethane	mg/kg	.025	0.0282	113.	57.1-137	WG702232
Ethylbenzene	mg/kg	.025	0.0262	105.	79.7-122	WG702232
Hexachloro-1,3-butadiene	mg/kg	.025	0.0234	93.8	68.2-123	WG702232
Isopropylbenzene	mg/kg	.025	0.0274	109.	80-135	WG702232
Methyl tert-butyl ether	mg/kg	.025	0.0251	100.	73-129	WG702232
Methylene Chloride	mg/kg	.025	0.0252	101.	72.6-120	WG702232
n-Butylbenzene	mg/kg	.025	0.0263	105.	77.5-126	WG702232
n-Propylbenzene	mg/kg	.025	0.0248	99.1	77.9-123	WG702232
Naphthalene	mg/kg	.025	0.0256	102.	69.8-128	WG702232
p-Isopropyltoluene	mg/kg	.025	0.0251	100.	75.8-129	WG702232
sec-Butylbenzene	mg/kg	.025	0.0247	98.7	75.8-126	WG702232
Styrene	mg/kg	.025	0.0262	105.	82.4-126	WG702232
tert-Butylbenzene	mg/kg	.025	0.0253	101.	76.4-126	WG702232
Tetrachloroethene	mg/kg	.025	0.0267	107.	73.9-125	WG702232
Toluene	mg/kg	.025	0.0259	104.	79.7-118	WG702232
trans-1,2-Dichloroethene	mg/kg	.025	0.0258	103.	73.8-122	WG702232
trans-1,3-Dichloropropene	mg/kg	.025	0.0267	107.	75.9-124	WG702232
Trichloroethene	mg/kg	.025	0.0260	104.	77.9-118	WG702232
Trichlorofluoromethane	mg/kg	.025	0.0234	93.7	67.7-131	WG702232
Vinyl chloride	mg/kg	.025	0.0297	119.	66.7-130	WG702232
Xylenes, Total	mg/kg	.075	0.0768	102.	78.8-121	WG702232
4-Bromofluorobenzene				95.90	71-126	WG702232
Dibromofluoromethane				95.30	78.3-121	WG702232
Toluene-d8				102.0	88.5-111	WG702232
a,a,a-Trifluorotoluene				98.10	85-114	WG702232
Total Solids	%	50	50.0	100.	85-115	WG702527
Total Solids	%	50	50.2	100.	85-115	WG702528
Mercury	mg/kg	12.4	13.3	107.	71.6-128	WG702461
Antimony	mg/kg	113	66.1	58.0	0.88-223	WG702286
Arsenic	mg/kg	237	269.	114.	83.1-117	WG702286
Beryllium	mg/kg	93.3	103.	111.	83.3-117	WG702286
Cadmium	mg/kg	191	190.	99.0	83.2-117	WG702286
Chromium	mg/kg	128	138.	108.	81.3-118	WG702286
Copper	mg/kg	123	135.	109.	83.7-116	WG702286
Lead	mg/kg	103	106.	103.	83.1-117	WG702286
Nickel	mg/kg	118	123.	105.	82-118	WG702286
Selenium	mg/kg	110	121.	110.	78.7-122	WG702286
Silver	mg/kg	47.3	51.1	108.	66.2-134	WG702286
Thallium	mg/kg	158	163.	103.	81-119	WG702286
Zinc	mg/kg	183	194.	106.	82-118	WG702286
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0223	89.0	74.2-124	WG702215
1,1,1-Trichloroethane	mg/l	.025	0.0225	90.0	73.2-123	WG702215
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0230	91.9	70.7-122	WG702215
1,1,2-Trichloroethane	mg/l	.025	0.0250	100.	77.7-118	WG702215
1,1-Dichloroethane	mg/l	.025	0.0254	102.	70.7-126	WG702215
1,1-Dichloroethene	mg/l	.025	0.0204	81.6	67.8-129	WG702215
1,1-Dichloropropene	mg/l	.025	0.0239	95.6	73.1-125	WG702215
1,2,3-Trichlorobenzene	mg/l	.025	0.0233	93.2	64.9-135	WG702215

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,2,3-Trichloropropane	mg/l	.025	0.0229	91.4	71.8-121	WG702215
1,2,4-Trichlorobenzene	mg/l	.025	0.0233	93.0	69.7-136	WG702215
1,2,4-Trimethylbenzene	mg/l	.025	0.0209	83.6	75-123	WG702215
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0232	93.0	65.4-128	WG702215
1,2-Dibromoethane	mg/l	.025	0.0251	100.	76.6-121	WG702215
1,2-Dichlorobenzene	mg/l	.025	0.0221	88.4	78.4-117	WG702215
1,2-Dichloroethane	mg/l	.025	0.0232	92.7	68.8-124	WG702215
1,2-Dichloropropane	mg/l	.025	0.0264	105.	76.5-119	WG702215
1,3,5-Trimethylbenzene	mg/l	.025	0.0213	85.4	75.6-124	WG702215
1,3-Dichlorobenzene	mg/l	.025	0.0206	82.3	70.8-128	WG702215
1,3-Dichloropropane	mg/l	.025	0.0253	101.	77.4-117	WG702215
1,4-Dichlorobenzene	mg/l	.025	0.0216	86.4	78.8-115	WG702215
2,2-Dichloropropane	mg/l	.025	0.0210	84.1	62.4-133	WG702215
2-Butanone (MEK)	mg/l	.125	0.111	89.0	55-149	WG702215
2-Chloroethyl vinyl ether	mg/l	.125	0.167	134.	43.8-150	WG702215
2-Chlorotoluene	mg/l	.025	0.0202	80.8	74.7-122	WG702215
4-Chlorotoluene	mg/l	.025	0.0217	86.6	77.5-120	WG702215
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.136	109.	70.5-133	WG702215
Acetone	mg/l	.125	0.0578	46.3	35.6-163	WG702215
Acrolein	mg/l	.125	0.183	147.	10-190	WG702215
Acrylonitrile	mg/l	.125	0.148	119.	55.2-130	WG702215
Benzene	mg/l	.025	0.0245	98.0	74.8-121	WG702215
Bromobenzene	mg/l	.025	0.0226	90.5	77.5-116	WG702215
Bromodichloromethane	mg/l	.025	0.0213	85.2	75.1-116	WG702215
Bromoform	mg/l	.025	0.0223	89.1	67.5-130	WG702215
Bromomethane	mg/l	.025	0.0202	80.8	49.9-162	WG702215
Carbon tetrachloride	mg/l	.025	0.0222	88.7	70.2-123	WG702215
Chlorobenzene	mg/l	.025	0.0235	94.2	78.1-119	WG702215
Chlorodibromomethane	mg/l	.025	0.0227	90.7	74-121	WG702215
Chloroethane	mg/l	.025	0.0203	81.4	61.7-135	WG702215
Chloroform	mg/l	.025	0.0231	92.4	76-121	WG702215
Chloromethane	mg/l	.025	0.0256	102.	61.5-129	WG702215
cis-1,2-Dichloroethene	mg/l	.025	0.0246	98.3	76-119	WG702215
cis-1,3-Dichloropropene	mg/l	.025	0.0256	103.	78.2-120	WG702215
Di-isopropyl ether	mg/l	.025	0.0262	105.	65.6-132	WG702215
Dibromomethane	mg/l	.025	0.0243	97.1	79.5-118	WG702215
Dichlorodifluoromethane	mg/l	.025	0.0230	91.9	54.8-135	WG702215
Ethylbenzene	mg/l	.025	0.0230	91.8	78.8-122	WG702215
Hexachloro-1,3-butadiene	mg/l	.025	0.0199	79.4	64.7-129	WG702215
Isopropylbenzene	mg/l	.025	0.0239	95.8	78.6-132	WG702215
Methyl tert-butyl ether	mg/l	.025	0.0238	95.2	71.2-126	WG702215
Methylene Chloride	mg/l	.025	0.0239	95.4	70.3-120	WG702215
n-Butylbenzene	mg/l	.025	0.0219	87.4	76.2-126	WG702215
n-Propylbenzene	mg/l	.025	0.0215	85.9	78.2-122	WG702215
Naphthalene	mg/l	.025	0.0232	92.8	68.4-128	WG702215
p-Isopropyltoluene	mg/l	.025	0.0218	87.1	74-131	WG702215
sec-Butylbenzene	mg/l	.025	0.0212	85.0	74.4-127	WG702215
Styrene	mg/l	.025	0.0236	94.3	80.4-126	WG702215
tert-Butylbenzene	mg/l	.025	0.0220	88.2	75.3-126	WG702215
Tetrachloroethene	mg/l	.025	0.0227	90.9	72.6-126	WG702215
Toluene	mg/l	.025	0.0239	95.7	79.7-116	WG702215
trans-1,2-Dichloroethene	mg/l	.025	0.0233	93.4	72.6-121	WG702215
trans-1,3-Dichloropropene	mg/l	.025	0.0253	101.	74.3-123	WG702215
Trichloroethene	mg/l	.025	0.0231	92.6	77.7-118	WG702215
Trichlorofluoromethane	mg/l	.025	0.0185	73.9	63.5-135	WG702215
Vinyl chloride	mg/l	.025	0.0243	97.4	65.9-128	WG702215
Xylenes, Total	mg/l	.075	0.0680	90.7	78.7-121	WG702215
4-Bromofluorobenzene				94.70	71-126	WG702215
Dibromofluoromethane				93.50	78.3-121	WG702215

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Quality Assurance Report
Level II

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Toluene-d8				105.0	88.5-111	
a,a,a-Trifluorotoluene				97.50	85-114	
Mercury	mg/kg	12.4	14.4	116.	71.6-128	WG702460
Antimony	mg/kg	113	61.9	55.0	0.88-223	WG702285
Arsenic	mg/kg	237	241.	102.	83.1-117	WG702285
Beryllium	mg/kg	93.3	88.3	95.0	83.3-117	WG702285
Cadmium	mg/kg	191	177.	93.0	83.2-117	WG702285
Chromium	mg/kg	128	125.	98.0	81.3-118	WG702285
Copper	mg/kg	123	123.	100.	83.7-116	WG702285
Lead	mg/kg	103	99.1	96.0	83.1-117	WG702285
Nickel	mg/kg	118	113.	96.0	82-118	WG702285
Selenium	mg/kg	110	113.	102.	78.7-122	WG702285
Silver	mg/kg	47.3	47.1	100.	66.2-134	WG702285
Thallium	mg/kg	158	155.	98.0	81-119	WG702285
Zinc	mg/kg	183	172.	94.0	82-118	WG702285
1,2,4-Trichlorobenzene	mg/kg	.333	0.234	70.4	39.8-100	WG702802
2,4,6-Trichlorophenol	mg/kg	.333	0.270	81.0	44.4-108	WG702802
2,4-Dichlorophenol	mg/kg	.333	0.268	80.6	46.2-109	WG702802
2,4-Dimethylphenol	mg/kg	.333	0.284	85.2	42.2-110	WG702802
2,4-Dinitrophenol	mg/kg	.333	0.144	43.4	10-105	WG702802
2,4-Dinitrotoluene	mg/kg	.333	0.323	97.1	53-112	WG702802
2,6-Dinitrotoluene	mg/kg	.333	0.325	97.5	51.6-110	WG702802
2-Chloronaphthalene	mg/kg	.333	0.256	76.9	47.1-105	WG702802
2-Chlorophenol	mg/kg	.333	0.246	74.0	40.8-103	WG702802
2-Nitrophenol	mg/kg	.333	0.272	81.8	44.2-113	WG702802
3,3-Dichlorobenzidine	mg/kg	.333	0.223	67.1	21-101	WG702802
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.283	85.1	23.1-119	WG702802
4-Bromophenyl-phenylether	mg/kg	.333	0.291	87.4	51.4-110	WG702802
4-Chloro-3-methylphenol	mg/kg	.333	0.305	91.5	51.1-113	WG702802
4-Chlorophenyl-phenylether	mg/kg	.333	0.253	75.8	48.1-108	WG702802
4-Nitrophenol	mg/kg	.333	0.250	75.2	34.8-109	WG702802
Acenaphthene	mg/kg	.333	0.274	82.3	48.9-107	WG702802
Acenaphthylene	mg/kg	.333	0.276	82.8	49.2-111	WG702802
Anthracene	mg/kg	.333	0.292	87.8	52-112	WG702802
Benzidine	mg/kg	.333	0.00588	1.77	0-48	WG702802
Benzo(a)anthracene	mg/kg	.333	0.265	79.5	52.3-106	WG702802
Benzo(a)pyrene	mg/kg	.333	0.247	74.3	51.9-106	WG702802
Benzo(b)fluoranthene	mg/kg	.333	0.259	77.7	51.3-106	WG702802
Benzo(g,h,i)perylene	mg/kg	.333	0.276	83.0	45.8-108	WG702802
Benzo(k)fluoranthene	mg/kg	.333	0.272	81.7	52.9-107	WG702802
Benzylbutyl phthalate	mg/kg	.333	0.348	105.	47.5-115	WG702802
Bis(2-chlorethoxy)methane	mg/kg	.333	0.268	80.4	44.9-108	WG702802
Bis(2-chloroethyl)ether	mg/kg	.333	0.221	66.2	32.5-112	WG702802
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.261	78.5	40.4-99	WG702802
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.300	90.0	48.1-116	WG702802
Chrysene	mg/kg	.333	0.265	79.6	54.4-110	WG702802
Di-n-butyl phthalate	mg/kg	.333	0.361	109.	49.7-113	WG702802
Di-n-octyl phthalate	mg/kg	.333	0.300	90.2	49.6-112	WG702802
Dibenz(a,h)anthracene	mg/kg	.333	0.280	84.2	45.7-111	WG702802
Diethyl phthalate	mg/kg	.333	0.344	103.	52-112	WG702802
Dimethyl phthalate	mg/kg	.333	0.322	96.7	51.4-108	WG702802
Fluoranthene	mg/kg	.333	0.289	86.6	53.7-110	WG702802
Fluorene	mg/kg	.333	0.276	82.8	51.1-109	WG702802
Hexachloro-1,3-butadiene	mg/kg	.333	0.288	86.3	41.5-112	WG702802
Hexachlorobenzene	mg/kg	.333	0.301	90.5	43.2-104	WG702802

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Fax (615) 758-5859

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Quality Assurance Report
Level II

L678902

January 24, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Hexachlorocyclopentadiene	mg/kg	.333	0.236	70.9	13.5-123	WG702802
Hexachloroethane	mg/kg	.333	0.258	77.5	36.2-103	WG702802
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.285	85.5	47.5-109	WG702802
Isophorone	mg/kg	.333	0.323	97.0	28.8-104	WG702802
n-Nitrosodi-n-propylamine	mg/kg	.333	0.267	80.0	43.3-109	WG702802
n-Nitrosodimethylamine	mg/kg	.333	0.232	69.6	18.1-122	WG702802
n-Nitrosodiphenylamine	mg/kg	.333	0.299	89.7	48.8-107	WG702802
Naphthalene	mg/kg	.333	0.235	70.5	43.4-103	WG702802
Nitrobenzene	mg/kg	.333	0.273	82.0	40.7-109	WG702802
Pentachlorophenol	mg/kg	.333	0.264	79.2	16.2-102	WG702802
Phenanthrene	mg/kg	.333	0.279	83.8	51.6-107	WG702802
Phenol	mg/kg	.333	0.251	75.5	41.5-106	WG702802
Pyrene	mg/kg	.333	0.267	80.2	47.1-108	WG702802
2,4,6-Tribromophenol				107.0	21.6-142	WG702802
2-Fluorobiphenyl				74.20	34.9-129	WG702802
2-Fluorophenol				70.60	21.1-116	WG702802
Nitrobenzene-d5				78.50	21.9-129	WG702802
Phenol-d5				76.80	26.3-121	WG702802
p-Terphenyl-d14				75.30	21.5-128	WG702802
Antimony	mg/kg	113	58.1	51.0	0.88-223	WG702327
Arsenic	mg/kg	237	232.	98.0	83.1-117	WG702327
Beryllium	mg/kg	93.3	91.8	98.0	83.3-117	WG702327
Cadmium	mg/kg	191	183.	96.0	83.2-117	WG702327
Chromium	mg/kg	128	126.	99.0	81.3-118	WG702327
Copper	mg/kg	123	123.	100.	83.7-116	WG702327
Lead	mg/kg	103	98.9	96.0	83.1-117	WG702327
Nickel	mg/kg	118	106.	90.0	82-118	WG702327
Selenium	mg/kg	110	111.	101.	78.7-122	WG702327
Silver	mg/kg	47.3	45.8	97.0	66.2-134	WG702327
Thallium	mg/kg	158	156.	99.0	81-119	WG702327
Zinc	mg/kg	183	177.	97.0	82-118	WG702327

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/kg	0.0256	0.0243	102.	72.9-124	5.03	20	WG702232
1,1,1-Trichloroethane	mg/kg	0.0279	0.0261	112.	73.7-124	6.86	20	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0242	0.0250	97.0	69.4-122	3.42	20	WG702232
1,1,2-Trichloroethane	mg/kg	0.0248	0.0273	99.0	79.1-118	9.59	20	WG702232
1,1-Dichloroethane	mg/kg	0.0303	0.0280	121.	75-124	7.91	20	WG702232
1,1-Dichloroethene	mg/kg	0.0269	0.0251	108.	70.4-129	6.83	20	WG702232
1,1-Dichloropropene	mg/kg	0.0286	0.0275	114.	74.9-124	4.03	20	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0280	0.0254	112.	69.3-131	9.66	20	WG702232
1,2,3-Trichloropropane	mg/kg	0.0240	0.0247	96.0	71.4-123	2.66	20	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0293	0.0264	117.	71.9-137	10.2	20	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0254	0.0239	102.	75.5-122	6.44	20	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0255	0.0268	102.	62.8-133	4.83	20	WG702232
1,2-Dibromoethane	mg/kg	0.0245	0.0279	98.0	78.6-120	12.8	20	WG702232
1,2-Dichlorobenzene	mg/kg	0.0253	0.0245	101.	78.3-118	3.41	20	WG702232
1,2-Dichloroethane	mg/kg	0.0248	0.0247	99.0	70.1-124	0.180	20	WG702232
1,2-Dichloropropane	mg/kg	0.0281	0.0281	112.	77.9-119	0.270	20	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0260	0.0244	104.	75.9-124	6.21	20	WG702232
1,3-Dichlorobenzene	mg/kg	0.0245	0.0233	98.0	72-126	5.03	20	WG702232
1,3-Dichloropropane	mg/kg	0.0248	0.0276	99.0	79.1-117	10.7	20	WG702232
1,4-Dichlorobenzene	mg/kg	0.0239	0.0239	96.0	78.3-117	0.0400	20	WG702232
2,2-Dichloropropane	mg/kg	0.0277	0.0244	111.	61.3-136	12.6	20	WG702232
2-Butanone (MEK)	mg/kg	0.127	0.160	102.	53.7-153	22.7*	21.2	WG702232

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Quality Assurance Report
Level II

L678902

January 24, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
2-Chloroethyl vinyl ether	mg/kg	0.147	0.179	117.	37.7-157	20.1*	20	WG702232
2-Chlorotoluene	mg/kg	0.0246	0.0228	98.0	75.6-121	7.56	20	WG702232
4-Chlorotoluene	mg/kg	0.0254	0.0241	102.	77.3-120	5.03	20	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.135	0.150	108.	70.4-137	10.7	20	WG702232
Acetone	mg/kg	0.105	0.116	84.0	35.1-175	10.3	26.1	WG702232
Acrylonitrile	mg/kg	0.148	0.167	119.	56.4-128	11.9	20	WG702232
Benzene	mg/kg	0.0279	0.0268	112.	77.1-121	4.11	20	WG702232
Bromobenzene	mg/kg	0.0252	0.0247	101.	78.2-115	2.29	20	WG702232
Bromodichloromethane	mg/kg	0.0231	0.0230	92.0	74.9-115	0.250	20	WG702232
Bromoform	mg/kg	0.0235	0.0249	94.0	65.9-132	6.10	20	WG702232
Bromomethane	mg/kg	0.0299	0.0267	120.	48.7-165	11.4	20	WG702232
Carbon tetrachloride	mg/kg	0.0271	0.0259	108.	70-124	4.58	20	WG702232
Chlorobenzene	mg/kg	0.0256	0.0259	102.	79.1-119	1.02	20	WG702232
Chlorodibromomethane	mg/kg	0.0245	0.0256	98.0	73.5-121	4.07	20	WG702232
Chloroethane	mg/kg	0.0282	0.0269	113.	66.2-132	4.76	20	WG702232
Chloroform	mg/kg	0.0266	0.0253	106.	76.7-122	5.34	20	WG702232
Chloromethane	mg/kg	0.0328	0.0304	131.	63.4-131	7.60	20	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0287	0.0266	115.	78.2-119	7.53	20	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0263	0.0281	105.	79.6-120	6.53	20	WG702232
Di-isopropyl ether	mg/kg	0.0294	0.0284	117.	70.4-133	3.41	20	WG702232
Dibromomethane	mg/kg	0.0258	0.0258	103.	79.4-120	0.140	20	WG702232
Dichlorodifluoromethane	mg/kg	0.0294	0.0282	118.	57.1-137	4.31	20	WG702232
Ethylbenzene	mg/kg	0.0268	0.0262	107.	79.7-122	2.39	20	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0258	0.0234	103.	68.2-123	9.61	20	WG702232
Isopropylbenzene	mg/kg	0.0290	0.0274	116.	80-135	5.95	20	WG702232
Methyl tert-butyl ether	mg/kg	0.0266	0.0251	106.	73-129	5.84	20	WG702232
Methylene Chloride	mg/kg	0.0282	0.0252	113.	72.6-120	10.9	20	WG702232
n-Butylbenzene	mg/kg	0.0276	0.0263	110.	77.5-126	4.88	20	WG702232
n-Propylbenzene	mg/kg	0.0264	0.0248	106.	77.9-123	6.22	20	WG702232
Naphthalene	mg/kg	0.0260	0.0256	104.	69.8-128	1.62	20	WG702232
p-Isopropyltoluene	mg/kg	0.0272	0.0251	109.	75.8-129	8.34	20	WG702232
sec-Butylbenzene	mg/kg	0.0265	0.0247	106.	75.8-126	7.33	20	WG702232
Styrene	mg/kg	0.0264	0.0262	106.	82.4-126	0.850	20	WG702232
tert-Butylbenzene	mg/kg	0.0269	0.0253	108.	76.4-126	6.23	20	WG702232
Tetrachloroethene	mg/kg	0.0260	0.0267	104.	73.9-125	2.76	20	WG702232
Toluene	mg/kg	0.0261	0.0259	104.	79.7-118	0.620	20	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0283	0.0258	113.	73.8-122	9.41	20	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0238	0.0267	95.0	75.9-124	11.7	20	WG702232
Trichloroethene	mg/kg	0.0270	0.0260	108.	77.9-118	4.06	20	WG702232
Trichlorofluoromethane	mg/kg	0.0254	0.0234	102.	67.7-131	8.24	20	WG702232
Vinyl chloride	mg/kg	0.0306	0.0297	122.	66.7-130	2.97	20	WG702232
Xylenes, Total	mg/kg	0.0778	0.0768	104.	78.8-121	1.31	20	WG702232
4-Bromofluorobenzene				96.20	71-126			WG702232
Dibromofluoromethane				101.0	78.3-121			WG702232
Toluene-d8				103.0	88.5-111			WG702232
a,a,a-Trifluorotoluene				103.0	85-114			WG702232
1,1,1,2-Tetrachloroethane	mg/l	0.0228	0.0223	91.0	74.2-124	2.26	20	WG702215
1,1,1-Trichloroethane	mg/l	0.0235	0.0225	94.0	73.2-123	4.19	20	WG702215
1,1,2,2-Tetrachloroethane	mg/l	0.0236	0.0230	94.0	70.7-122	2.55	20	WG702215
1,1,2-Trichloroethane	mg/l	0.0250	0.0250	100.	77.7-118	0.140	20	WG702215
1,1-Dichloroethane	mg/l	0.0262	0.0254	105.	70.7-126	3.16	20	WG702215
1,1-Dichloroethene	mg/l	0.0224	0.0204	90.0	67.8-129	9.35	20	WG702215
1,1-Dichloropropene	mg/l	0.0246	0.0239	98.0	73.1-125	2.84	20	WG702215
1,2,3-Trichlorobenzene	mg/l	0.0238	0.0233	95.0	64.9-135	1.95	20	WG702215
1,2,3-Trichloropropane	mg/l	0.0231	0.0229	92.0	71.8-121	1.19	20	WG702215
1,2,4-Trichlorobenzene	mg/l	0.0234	0.0233	94.0	69.7-136	0.540	20	WG702215
1,2,4-Trimethylbenzene	mg/l	0.0219	0.0209	87.0	75-123	4.51	20	WG702215

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Quality Assurance Report
Level II

L678902

January 24, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2-Dibromo-3-Chloropropane	mg/l	0.0243	0.0232	97.0	65.4-128	4.44	20	WG702215
1,2-Dibromoethane	mg/l	0.0250	0.0251	100.	76.6-121	0.0200	20	WG702215
1,2-Dichlorobenzene	mg/l	0.0227	0.0221	91.0	78.4-117	2.72	20	WG702215
1,2-Dichloroethane	mg/l	0.0236	0.0232	94.0	68.8-124	1.95	20	WG702215
1,2-Dichloropropane	mg/l	0.0274	0.0264	110.	76.5-119	3.88	20	WG702215
1,3,5-Trimethylbenzene	mg/l	0.0224	0.0213	90.0	75.6-124	4.73	20	WG702215
1,3-Dichlorobenzene	mg/l	0.0216	0.0206	86.0	70.8-128	5.03	20	WG702215
1,3-Dichloropropane	mg/l	0.0252	0.0253	101.	77.4-117	0.140	20	WG702215
1,4-Dichlorobenzene	mg/l	0.0215	0.0216	86.0	78.8-115	0.390	20	WG702215
2,2-Dichloropropane	mg/l	0.0214	0.0210	86.0	62.4-133	1.93	20	WG702215
2-Butanone (MEK)	mg/l	0.111	0.111	89.0	55-149	0.400	20	WG702215
2-Chloroethyl vinyl ether	mg/l	0.164	0.167	131.	43.8-150	1.57	20	WG702215
2-Chlorotoluene	mg/l	0.0213	0.0202	85.0	74.7-122	5.31	20	WG702215
4-Chlorotoluene	mg/l	0.0223	0.0217	89.0	77.5-120	3.06	20	WG702215
4-Methyl-2-pentanone (MIBK)	mg/l	0.141	0.136	113.	70.5-133	3.71	20	WG702215
Acetone	mg/l	0.0602	0.0578	48.0	35.6-163	3.98	23.9	WG702215
Acrolein	mg/l	0.182	0.183	146.	10-190	0.700	28.1	WG702215
Acrylonitrile	mg/l	0.150	0.148	120.	55.2-130	1.21	20	WG702215
Benzene	mg/l	0.0250	0.0245	100.	74.8-121	2.06	20	WG702215
Bromobenzene	mg/l	0.0235	0.0226	94.0	77.5-116	3.83	20	WG702215
Bromodichloromethane	mg/l	0.0219	0.0213	88.0	75.1-116	2.75	20	WG702215
Bromoform	mg/l	0.0223	0.0223	89.0	67.5-130	0.250	20	WG702215
Bromomethane	mg/l	0.0230	0.0202	92.0	49.9-162	12.8	20	WG702215
Carbon tetrachloride	mg/l	0.0224	0.0222	90.0	70.2-123	0.920	20	WG702215
Chlorobenzene	mg/l	0.0239	0.0235	95.0	78.1-119	1.33	20	WG702215
Chlorodibromomethane	mg/l	0.0237	0.0227	95.0	74-121	4.26	20	WG702215
Chloroethane	mg/l	0.0230	0.0203	92.0	61.7-135	12.3	20	WG702215
Chloroform	mg/l	0.0239	0.0231	96.0	76-121	3.48	20	WG702215
Chloromethane	mg/l	0.0272	0.0256	109.	61.5-129	6.39	20	WG702215
cis-1,2-Dichloroethene	mg/l	0.0254	0.0246	101.	76-119	3.11	20	WG702215
cis-1,3-Dichloropropene	mg/l	0.0260	0.0256	104.	78.2-120	1.55	20	WG702215
Di-isopropyl ether	mg/l	0.0272	0.0262	109.	65.6-132	3.70	20	WG702215
Dibromomethane	mg/l	0.0254	0.0243	101.	79.5-118	4.42	20	WG702215
Dichlorodifluoromethane	mg/l	0.0234	0.0230	94.0	54.8-135	1.92	20	WG702215
Ethylbenzene	mg/l	0.0237	0.0230	95.0	78.8-122	3.36	20	WG702215
Hexachloro-1,3-butadiene	mg/l	0.0200	0.0199	80.0	64.7-129	0.890	20	WG702215
Isopropylbenzene	mg/l	0.0247	0.0239	99.0	78.6-132	3.04	20	WG702215
Methyl tert-butyl ether	mg/l	0.0250	0.0238	100.	71.2-126	4.98	20	WG702215
Methylene Chloride	mg/l	0.0249	0.0239	100.	70.3-120	4.38	20	WG702215
n-Butylbenzene	mg/l	0.0217	0.0219	87.0	76.2-126	0.820	20	WG702215
n-Propylbenzene	mg/l	0.0223	0.0215	89.0	78.2-122	3.70	20	WG702215
Naphthalene	mg/l	0.0237	0.0232	95.0	68.4-128	2.17	20	WG702215
p-Isopropyltoluene	mg/l	0.0226	0.0218	90.0	74-131	3.49	20	WG702215
sec-Butylbenzene	mg/l	0.0225	0.0212	90.0	74.4-127	5.74	20	WG702215
Styrene	mg/l	0.0243	0.0236	97.0	80.4-126	2.95	20	WG702215
tert-Butylbenzene	mg/l	0.0230	0.0220	92.0	75.3-126	4.03	20	WG702215
Tetrachloroethene	mg/l	0.0222	0.0227	89.0	72.6-126	2.17	20	WG702215
Toluene	mg/l	0.0241	0.0239	96.0	79.7-116	0.800	20	WG702215
trans-1,2-Dichloroethene	mg/l	0.0240	0.0233	96.0	72.6-121	2.73	20	WG702215
trans-1,3-Dichloropropene	mg/l	0.0252	0.0253	101.	74.3-123	0.580	20	WG702215
Trichloroethene	mg/l	0.0237	0.0231	95.0	77.7-118	2.38	20	WG702215
Trichlorofluoromethane	mg/l	0.0203	0.0185	81.0	63.5-135	9.46	20	WG702215
Vinyl chloride	mg/l	0.0246	0.0243	98.0	65.9-128	1.06	20	WG702215
Xylenes, Total	mg/l	0.0693	0.0680	92.0	78.7-121	1.90	20	WG702215
4-Bromofluorobenzene				96.10	71-126			WG702215
Dibromofluoromethane				97.50	78.3-121			WG702215
Toluene-d8				105.0	88.5-111			WG702215
a,a,a-Trifluorotoluene				98.80	85-114			WG702215

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Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678902

January 24, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2,4-Trichlorobenzene	mg/kg	0.250	0.234	75.0	39.8-100	6.54	20	WG702802
2,4,6-Trichlorophenol	mg/kg	0.264	0.270	79.0	44.4-108	2.13	20	WG702802
2,4-Dichlorophenol	mg/kg	0.285	0.268	86.0	46.2-109	5.97	20	WG702802
2,4-Dimethylphenol	mg/kg	0.266	0.284	80.0	42.2-110	6.52	20	WG702802
2,4-Dinitrophenol	mg/kg	0.133	0.144	40.0	10-105	8.46	36.5	WG702802
2,4-Dinitrotoluene	mg/kg	0.321	0.323	96.0	53-112	0.830	20	WG702802
2,6-Dinitrotoluene	mg/kg	0.311	0.325	93.0	51.6-110	4.20	20	WG702802
2-Chloronaphthalene	mg/kg	0.249	0.256	75.0	47.1-105	2.80	20	WG702802
2-Chlorophenol	mg/kg	0.252	0.246	76.0	40.8-103	2.13	20	WG702802
2-Nitrophenol	mg/kg	0.281	0.272	84.0	44.2-113	3.17	20.9	WG702802
3,3-Dichlorobenzidine	mg/kg	0.209	0.223	63.0	21-101	6.49	22	WG702802
4,6-Dinitro-2-methylphenol	mg/kg	0.288	0.283	86.0	23.1-119	1.41	23.7	WG702802
4-Bromophenyl-phenylether	mg/kg	0.300	0.291	90.0	51.4-110	3.19	20	WG702802
4-Chloro-3-methylphenol	mg/kg	0.326	0.305	98.0	51.1-113	6.77	20	WG702802
4-Chlorophenyl-phenylether	mg/kg	0.255	0.253	76.0	48.1-108	1.00	20	WG702802
4-Nitrophenol	mg/kg	0.253	0.250	76.0	34.8-109	0.930	20	WG702802
Acenaphthene	mg/kg	0.264	0.274	79.0	48.9-107	3.75	20	WG702802
Acenaphthylene	mg/kg	0.269	0.276	81.0	49.2-111	2.60	20	WG702802
Anthracene	mg/kg	0.294	0.292	88.0	52-112	0.460	20	WG702802
Benzidine	mg/kg	0.00590	0.00588	2.00	0-48	0.320	40	WG702802
Benzo(a)anthracene	mg/kg	0.269	0.265	81.0	52.3-106	1.55	20	WG702802
Benzo(a)pyrene	mg/kg	0.246	0.247	74.0	51.9-106	0.510	20	WG702802
Benzo(b)fluoranthene	mg/kg	0.251	0.259	75.0	51.3-106	3.05	20	WG702802
Benzo(g,h,i)perylene	mg/kg	0.268	0.276	80.0	45.8-108	3.01	20	WG702802
Benzo(k)fluoranthene	mg/kg	0.268	0.272	80.0	52.9-107	1.48	20	WG702802
Benzylbutyl phthalate	mg/kg	0.363	0.348	109.	47.5-115	4.19	20	WG702802
Bis(2-chlorethoxy)methane	mg/kg	0.272	0.268	82.0	44.9-108	1.49	20	WG702802
Bis(2-chloroethyl)ether	mg/kg	0.223	0.221	67.0	32.5-112	0.900	26	WG702802
Bis(2-chloroisopropyl)ether	mg/kg	0.262	0.261	79.0	40.4-99	0.160	20.7	WG702802
Bis(2-ethylhexyl)phthalate	mg/kg	0.314	0.300	94.0	48.1-116	4.57	20.5	WG702802
Chrysene	mg/kg	0.282	0.265	84.0	54.4-110	6.06	20	WG702802
Di-n-butyl phthalate	mg/kg	0.360	0.361	108.	49.7-113	0.260	20	WG702802
Di-n-octyl phthalate	mg/kg	0.308	0.300	92.0	49.6-112	2.59	22	WG702802
Dibenz(a,h)anthracene	mg/kg	0.276	0.280	83.0	45.7-111	1.67	20	WG702802
Diethyl phthalate	mg/kg	0.336	0.344	101.	52-112	2.26	20	WG702802
Dimethyl phthalate	mg/kg	0.304	0.322	91.0	51.4-108	5.83	20	WG702802
Fluoranthene	mg/kg	0.282	0.289	85.0	53.7-110	2.16	20	WG702802
Fluorene	mg/kg	0.272	0.276	82.0	51.1-109	1.42	20	WG702802
Hexachloro-1,3-butadiene	mg/kg	0.282	0.288	85.0	41.5-112	1.83	20	WG702802
Hexachlorobenzene	mg/kg	0.321	0.301	96.0	43.2-104	6.41	20.1	WG702802
Hexachlorocyclopentadiene	mg/kg	0.238	0.236	71.0	13.5-123	0.600	20.7	WG702802
Hexachloroethane	mg/kg	0.265	0.258	80.0	36.2-103	2.60	22.7	WG702802
Indeno(1,2,3-cd)pyrene	mg/kg	0.279	0.285	84.0	47.5-109	2.20	20	WG702802
Isophorone	mg/kg	0.327	0.323	98.0	28.8-104	1.35	20	WG702802
n-Nitrosodi-n-propylamine	mg/kg	0.269	0.267	81.0	43.3-109	0.940	20	WG702802
n-Nitrosodimethylamine	mg/kg	0.238	0.232	72.0	18.1-122	2.87	23.5	WG702802
n-Nitrosodiphenylamine	mg/kg	0.304	0.299	91.0	48.8-107	1.67	20	WG702802
Naphthalene	mg/kg	0.242	0.235	73.0	43.4-103	3.26	20	WG702802
Nitrobenzene	mg/kg	0.281	0.273	84.0	40.7-109	3.05	21	WG702802
Pentachlorophenol	mg/kg	0.262	0.264	79.0	16.2-102	0.500	22.9	WG702802
Phenanthrene	mg/kg	0.272	0.279	82.0	51.6-107	2.70	20	WG702802
Phenol	mg/kg	0.260	0.251	78.0	41.5-106	3.51	20	WG702802
Pyrene	mg/kg	0.280	0.267	84.0	47.1-108	4.81	20	WG702802
2,4,6-Tribromophenol				105.0	21.6-142			WG702802
2-Fluorobiphenyl				72.10	34.9-129			WG702802
2-Fluorophenol				69.80	21.1-116			WG702802
Nitrobenzene-d5				78.20	21.9-129			WG702802
Phenol-d5				76.30	26.3-121			WG702802

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Quality Assurance Report
Level II

L678902

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
p-Terphenyl-d14				71.10		21.5-128		

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/kg	0.0115	0.0	.025	46.0*	64-128	L678902-01	WG702232
1,1,1-Trichloroethane	mg/kg	0.0122	0.0	.025	49.0*	58.7-134	L678902-01	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0113	0.0	.025	45.0*	56-132	L678902-01	WG702232
1,1,2-Trichloroethane	mg/kg	0.0123	0.0	.025	49.0*	66.3-125	L678902-01	WG702232
1,1-Dichloroethane	mg/kg	0.0129	0.0	.025	52.0*	58.5-132	L678902-01	WG702232
1,1-Dichloroethene	mg/kg	0.0115	0.0	.025	46.0*	51.1-140	L678902-01	WG702232
1,1-Dichloropropene	mg/kg	0.0127	0.0	.025	51.0*	57.3-136	L678902-01	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0116	0.0	.025	47.0*	59.1-138	L678902-01	WG702232
1,2,3-Trichloropropane	mg/kg	0.0112	0.0	.025	45.0*	61.4-128	L678902-01	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0125	0.0	.025	50.0*	63.6-143	L678902-01	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0112	0.0	.025	45.0*	57.4-137	L678902-01	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0113	0.0	.025	45.0*	57.3-136	L678902-01	WG702232
1,2-Dibromoethane	mg/kg	0.0120	0.0	.025	48.0*	67.1-125	L678902-01	WG702232
1,2-Dichlorobenzene	mg/kg	0.0118	0.0	.025	47.0*	68.2-123	L678902-01	WG702232
1,2-Dichloroethane	mg/kg	0.0112	0.0	.025	45.0*	60-126	L678902-01	WG702232
1,2-Dichloropropane	mg/kg	0.0130	0.0	.025	52.0*	64.2-123	L678902-01	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0117	0.0	.025	47.0*	63.6-132	L678902-01	WG702232
1,3-Dichlorobenzene	mg/kg	0.0111	0.0	.025	44.0*	63.1-131	L678902-01	WG702232
1,3-Dichloropropane	mg/kg	0.0121	0.0	.025	48.0*	67.9-121	L678902-01	WG702232
1,4-Dichlorobenzene	mg/kg	0.0115	0.0	.025	46.0*	68.6-123	L678902-01	WG702232
2,2-Dichloropropane	mg/kg	0.0124	0.0	.025	50.0*	50.5-144	L678902-01	WG702232
2-Butanone (MEK)	mg/kg	0.0558	0.0	.125	45.0	22.4-138	L678902-01	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.0784	0.0	.125	63.0	10-155	L678902-01	WG702232
2-Chlorotoluene	mg/kg	0.0110	0.0	.025	44.0*	63.6-128	L678902-01	WG702232
4-Chlorotoluene	mg/kg	0.0114	0.0	.025	46.0*	65.7-127	L678902-01	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.0644	0.0	.125	52.0*	60.8-140	L678902-01	WG702232
Acetone	mg/kg	0.0379	0.00537	.125	26.0	10-130	L678902-01	WG702232
Acrylonitrile	mg/kg	0.0654	0.0	.125	52.0	49.4-133	L678902-01	WG702232
Benzene	mg/kg	0.0125	0.0	.025	50.0*	54.3-133	L678902-01	WG702232
Bromobenzene	mg/kg	0.0118	0.0	.025	47.0*	63.9-124	L678902-01	WG702232
Bromodichloromethane	mg/kg	0.0109	0.0	.025	44.0*	63.9-121	L678902-01	WG702232
Bromoform	mg/kg	0.0106	0.0	.025	42.0*	59.5-134	L678902-01	WG702232
Bromomethane	mg/kg	0.0129	0.0	.025	52.0	41.7-155	L678902-01	WG702232
Carbon tetrachloride	mg/kg	0.0119	0.0	.025	48.0*	55.7-134	L678902-01	WG702232
Chlorobenzene	mg/kg	0.0122	0.0	.025	49.0*	67-125	L678902-01	WG702232
Chlorodibromomethane	mg/kg	0.0113	0.0	.025	45.0*	64.3-125	L678902-01	WG702232
Chloroethane	mg/kg	0.0135	0.0	.025	54.0	51.5-136	L678902-01	WG702232
Chloroform	mg/kg	0.0120	0.0	.025	48.0*	63-129	L678902-01	WG702232
Chloromethane	mg/kg	0.0143	0.0	.025	57.0	42.4-135	L678902-01	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0121	0.0	.025	48.0*	59.2-129	L678902-01	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0129	0.0	.025	51.0*	66.4-125	L678902-01	WG702232
Di-isopropyl ether	mg/kg	0.0131	0.0	.025	52.0*	56.9-136	L678902-01	WG702232
Dibromomethane	mg/kg	0.0114	0.0	.025	46.0*	68.2-124	L678902-01	WG702232
Dichlorodifluoromethane	mg/kg	0.0131	0.0	.025	53.0	40.6-144	L678902-01	WG702232
Ethylbenzene	mg/kg	0.0122	0.0	.025	49.0*	61.4-133	L678902-01	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0112	0.0	.025	45.0*	55.1-136	L678902-01	WG702232
Isopropylbenzene	mg/kg	0.0131	0.0	.025	52.0*	66.8-141	L678902-01	WG702232
Methyl tert-butyl ether	mg/kg	0.0118	0.0	.025	47.0*	57.7-134	L678902-01	WG702232
Methylene Chloride	mg/kg	0.0122	0.0	.025	49.0*	58.1-122	L678902-01	WG702232
n-Butylbenzene	mg/kg	0.0127	0.0	.025	51.0*	62.7-140	L678902-01	WG702232
n-Propylbenzene	mg/kg	0.0118	0.0	.025	47.0	10-176	L678902-01	WG702232
Naphthalene	mg/kg	0.0111	0.0	.025	44.0*	58-135	L678902-01	WG702232
p-Isopropyltoluene	mg/kg	0.0119	0.0	.025	47.0*	63.2-139	L678902-01	WG702232
sec-Butylbenzene	mg/kg	0.0116	0.0	.025	46.0*	62.2-136	L678902-01	WG702232

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January 24, 2014

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Styrene	mg/kg	0.0119	0.0	.025	48.0*	66.8-133	L678902-01	WG702232
tert-Butylbenzene	mg/kg	0.0120	0.0	.025	48.0*	63.3-134	L678902-01	WG702232
Tetrachloroethene	mg/kg	0.0121	0.0	.025	48.0*	53-139	L678902-01	WG702232
Toluene	mg/kg	0.0124	0.0	.025	50.0*	61.4-130	L678902-01	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0124	0.0	.025	49.0*	56.5-129	L678902-01	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0125	0.0	.025	50.0*	64.1-128	L678902-01	WG702232
Trichloroethene	mg/kg	0.0119	0.0	.025	48.0	44.1-149	L678902-01	WG702232
Trichlorofluoromethane	mg/kg	0.0113	0.0	.025	45.0*	49.6-145	L678902-01	WG702232
Vinyl chloride	mg/kg	0.0136	0.0	.025	54.0	47.8-137	L678902-01	WG702232
Xylenes, Total	mg/kg	0.0361	0.0	.075	48.0*	63.3-131	L678902-01	WG702232
4-Bromofluorobenzene					90.40	71-126		WG702232
Dibromofluoromethane					93.80	78.3-121		WG702232
Toluene-d8					103.0	88.5-111		WG702232
a,a,a-Trifluorotoluene					98.20	85-114		WG702232
Mercury	mg/kg	0.291	0.0141	.25	110.	80-120	L678902-02	WG702461
Antimony	mg/kg	33.8	5.19	50	57.0*	75-125	L678779-03	WG702286
Arsenic	mg/kg	70.7	12.8	50	120.	75-125	L678779-03	WG702286
Beryllium	mg/kg	55.1	0.638	50	110.	75-125	L678779-03	WG702286
Cadmium	mg/kg	52.0	0.364	50	100.	75-125	L678779-03	WG702286
Chromium	mg/kg	166.	68.0	50	200.*	75-125	L678779-03	WG702286
Copper	mg/kg	58.4	2.08	50	110.	75-125	L678779-03	WG702286
Lead	mg/kg	57.6	4.72	50	110.	75-125	L678779-03	WG702286
Nickel	mg/kg	53.5	3.36	50	100.	75-125	L678779-03	WG702286
Silver	mg/kg	55.2	0.565	50	110.	75-125	L678779-03	WG702286
Thallium	mg/kg	51.2	1.34	50	100.	75-125	L678779-03	WG702286
Zinc	mg/kg	78.9	19.6	50	120.	75-125	L678779-03	WG702286
Selenium	mg/kg	52.3	-4.87	10	100.	75-125	L678779-03	WG702286
1,1,1,2-Tetrachloroethane	mg/l	0.0194	0.0	.025	78.0	64-128	L678787-02	WG702215
1,1,1-Trichloroethane	mg/l	0.0193	0.0	.025	77.0	58.7-134	L678787-02	WG702215
1,1,2,2-Tetrachloroethane	mg/l	0.0196	0.0	.025	78.0	56-132	L678787-02	WG702215
1,1,2-Trichloroethane	mg/l	0.0217	0.0	.025	87.0	66.3-125	L678787-02	WG702215
1,1-Dichloroethane	mg/l	0.0240	0.00382	.025	81.0	58.5-132	L678787-02	WG702215
1,1-Dichloroethene	mg/l	0.0176	0.00317	.025	58.0	51.1-140	L678787-02	WG702215
1,1-Dichloropropene	mg/l	0.0179	0.0	.025	72.0	57.3-136	L678787-02	WG702215
1,2,3-Trichlorobenzene	mg/l	0.0222	0.0	.025	89.0	59.1-138	L678787-02	WG702215
1,2,3-Trichloropropane	mg/l	0.0189	0.0	.025	75.0	61.4-128	L678787-02	WG702215
1,2,4-Trichlorobenzene	mg/l	0.0235	0.0	.025	94.0	63.6-143	L678787-02	WG702215
1,2,4-Trimethylbenzene	mg/l	0.0185	0.0	.025	74.0	57.4-137	L678787-02	WG702215
1,2-Dibromo-3-Chloropropane	mg/l	0.0206	0.0	.025	82.0	57.3-136	L678787-02	WG702215
1,2-Dibromoethane	mg/l	0.0190	0.0	.025	76.0	67.1-125	L678787-02	WG702215
1,2-Dichlorobenzene	mg/l	0.0207	0.0	.025	83.0	68.2-123	L678787-02	WG702215
1,2-Dichloroethane	mg/l	0.0182	0.0	.025	73.0	60-126	L678787-02	WG702215
1,2-Dichloropropane	mg/l	0.0220	0.0	.025	88.0	64.2-123	L678787-02	WG702215
1,3,5-Trimethylbenzene	mg/l	0.0189	0.0	.025	76.0	63.6-132	L678787-02	WG702215
1,3-Dichlorobenzene	mg/l	0.0188	0.0	.025	75.0	63.1-131	L678787-02	WG702215
1,3-Dichloropropane	mg/l	0.0205	0.0	.025	82.0	67.9-121	L678787-02	WG702215
1,4-Dichlorobenzene	mg/l	0.0202	0.0	.025	81.0	68.6-123	L678787-02	WG702215
2,2-Dichloropropane	mg/l	0.0187	0.0	.025	75.0	50.5-144	L678787-02	WG702215
2-Butanone (MEK)	mg/l	0.0874	0.00217	.125	68.0	22.4-138	L678787-02	WG702215
2-Chloroethyl vinyl ether	mg/l	0.000425	0.0	.125	0.340*	10-155	L678787-02	WG702215
2-Chlorotoluene	mg/l	0.0182	0.0	.025	73.0	63.6-128	L678787-02	WG702215
4-Chlorotoluene	mg/l	0.0192	0.0	.025	77.0	65.7-127	L678787-02	WG702215
4-Methyl-2-pentanone (MIBK)	mg/l	0.106	0.000399	.125	85.0	60.8-140	L678787-02	WG702215

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Tax I.D. 62-0814289

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Duncklee and Dunham
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Cary, NC 27512

Quality Assurance Report
Level II

L678902

January 24, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Acetone	mg/l	0.0630	0.0183	.125	36.0	10-130	L678787-02	WG702215
Acrolein	mg/l	0.182	0.0	.125	150.	10-200	L678787-02	WG702215
Acrylonitrile	mg/l	0.116	0.0	.125	93.0	49.4-133	L678787-02	WG702215
Benzene	mg/l	0.0192	0.000645	.025	74.0	54.3-133	L678787-02	WG702215
Bromobenzene	mg/l	0.0194	0.0	.025	78.0	63.9-124	L678787-02	WG702215
Bromodichloromethane	mg/l	0.0181	0.0	.025	72.0	63.9-121	L678787-02	WG702215
Bromoform	mg/l	0.0188	0.0	.025	75.0	59.5-134	L678787-02	WG702215
Bromomethane	mg/l	0.0155	0.0	.025	62.0	41.7-155	L678787-02	WG702215
Carbon tetrachloride	mg/l	0.0181	0.0	.025	72.0	55.7-134	L678787-02	WG702215
Chlorobenzene	mg/l	0.0197	0.0	.025	79.0	67-125	L678787-02	WG702215
Chlorodibromomethane	mg/l	0.0203	0.0	.025	81.0	64.3-125	L678787-02	WG702215
Chloroethane	mg/l	0.0153	0.0	.025	61.0	51.5-136	L678787-02	WG702215
Chloroform	mg/l	0.0210	0.00218	.025	75.0	63-129	L678787-02	WG702215
Chloromethane	mg/l	0.0135	0.0	.025	54.0	42.4-135	L678787-02	WG702215
cis-1,2-Dichloroethene	mg/l	0.318	0.342	.025	0.0*	59.2-129	L678787-02	WG702215
cis-1,3-Dichloropropene	mg/l	0.0207	0.0	.025	83.0	66.4-125	L678787-02	WG702215
Di-isopropyl ether	mg/l	0.0219	0.0	.025	88.0	56.9-136	L678787-02	WG702215
Dibromomethane	mg/l	0.0190	0.0	.025	76.0	68.2-124	L678787-02	WG702215
Dichlorodifluoromethane	mg/l	0.0157	0.0	.025	63.0	40.6-144	L678787-02	WG702215
Ethylbenzene	mg/l	0.0198	0.0	.025	79.0	61.4-133	L678787-02	WG702215
Hexachloro-1,3-butadiene	mg/l	0.0196	0.0	.025	79.0	55.1-136	L678787-02	WG702215
Isopropylbenzene	mg/l	0.0217	0.0	.025	87.0	66.8-141	L678787-02	WG702215
Methyl tert-butyl ether	mg/l	0.0201	0.0	.025	80.0	57.7-134	L678787-02	WG702215
Methylene Chloride	mg/l	0.0190	0.00118	.025	71.0	58.1-122	L678787-02	WG702215
n-Butylbenzene	mg/l	0.0218	0.0	.025	87.0	62.7-140	L678787-02	WG702215
n-Propylbenzene	mg/l	0.0196	0.0	.025	78.0	65.9-131	L678787-02	WG702215
Naphthalene	mg/l	0.0209	0.0	.025	83.0	58-135	L678787-02	WG702215
p-Isopropyltoluene	mg/l	0.0199	0.0	.025	80.0	63.2-139	L678787-02	WG702215
sec-Butylbenzene	mg/l	0.0198	0.0	.025	79.0	62.2-136	L678787-02	WG702215
Styrene	mg/l	0.0201	0.0	.025	80.0	66.8-133	L678787-02	WG702215
tert-Butylbenzene	mg/l	0.0203	0.0	.025	81.0	63.3-134	L678787-02	WG702215
Tetrachloroethene	mg/l	0.0190	0.000675	.025	73.0	53-139	L678787-02	WG702215
Toluene	mg/l	0.0192	0.0	.025	77.0	61.4-130	L678787-02	WG702215
trans-1,2-Dichloroethene	mg/l	0.0204	0.00491	.025	62.0	56.5-129	L678787-02	WG702215
trans-1,3-Dichloropropene	mg/l	0.0197	0.0	.025	79.0	64.1-128	L678787-02	WG702215
Trichloroethene	mg/l	0.225	0.237	.025	0.0*	44.1-149	L678787-02	WG702215
Trichlorofluoromethane	mg/l	0.0149	0.0	.025	59.0	49.6-145	L678787-02	WG702215
Vinyl chloride	mg/l	0.0238	0.0103	.025	54.0	47.8-137	L678787-02	WG702215
Xylenes, Total	mg/l	0.0579	0.0	.075	77.0	63.3-131	L678787-02	WG702215
4-Bromofluorobenzene					92.30	71-126		WG702215
Dibromofluoromethane					91.40	78.3-121		WG702215
Toluene-d8					102.0	88.5-111		WG702215
a,a,a-Trifluorotoluene					97.50	85-114		WG702215
Mercury	mg/kg	0.339	0.0866	.025	100.	80-120	L678967-01	WG702460
Antimony	mg/kg	20.5	0.0762	50	41.0*	75-125	L678894-01	WG702285
Arsenic	mg/kg	53.8	2.89	50	100.	75-125	L678894-01	WG702285
Beryllium	mg/kg	51.7	0.432	50	100.	75-125	L678894-01	WG702285
Cadmium	mg/kg	50.2	0.235	50	100.	75-125	L678894-01	WG702285
Chromium	mg/kg	71.5	12.2	50	120.	75-125	L678894-01	WG702285
Copper	mg/kg	68.4	15.1	50	110.	75-125	L678894-01	WG702285
Lead	mg/kg	79.9	29.6	50	100.	75-125	L678894-01	WG702285
Nickel	mg/kg	54.9	5.88	50	98.0	75-125	L678894-01	WG702285
Selenium	mg/kg	52.3	0.583	50	100.	75-125	L678894-01	WG702285
Silver	mg/kg	51.9	-0.439	50	100.	75-125	L678894-01	WG702285
Thallium	mg/kg	50.6	0.316	50	100.	75-125	L678894-01	WG702285

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Quality Assurance Report
Level II

L678902

January 24, 2014

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Zinc	mg/kg	82.4	32.0	50	100.	75-125	L678894-01	WG702285
Antimony	mg/kg	14.5	-0.552	50	29.0*	75-125	L678849-01	WG702327
Arsenic	mg/kg	54.3	6.62	50	95.0	75-125	L678849-01	WG702327
Beryllium	mg/kg	51.1	0.899	50	100.	75-125	L678849-01	WG702327
Cadmium	mg/kg	49.6	0.170	50	99.0	75-125	L678849-01	WG702327
Chromium	mg/kg	65.8	16.4	50	99.0	75-125	L678849-01	WG702327
Copper	mg/kg	70.0	17.5	50	100.	75-125	L678849-01	WG702327
Lead	mg/kg	60.4	11.5	50	98.0	75-125	L678849-01	WG702327
Nickel	mg/kg	60.6	14.3	50	93.0	75-125	L678849-01	WG702327
Selenium	mg/kg	49.3	1.84	50	95.0	75-125	L678849-01	WG702327
Silver	mg/kg	49.5	0.00795	50	99.0	75-125	L678849-01	WG702327
Thallium	mg/kg	47.6	-1.55	50	95.0	75-125	L678849-01	WG702327
Zinc	mg/kg	96.2	46.7	50	99.0	75-125	L678849-01	WG702327

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/kg	0.0212	0.0115	84.8	64-128	59.3*	20	L678902-01	WG702232
1,1,1-Trichloroethane	mg/kg	0.0241	0.0122	96.2	58.7-134	65.2*	20	L678902-01	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0216	0.0113	86.4	56-132	62.7*	22.2	L678902-01	WG702232
1,1,2-Trichloroethane	mg/kg	0.0237	0.0123	94.6	66.3-125	62.8*	20	L678902-01	WG702232
1,1-Dichloroethane	mg/kg	0.0259	0.0129	104.	58.5-132	67.1*	20	L678902-01	WG702232
1,1-Dichloroethene	mg/kg	0.0236	0.0115	94.3	51.1-140	69.1*	20.2	L678902-01	WG702232
1,1-Dichloropropene	mg/kg	0.0250	0.0127	100.	57.3-136	65.1*	20	L678902-01	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0209	0.0116	83.8	59.1-138	57.1*	23.7	L678902-01	WG702232
1,2,3-Trichloropropane	mg/kg	0.0207	0.0112	82.7	61.4-128	59.5*	22.4	L678902-01	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0216	0.0125	86.6	63.6-143	53.8*	21.9	L678902-01	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0202	0.0112	81.0	57.4-137	57.8*	20	L678902-01	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0244	0.0113	97.5	57.3-136	73.5*	27	L678902-01	WG702232
1,2-Dibromoethane	mg/kg	0.0233	0.0120	93.0	67.1-125	63.9*	20	L678902-01	WG702232
1,2-Dichlorobenzene	mg/kg	0.0219	0.0118	87.4	68.2-123	59.6*	20	L678902-01	WG702232
1,2-Dichloroethane	mg/kg	0.0228	0.0112	91.2	60-126	68.1*	20	L678902-01	WG702232
1,2-Dichloropropane	mg/kg	0.0258	0.0130	103.	64.2-123	66.0*	20	L678902-01	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0206	0.0117	82.3	63.6-132	54.6*	20.5	L678902-01	WG702232
1,3-Dichlorobenzene	mg/kg	0.0194	0.0111	77.6	63.1-131	54.7*	20	L678902-01	WG702232
1,3-Dichloropropane	mg/kg	0.0238	0.0121	95.4	67.9-121	65.4*	20	L678902-01	WG702232
1,4-Dichlorobenzene	mg/kg	0.0210	0.0115	83.8	68.6-123	58.6*	20	L678902-01	WG702232
2,2-Dichloropropane	mg/kg	0.0236	0.0124	94.4	50.5-144	62.0*	21.9	L678902-01	WG702232
2-Butanone (MEK)	mg/kg	0.116	0.0558	92.7	22.4-138	70.0*	27	L678902-01	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.161	0.0784	129.	10-155	68.9*	40	L678902-01	WG702232
2-Chlorotoluene	mg/kg	0.0201	0.0110	80.2	63.6-128	58.7*	20	L678902-01	WG702232
4-Chlorotoluene	mg/kg	0.0205	0.0114	82.1	65.7-127	57.2*	20	L678902-01	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.129	0.0644	103.	60.8-140	66.8*	25.1	L678902-01	WG702232
Acetone	mg/kg	0.0684	0.0379	50.4	10-130	57.4*	27.9	L678902-01	WG702232
Acrylonitrile	mg/kg	0.143	0.0654	114.	49.4-133	74.4*	25.3	L678902-01	WG702232
Benzene	mg/kg	0.0248	0.0125	99.4	54.3-133	66.0*	20	L678902-01	WG702232
Bromobenzene	mg/kg	0.0212	0.0118	84.7	63.9-124	57.0*	20	L678902-01	WG702232
Bromodichloromethane	mg/kg	0.0209	0.0109	83.6	63.9-121	62.8*	20	L678902-01	WG702232
Bromoform	mg/kg	0.0211	0.0106	84.3	59.5-134	66.3*	20.8	L678902-01	WG702232
Bromomethane	mg/kg	0.0249	0.0129	99.5	41.7-155	63.7*	20.5	L678902-01	WG702232
Carbon tetrachloride	mg/kg	0.0235	0.0119	94.1	55.7-134	65.9*	20.3	L678902-01	WG702232
Chlorobenzene	mg/kg	0.0223	0.0122	89.1	67-125	58.1*	20	L678902-01	WG702232
Chlorodibromomethane	mg/kg	0.0219	0.0113	87.6	64.3-125	63.9*	20	L678902-01	WG702232
Chloroethane	mg/kg	0.0250	0.0135	100.	51.5-136	59.5*	20.8	L678902-01	WG702232
Chloroform	mg/kg	0.0233	0.0120	93.2	63-129	64.0*	20	L678902-01	WG702232
Chloromethane	mg/kg	0.0278	0.0143	111.	42.4-135	64.3*	20	L678902-01	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0248	0.0121	99.4	59.2-129	68.9*	20	L678902-01	WG702232

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Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
cis-1,3-Dichloropropene	mg/kg	0.0248	0.0129	99.4	66.4-125	63.6*	20	L678902-01	WG702232
Di-isopropyl ether	mg/kg	0.0261	0.0131	104.	56.9-136	66.6*	20	L678902-01	WG702232
Dibromomethane	mg/kg	0.0234	0.0114	93.6	68.2-124	68.7*	20	L678902-01	WG702232
Dichlorodifluoromethane	mg/kg	0.0254	0.0131	102.	40.6-144	63.6*	20.2	L678902-01	WG702232
Ethylbenzene	mg/kg	0.0226	0.0122	90.5	61.4-133	59.7*	20	L678902-01	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0194	0.0112	77.4	55.1-136	53.7*	23.6	L678902-01	WG702232
Isopropylbenzene	mg/kg	0.0235	0.0131	93.8	66.8-141	56.7*	20	L678902-01	WG702232
Methyl tert-butyl ether	mg/kg	0.0240	0.0118	95.8	57.7-134	68.3*	20	L678902-01	WG702232
Methylene Chloride	mg/kg	0.0237	0.0122	94.7	58.1-122	63.8*	20	L678902-01	WG702232
n-Butylbenzene	mg/kg	0.0229	0.0127	91.4	62.7-140	57.3*	20	L678902-01	WG702232
n-Propylbenzene	mg/kg	0.0214	0.0118	85.6	10-176	57.7*	26.6	L678902-01	WG702232
Naphthalene	mg/kg	0.0213	0.0111	85.2	58-135	63.0*	25.5	L678902-01	WG702232
p-Isopropyltoluene	mg/kg	0.0212	0.0119	84.9	63.2-139	56.6*	20.4	L678902-01	WG702232
sec-Butylbenzene	mg/kg	0.0210	0.0116	84.0	62.2-136	58.1*	20.3	L678902-01	WG702232
Styrene	mg/kg	0.0222	0.0119	88.9	66.8-133	60.5*	20	L678902-01	WG702232
tert-Butylbenzene	mg/kg	0.0216	0.0120	86.6	63.3-134	57.2*	20.3	L678902-01	WG702232
Tetrachloroethene	mg/kg	0.0225	0.0121	90.1	53-139	60.5*	20	L678902-01	WG702232
Toluene	mg/kg	0.0236	0.0124	94.2	61.4-130	61.8*	20	L678902-01	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0239	0.0124	95.6	56.5-129	63.8*	20	L678902-01	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0235	0.0125	94.2	64.1-128	61.3*	20	L678902-01	WG702232
Trichloroethene	mg/kg	0.0230	0.0119	91.8	44.1-149	63.2*	20	L678902-01	WG702232
Trichlorofluoromethane	mg/kg	0.0219	0.0113	87.8	49.6-145	64.4*	21.2	L678902-01	WG702232
Vinyl chloride	mg/kg	0.0268	0.0136	107.	47.8-137	65.2*	20	L678902-01	WG702232
Xylenes, Total	mg/kg	0.0658	0.0361	87.8	63.3-131	58.5*	20	L678902-01	WG702232
4-Bromofluorobenzene				90.80	71-126				WG702232
Dibromofluoromethane				96.30	78.3-121				WG702232
Toluene-d8				103.0	88.5-111				WG702232
a,a,a-Trifluorotoluene				97.10	85-114				WG702232
Mercury	mg/kg	0.270	0.291	102.	80-120	8.00	20	L678902-02	WG702461
Antimony	mg/kg	31.1	33.8	51.8*	75-125	8.00	20	L678779-03	WG702286
Arsenic	mg/kg	67.9	70.7	110.	75-125	4.00	20	L678779-03	WG702286
Beryllium	mg/kg	54.8	55.1	108.	75-125	0.0	20	L678779-03	WG702286
Cadmium	mg/kg	52.1	52.0	104.	75-125	0.0	20	L678779-03	WG702286
Chromium	mg/kg	126.	166.	116.	75-125	28.0*	20	L678779-03	WG702286
Copper	mg/kg	57.6	58.4	111.	75-125	1.00	20	L678779-03	WG702286
Lead	mg/kg	57.0	57.6	105.	75-125	1.00	20	L678779-03	WG702286
Nickel	mg/kg	52.9	53.5	99.1	75-125	1.00	20	L678779-03	WG702286
Silver	mg/kg	55.0	55.2	109.	75-125	0.0	20	L678779-03	WG702286
Thallium	mg/kg	51.5	51.2	100.	75-125	1.00	20	L678779-03	WG702286
Zinc	mg/kg	74.4	78.9	110.	75-125	6.00	20	L678779-03	WG702286
Selenium	mg/kg	56.8	52.3	123.	75-125	8.00	20	L678779-03	WG702286
1,1,1,2-Tetrachloroethane	mg/l	0.0211	0.0194	84.2	64-128	8.19	20	L678787-02	WG702215
1,1,1-Trichloroethane	mg/l	0.0205	0.0193	82.1	58.7-134	6.21	20	L678787-02	WG702215
1,1,2,2-Tetrachloroethane	mg/l	0.0207	0.0196	82.7	56-132	5.60	22.2	L678787-02	WG702215
1,1,2-Trichloroethane	mg/l	0.0227	0.0217	90.9	66.3-125	4.77	20	L678787-02	WG702215
1,1-Dichloroethane	mg/l	0.0248	0.0240	83.9	58.5-132	3.36	20	L678787-02	WG702215
1,1-Dichloroethene	mg/l	0.0187	0.0176	61.9	51.1-140	5.55	20.2	L678787-02	WG702215
1,1-Dichloropropene	mg/l	0.0194	0.0179	77.5	57.3-136	8.03	20	L678787-02	WG702215
1,2,3-Trichlorobenzene	mg/l	0.0235	0.0222	93.8	59.1-138	5.33	23.7	L678787-02	WG702215
1,2,3-Trichloropropane	mg/l	0.0206	0.0189	82.3	61.4-128	8.69	22.4	L678787-02	WG702215
1,2,4-Trichlorobenzene	mg/l	0.0241	0.0235	96.4	63.6-143	2.53	21.9	L678787-02	WG702215
1,2,4-Trimethylbenzene	mg/l	0.0202	0.0185	80.9	57.4-137	8.70	20	L678787-02	WG702215
1,2-Dibromo-3-Chloropropane	mg/l	0.0217	0.0206	86.6	57.3-136	4.86	27	L678787-02	WG702215

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678902

January 24, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,2-Dibromoethane	mg/l	0.0207	0.0190	83.0	67.1-125	8.69	20	L678787-02	WG702215
1,2-Dichlorobenzene	mg/l	0.0222	0.0207	88.6	68.2-123	6.90	20	L678787-02	WG702215
1,2-Dichloroethane	mg/l	0.0193	0.0182	77.0	60-126	5.85	20	L678787-02	WG702215
1,2-Dichloropropane	mg/l	0.0227	0.0220	90.9	64.2-123	3.30	20	L678787-02	WG702215
1,3,5-Trimethylbenzene	mg/l	0.0206	0.0189	82.4	63.6-132	8.43	20.5	L678787-02	WG702215
1,3-Dichlorobenzene	mg/l	0.0198	0.0188	79.3	63.1-131	5.38	20	L678787-02	WG702215
1,3-Dichloropropane	mg/l	0.0221	0.0205	88.2	67.9-121	7.42	20	L678787-02	WG702215
1,4-Dichlorobenzene	mg/l	0.0212	0.0202	84.8	68.6-123	4.78	20	L678787-02	WG702215
2,2-Dichloropropane	mg/l	0.0197	0.0187	78.9	50.5-144	5.35	21.9	L678787-02	WG702215
2-Butanone (MEK)	mg/l	0.0890	0.0874	69.5	22.4-138	1.90	27	L678787-02	WG702215
2-Chloroethyl vinyl ether	mg/l	0.000485	0.000425	0.388*	10-155	13.3	20	L678787-02	WG702215
2-Chlorotoluene	mg/l	0.0204	0.0182	81.5	63.6-128	11.5	20	L678787-02	WG702215
4-Chlorotoluene	mg/l	0.0208	0.0192	83.2	65.7-127	8.10	20	L678787-02	WG702215
4-Methyl-2-pentanone (MIBK)	mg/l	0.111	0.106	88.5	60.8-140	4.53	25.1	L678787-02	WG702215
Acetone	mg/l	0.0638	0.0630	36.4	10-130	1.15	27.9	L678787-02	WG702215
Acrolein	mg/l	0.191	0.182	153.	10-200	4.71	27.7	L678787-02	WG702215
Acrylonitrile	mg/l	0.119	0.116	95.4	49.4-133	2.45	25.3	L678787-02	WG702215
Benzene	mg/l	0.0204	0.0192	78.9	54.3-133	5.96	20	L678787-02	WG702215
Bromobenzene	mg/l	0.0211	0.0194	84.4	63.9-124	8.17	20	L678787-02	WG702215
Bromodichloromethane	mg/l	0.0196	0.0181	78.5	63.9-121	8.10	20	L678787-02	WG702215
Bromoform	mg/l	0.0199	0.0188	79.5	59.5-134	5.81	20.5	L678787-02	WG702215
Bromomethane	mg/l	0.0158	0.0155	63.4	41.7-155	2.48	21.9	L678787-02	WG702215
Carbon tetrachloride	mg/l	0.0195	0.0181	78.1	55.7-134	7.57	20	L678787-02	WG702215
Chlorobenzene	mg/l	0.0214	0.0197	85.7	67-125	8.20	20	L678787-02	WG702215
Chlorodibromomethane	mg/l	0.0217	0.0203	86.9	64.3-125	6.79	20.8	L678787-02	WG702215
Chloroethane	mg/l	0.0155	0.0153	61.9	51.5-136	1.01	40	L678787-02	WG702215
Chloroform	mg/l	0.0221	0.0210	79.7	63-129	5.08	20	L678787-02	WG702215
Chloromethane	mg/l	0.0136	0.0135	54.5	42.4-135	0.820	20	L678787-02	WG702215
cis-1,2-Dichloroethene	mg/l	0.303	0.318	0*	59.2-129	4.74	20	L678787-02	WG702215
cis-1,3-Dichloropropene	mg/l	0.0226	0.0207	90.2	66.4-125	8.76	20	L678787-02	WG702215
Di-isopropyl ether	mg/l	0.0229	0.0219	91.4	56.9-136	4.16	20	L678787-02	WG702215
Dibromomethane	mg/l	0.0203	0.0190	81.1	68.2-124	6.52	20	L678787-02	WG702215
Dichlorodifluoromethane	mg/l	0.0150	0.0157	60.1	40.6-144	4.06	20.2	L678787-02	WG702215
Ethylbenzene	mg/l	0.0213	0.0198	85.1	61.4-133	7.21	20	L678787-02	WG702215
Hexachloro-1,3-butadiene	mg/l	0.0214	0.0196	85.5	55.1-136	8.49	23.6	L678787-02	WG702215
Isopropylbenzene	mg/l	0.0233	0.0217	93.2	66.8-141	7.21	20	L678787-02	WG702215
Methyl tert-butyl ether	mg/l	0.0206	0.0201	82.5	57.7-134	2.78	20	L678787-02	WG702215
Methylene Chloride	mg/l	0.0198	0.0190	74.4	58.1-122	3.98	20	L678787-02	WG702215
n-Butylbenzene	mg/l	0.0235	0.0218	93.8	62.7-140	7.53	20.3	L678787-02	WG702215
n-Propylbenzene	mg/l	0.0216	0.0196	86.3	65.9-131	9.78	20	L678787-02	WG702215
Naphthalene	mg/l	0.0219	0.0209	87.5	58-135	4.81	25.5	L678787-02	WG702215
p-Isopropyltoluene	mg/l	0.0215	0.0199	86.0	63.2-139	7.68	20.4	L678787-02	WG702215
sec-Butylbenzene	mg/l	0.0216	0.0198	86.4	62.2-136	8.73	20.3	L678787-02	WG702215
Styrene	mg/l	0.0219	0.0201	87.5	66.8-133	8.43	20	L678787-02	WG702215
tert-Butylbenzene	mg/l	0.0222	0.0203	88.6	63.3-134	8.73	21	L678787-02	WG702215
Tetrachloroethene	mg/l	0.0208	0.0190	80.5	53-139	9.27	20	L678787-02	WG702215
Toluene	mg/l	0.0206	0.0192	82.5	61.4-130	7.29	20	L678787-02	WG702215
trans-1,2-Dichloroethene	mg/l	0.0212	0.0204	65.1	56.5-129	3.62	20	L678787-02	WG702215
trans-1,3-Dichloropropene	mg/l	0.0218	0.0197	87.2	64.1-128	10.1	20	L678787-02	WG702215
Trichloroethene	mg/l	0.215	0.225	0*	44.1-149	4.34	20	L678787-02	WG702215
Trichlorofluoromethane	mg/l	0.0159	0.0149	63.6	49.6-145	6.82	21.2	L678787-02	WG702215
Vinyl chloride	mg/l	0.0227	0.0238	49.6	47.8-137	4.91	20	L678787-02	WG702215
Xylenes, Total	mg/l	0.0634	0.0579	84.5	63.3-131	9.04	20	L678787-02	WG702215
4-Bromofluorobenzene				94.10	71-126				WG702215
Dibromofluoromethane				91.50	78.3-121				WG702215
Toluene-d8				102.0	88.5-111				WG702215
a,a,a-Trifluorotoluene				97.10	85-114				WG702215

* Performance of this Analyte is outside of established criteria.
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Cary, NC 27512

Quality Assurance Report
Level II

L678902

January 24, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/kg	0.330	0.339	97.2	80-120	3.00	20	L678967-01	WG702460
Antimony	mg/kg	23.0	20.5	45.8*	75-125	11.0	20	L678894-01	WG702285
Arsenic	mg/kg	49.6	53.8	93.3	75-125	8.00	20	L678894-01	WG702285
Beryllium	mg/kg	46.9	51.7	92.9	75-125	10.0	20	L678894-01	WG702285
Cadmium	mg/kg	46.8	50.2	93.1	75-125	7.00	20	L678894-01	WG702285
Chromium	mg/kg	59.5	71.5	94.7	75-125	18.0	20	L678894-01	WG702285
Copper	mg/kg	61.7	68.4	93.2	75-125	10.0	20	L678894-01	WG702285
Lead	mg/kg	71.3	79.9	83.3	75-125	11.0	20	L678894-01	WG702285
Nickel	mg/kg	51.2	54.9	90.7	75-125	7.00	20	L678894-01	WG702285
Selenium	mg/kg	48.8	52.3	96.5	75-125	7.00	20	L678894-01	WG702285
Silver	mg/kg	48.2	51.9	97.2	75-125	7.00	20	L678894-01	WG702285
Thallium	mg/kg	46.4	50.6	92.1	75-125	9.00	20	L678894-01	WG702285
Zinc	mg/kg	71.4	82.4	78.8	75-125	14.0	20	L678894-01	WG702285
Antimony	mg/kg	14.6	14.5	30.3*	75-125	1.00	20	L678849-01	WG702327
Arsenic	mg/kg	55.9	54.3	98.6	75-125	3.00	20	L678849-01	WG702327
Beryllium	mg/kg	51.5	51.1	101.	75-125	1.00	20	L678849-01	WG702327
Cadmium	mg/kg	50.7	49.6	101.	75-125	2.00	20	L678849-01	WG702327
Chromium	mg/kg	65.7	65.8	98.7	75-125	0.0	20	L678849-01	WG702327
Copper	mg/kg	70.3	70.0	106.	75-125	1.00	20	L678849-01	WG702327
Lead	mg/kg	60.6	60.4	98.2	75-125	0.0	20	L678849-01	WG702327
Nickel	mg/kg	58.7	60.6	88.7	75-125	3.00	20	L678849-01	WG702327
Selenium	mg/kg	50.4	49.3	97.1	75-125	2.00	20	L678849-01	WG702327
Silver	mg/kg	49.4	49.5	98.9	75-125	0.0	20	L678849-01	WG702327
Thallium	mg/kg	47.4	47.6	97.8	75-125	1.00	20	L678849-01	WG702327
Zinc	mg/kg	94.5	96.2	95.6	75-125	2.00	20	L678849-01	WG702327

Post Spike

* Performance of this Analyte is outside of established criteria.
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Quality Assurance Report
Level II

L678902

January 24, 2014

Post Spike

Serial Dilution

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678902

January 24, 2014

Serial Dilution

Batch number /Run number / Sample number cross reference

WG702232: R2878186: L678902-01 02 03 04 05 06 07 08 09
WG702527: R2878260: L678902-01
WG702528: R2878262: L678902-02 03 04 05 06 07 08 09
WG702461: R2878320: L678902-02 03 04 05 06 07 08 09
WG702286: R2878381: L678902-04 05 06 08 09
WG702215: R2878481: L678902-10
WG702460: R2878605: L678902-01
WG702285: R2878638: L678902-01 02 03
WG702802: R2878823 R2878861: L678902-01 02 03 04 05 06 07 08 09
WG702327: R2879060: L678902-07

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

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January 24, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project #: **201336**

Lab Project #:

Collected by (print): Matt Flinchum

Site/Facility ID #:

P.O. #:

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 day max

Email? ___ No ___ Yes
FAX? ✓ No ___ Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LABS SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 678902
C165

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
10-SB-A (4-5')	G	SS	4-5'	1/17/14	1420	[illegible]	X	X	X									-01
10-SB-B (1-2')	|	|	1-2'	|	1430	|	|	|	|								-02
10-SB-C (1-2')	|	|	1-2'	|	1435	|	|	|	|								-03
10-SB-D (2-3')	|	|	2-3'	|	1445	|	|	|	|								-04
8-SB-A (1-2')	|	|	1-2'	|	1535	|	|	|	|								-05
8-SB-B (1-2')	|	|	|	|	1545	|	|	|	|								-06
8-SB-C (1-2')	|	|	|	|	1555	|	|	|	|								-07
8-SB-D (1-2')	|	|	|	|	1600	|	|	|	|								-08
8-SB-E (1-2')	✓	✓	✓	✓	1610	✓	✓	✓	✓									-09
Trip Blank	N/A	W	N/A	→	→	|	X										NoTICs	76

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/17/14	17:25	[signature]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/17/14	17:55	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ [illegible]

Temp: 3.1 °C Bottles Received: 60

Date: 1-18-14 Time: 0 1430

Condition: (lab use only) OK

COC Seal Intact: ___ Y ___ N ___ NA

pH Checked: NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-A 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-05

Date Collected: 1/17/2014

Lab File ID: 0121_20

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-A 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-05

Date Collected: 1/17/2014

Lab File ID: 0122A_18

Date Analyzed: 1/23/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 3

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.233	72.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	1.02	64.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.42	0.091	64.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-B 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-06

Date Collected: 1/17/2014

Lab File ID: 0121_21

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-B 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-06

Date Collected: 1/17/2014

Lab File ID: 0122A_19

Date Analyzed: 1/23/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 3

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.190	72.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.813	64.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.43	0.052	59.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-C 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-07

Date Collected: 1/17/2014

Lab File ID: 0121_22

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-C 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-07

Date Collected: 1/17/2014

Lab File ID: 0122A_20

Date Analyzed: 1/23/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.255	74.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-D 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-08

Date Collected: 1/17/2014

Lab File ID: 0121_23

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-D 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-08

Date Collected: 1/17/2014

Lab File ID: 0122A_23

Date Analyzed: 1/23/2014

Dilution Factor: 5.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 4

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000053-19-0	Mitotane	9.66	0.147	91.00	J
000207-08-9	Benzo[k]fluoranthene	12.42	0.117	89.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.02	0.936	72.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.42	0.116	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-E 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-09

Date Collected: 1/17/2014

Lab File ID: 0121_24

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 8-SB-E 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-09

Date Collected: 1/17/2014

Lab File ID: 0122A_21

Date Analyzed: 1/23/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 2

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000483-65-8	Phenanthrene, 1-methyl-7-(1-methyl	9.25	0.038	93.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.224	59.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 10-SB-A 4-5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-01

Date Collected: 1/17/2014

Lab File ID: 0121_11

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 10-SB-A 4-5FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-01

Date Collected: 1/17/2014

Lab File ID: 0122A_15

Date Analyzed: 1/23/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 4

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.221	78.00	J
000077-76-9	Propane, 2,2-dimethoxy-	2.83	0.040	74.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.977	74.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.43	0.111	74.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 10-SB-B 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-02

Date Collected: 1/17/2014

Lab File ID: 0121_17

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 10-SB-B 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-02

Date Collected: 1/17/2014

Lab File ID: 0122A_17

Date Analyzed: 1/23/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 5

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
001330-96-7	1,2-Benzenedicarboxylic acid, isod	13.42	0.048	80.00	J
003648-21-3	1,2-Benzenedicarboxylic acid, dihe	12.30	0.031	72.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.114	64.00	J
003648-21-3	1,2-Benzenedicarboxylic acid, dihe	11.80	0.027	64.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.42	0.042	59.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 10-SB-C 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-03

Date Collected: 1/17/2014

Lab File ID: 0121_18

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 10-SB-C 1-2FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-03

Date Collected: 1/17/2014

Lab File ID: 0122B_33

Date Analyzed: 1/23/2014

Dilution Factor: 20.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.04	1.63	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 10-SB-D 2-3FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-04

Date Collected: 1/17/2014

Lab File ID: 0121_19

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 10-SB-D 2-3FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678902-04

Date Collected: 1/17/2014

Lab File ID: 0122A_16

Date Analyzed: 1/23/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 2

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.05	0.933	74.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.202	74.00	J

Divider
Page

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Friday January 24, 2014

Report Number: L678897
Samples Received: 01/18/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678897-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 9HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 08:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	81.4	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.064	0.0014	0.024	mg/kg		7471	01/21/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	11.	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.4	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.39	0.035	0.31	mg/kg		6010C	01/22/14	1
Chromium	23.	0.070	0.61	mg/kg		6010C	01/22/14	1
Copper	66.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	8.8	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	15.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	0.47	0.37	1.2	mg/kg	J	6010C	01/22/14	1
Silver	U	0.70	3.1	mg/kg	O	6010C	01/22/14	5
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	31.	0.30	1.8	mg/kg		6010C	01/22/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.021	mg/kg		8082	01/22/14	1
PCB 1221	U	0.0054	0.021	mg/kg		8082	01/22/14	1
PCB 1232	U	0.0042	0.021	mg/kg		8082	01/22/14	1
PCB 1242	U	0.0032	0.021	mg/kg		8082	01/22/14	1
PCB 1248	U	0.0032	0.021	mg/kg		8082	01/22/14	1
PCB 1254	U	0.0047	0.021	mg/kg		8082	01/22/14	1
PCB 1260	U	0.0049	0.021	mg/kg		8082	01/22/14	1
PCBs Surrogates								
Decachlorobiphenyl	57.8			% Rec.		8082	01/22/14	1
Tetrachloro-m-xylene	82.2			% Rec.		8082	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678897-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 9HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 08:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	83.3	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.062	0.0014	0.024	mg/kg		7471	01/21/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	7.0	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.4	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.91	0.035	0.30	mg/kg		6010C	01/22/14	1
Chromium	28.	0.070	0.60	mg/kg		6010C	01/22/14	1
Copper	66.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	17.	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	20.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	2.2	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.0	mg/kg	O	6010C	01/22/14	5
Thallium	U	1.6	6.0	mg/kg	O	6010C	01/22/14	5
Zinc	67.	0.30	1.8	mg/kg		6010C	01/22/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.020	mg/kg		8082	01/22/14	1
PCB 1221	U	0.0054	0.020	mg/kg		8082	01/22/14	1
PCB 1232	U	0.0042	0.020	mg/kg		8082	01/22/14	1
PCB 1242	U	0.0032	0.020	mg/kg		8082	01/22/14	1
PCB 1248	U	0.0032	0.020	mg/kg		8082	01/22/14	1
PCB 1254	U	0.0047	0.020	mg/kg		8082	01/22/14	1
PCB 1260	U	0.0049	0.020	mg/kg		8082	01/22/14	1
PCBs Surrogates								
Decachlorobiphenyl	64.2			% Rec.		8082	01/22/14	1
Tetrachloro-m-xylene	89.9			% Rec.		8082	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678897-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 9HA-C 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 09:05

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	81.3	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.038	0.0014	0.025	mg/kg		7471	01/21/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	10.	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.2	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.44	0.035	0.31	mg/kg		6010C	01/22/14	1
Chromium	22.	0.070	0.62	mg/kg		6010C	01/22/14	1
Copper	43.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	6.9	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	15.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	1.6	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.1	mg/kg	O	6010C	01/22/14	5
Thallium	U	1.6	6.2	mg/kg	O	6010C	01/22/14	5
Zinc	32.	0.30	1.8	mg/kg		6010C	01/22/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.021	mg/kg		8082	01/22/14	1
PCB 1221	U	0.0054	0.021	mg/kg		8082	01/22/14	1
PCB 1232	U	0.0042	0.021	mg/kg		8082	01/22/14	1
PCB 1242	U	0.0032	0.021	mg/kg		8082	01/22/14	1
PCB 1248	U	0.0032	0.021	mg/kg		8082	01/22/14	1
PCB 1254	U	0.0047	0.021	mg/kg		8082	01/22/14	1
PCB 1260	U	0.0049	0.021	mg/kg		8082	01/22/14	1
PCBs Surrogates								
Decachlorobiphenyl	67.1			% Rec.		8082	01/22/14	1
Tetrachloro-m-xylene	90.1			% Rec.		8082	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678897-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 9HA-D 6-8IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 09:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	64.5	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.026	0.0014	0.031	mg/kg	J	7471	01/21/14	1
Antimony	U	0.38	1.6	mg/kg		6010C	01/22/14	1
Arsenic	6.0	0.32	1.6	mg/kg		6010C	01/22/14	1
Beryllium	1.2	0.035	0.16	mg/kg		6010C	01/22/14	1
Cadmium	2.3	0.035	0.39	mg/kg		6010C	01/22/14	1
Chromium	12.	0.070	0.78	mg/kg		6010C	01/22/14	1
Copper	40.	0.26	1.6	mg/kg		6010C	01/22/14	1
Lead	22.	0.095	0.39	mg/kg		6010C	01/22/14	1
Nickel	28.	0.24	1.6	mg/kg		6010C	01/22/14	1
Selenium	3.1	0.37	1.6	mg/kg		6010C	01/22/14	1
Silver	0.43	0.14	0.78	mg/kg	J	6010C	01/22/14	1
Thallium	U	6.5	31.	mg/kg	O	6010C	01/22/14	20
Zinc	93.	0.30	2.3	mg/kg		6010C	01/22/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.026	mg/kg		8082	01/22/14	1
PCB 1221	U	0.0054	0.026	mg/kg		8082	01/22/14	1
PCB 1232	U	0.0042	0.026	mg/kg		8082	01/22/14	1
PCB 1242	U	0.0032	0.026	mg/kg		8082	01/22/14	1
PCB 1248	U	0.0032	0.026	mg/kg		8082	01/22/14	1
PCB 1254	U	0.0047	0.026	mg/kg		8082	01/22/14	1
PCB 1260	U	0.0049	0.026	mg/kg		8082	01/22/14	1
PCBs Surrogates								
Decachlorobiphenyl	51.0			% Rec.		8082	01/22/14	1
Tetrachloro-m-xylene	75.5			% Rec.		8082	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24, 2014

ESC Sample # : L678897-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 9HA-E 6-8IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 09:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	89.9	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.0050	0.0014	0.022	mg/kg	J	7471	01/22/14	1
Antimony	U	0.38	1.1	mg/kg		6010C	01/22/14	1
Arsenic	0.84	0.32	1.1	mg/kg	J	6010C	01/22/14	1
Beryllium	0.18	0.035	0.11	mg/kg		6010C	01/22/14	1
Cadmium	0.34	0.035	0.28	mg/kg		6010C	01/22/14	1
Chromium	2.1	0.070	0.56	mg/kg		6010C	01/22/14	1
Copper	5.8	0.26	1.1	mg/kg		6010C	01/22/14	1
Lead	3.4	0.095	0.28	mg/kg		6010C	01/22/14	1
Nickel	7.7	0.24	1.1	mg/kg		6010C	01/22/14	1
Selenium	0.76	0.37	1.1	mg/kg	J	6010C	01/22/14	1
Silver	U	0.14	0.56	mg/kg		6010C	01/22/14	1
Thallium	U	1.6	5.6	mg/kg	O	6010C	01/22/14	5
Zinc	13.	0.30	1.7	mg/kg		6010C	01/22/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.019	mg/kg		8082	01/22/14	1
PCB 1221	U	0.0054	0.019	mg/kg		8082	01/22/14	1
PCB 1232	U	0.0042	0.019	mg/kg		8082	01/22/14	1
PCB 1242	U	0.0032	0.019	mg/kg		8082	01/22/14	1
PCB 1248	U	0.0032	0.019	mg/kg		8082	01/22/14	1
PCB 1254	U	0.0047	0.019	mg/kg		8082	01/22/14	1
PCB 1260	U	0.0049	0.019	mg/kg		8082	01/22/14	1
PCBs Surrogates								
Decachlorobiphenyl	77.8			% Rec.		8082	01/22/14	1
Tetrachloro-m-xylene	98.1			% Rec.		8082	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678897-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-3

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 10:10

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.40	0.21	1.0	ug/l	J	6020	01/22/14	1
Arsenic	0.45	0.25	1.0	ug/l	J	6020	01/21/14	1
Lead	0.66	0.24	1.0	ug/l	J	6020	01/21/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/21/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/21/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/21/14	1
Cadmium	1.3	0.70	5.0	ug/l	J	6010C	01/21/14	1
Chromium	U	1.4	10.	ug/l		6010C	01/21/14	1
Copper	U	5.3	20.	ug/l		6010C	01/21/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/21/14	1
Selenium	U	7.4	20.	ug/l		6010C	01/21/14	1
Silver	U	2.8	10.	ug/l		6010C	01/21/14	1
Zinc	U	5.9	30.	ug/l		6010C	01/21/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.10	0.50	ug/l		8082 A	01/23/14	1
PCB 1221	U	0.073	0.50	ug/l		8082 A	01/23/14	1
PCB 1232	U	0.042	0.50	ug/l		8082 A	01/23/14	1
PCB 1242	U	0.047	0.50	ug/l		8082 A	01/23/14	1
PCB 1248	U	0.086	0.50	ug/l		8082 A	01/23/14	1
PCB 1254	U	0.047	0.50	ug/l		8082 A	01/23/14	1
PCB 1260	U	0.12	0.50	ug/l		8082 A	01/23/14	1
PCBs Surrogates								
Decachlorobiphenyl	76.5			% Rec.		8082 A	01/23/14	1
Tetrachloro-m-xylene	86.5			% Rec.		8082 A	01/23/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 24,2014

ESC Sample # : L678897-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-3 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 09:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	83.8	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.027	0.0014	0.024	mg/kg		7471	01/22/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	9.2	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	0.91	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.27	0.035	0.30	mg/kg	J	6010C	01/22/14	1
Chromium	19.	0.070	0.60	mg/kg		6010C	01/22/14	1
Copper	42.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	5.8	0.095	0.30	mg/kg		6010C	01/22/14	1
Nickel	10.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	1.7	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.14	0.60	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	20.	0.30	1.8	mg/kg		6010C	01/22/14	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.020	mg/kg		8082	01/22/14	1
PCB 1221	U	0.0054	0.020	mg/kg		8082	01/22/14	1
PCB 1232	U	0.0042	0.020	mg/kg		8082	01/22/14	1
PCB 1242	U	0.0032	0.020	mg/kg		8082	01/22/14	1
PCB 1248	U	0.0032	0.020	mg/kg		8082	01/22/14	1
PCB 1254	U	0.0047	0.020	mg/kg		8082	01/22/14	1
PCB 1260	U	0.0049	0.020	mg/kg		8082	01/22/14	1
PCBs Surrogates								
Decachlorobiphenyl	75.2			% Rec.		8082	01/22/14	1
Tetrachloro-m-xylene	93.0			% Rec.		8082	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678897-01	WG702285	SAMP	Selenium	R2878638	J
	WG702285	SAMP	Silver	R2878638	O
L678897-02	WG702285	SAMP	Silver	R2878638	O
	WG702285	SAMP	Thallium	R2878638	O
L678897-03	WG702285	SAMP	Silver	R2878638	O
	WG702285	SAMP	Thallium	R2878638	O
L678897-04	WG702214	SAMP	Mercury	R2878101	J
	WG702285	SAMP	Silver	R2878638	J
	WG702285	SAMP	Thallium	R2878638	O
L678897-05	WG702460	SAMP	Mercury	R2878605	J
	WG702285	SAMP	Arsenic	R2878638	J
	WG702285	SAMP	Selenium	R2878638	J
	WG702285	SAMP	Thallium	R2878638	O
L678897-06	WG702315	SAMP	Antimony	R2878172	J
	WG702315	SAMP	Arsenic	R2878172	J
	WG702315	SAMP	Lead	R2878172	J
	WG702313	SAMP	Cadmium	R2878353	J
L678897-07	WG702285	SAMP	Cadmium	R2878638	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/24/14 at 15:57:37

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678897-01 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 15:57

Sample: L678897-02 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 15:57

Sample: L678897-03 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 15:57

Sample: L678897-04 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 15:57

Sample: L678897-05 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 15:57

Sample: L678897-06 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 15:57

Sample: L678897-07 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/24/14 00:00 RPT Date: 01/24/14 15:57

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Mt. Juliet, TN 37122
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1-800-767-5859
Fax (615) 758-5859

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678897

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Beryllium	< .002	mg/l			WG702313	01/20/14 18:10
Cadmium	< .005	mg/l			WG702313	01/20/14 18:10
Chromium	< .01	mg/l			WG702313	01/20/14 18:10
Copper	< .02	mg/l			WG702313	01/20/14 18:10
Nickel	< .02	mg/l			WG702313	01/20/14 18:10
Selenium	< .02	mg/l			WG702313	01/20/14 18:10
Silver	< .01	mg/l			WG702313	01/20/14 18:10
Zinc	< .03	mg/l			WG702313	01/20/14 18:10
Mercury	< .0002	mg/l			WG702302	01/21/14 10:59
Mercury	< .02	mg/kg			WG702214	01/21/14 12:46
Arsenic	< .001	mg/l			WG702315	01/21/14 00:25
Lead	< .001	mg/l			WG702315	01/21/14 00:25
Thallium	< .001	mg/l			WG702315	01/21/14 00:25
Total Solids	< .1	%			WG702527	01/22/14 08:42
Mercury	< .02	mg/kg			WG702460	01/22/14 16:08
Antimony	< 1	mg/kg			WG702285	01/22/14 16:04
Arsenic	< 1	mg/kg			WG702285	01/22/14 16:04
Beryllium	< .1	mg/kg			WG702285	01/22/14 16:04
Cadmium	< .25	mg/kg			WG702285	01/22/14 16:04
Chromium	< .5	mg/kg			WG702285	01/22/14 16:04
Copper	< 1	mg/kg			WG702285	01/22/14 16:04
Lead	< .25	mg/kg			WG702285	01/22/14 16:04
Nickel	< 1	mg/kg			WG702285	01/22/14 16:04
Selenium	< 1	mg/kg			WG702285	01/22/14 16:04
Silver	< .5	mg/kg			WG702285	01/22/14 16:04
Thallium	< 1	mg/kg			WG702285	01/22/14 16:04
Zinc	< 1.5	mg/kg			WG702285	01/22/14 16:04
PCB 1016	< .017	mg/kg			WG702261	01/22/14 08:11
PCB 1221	< .017	mg/kg			WG702261	01/22/14 08:11
PCB 1232	< .017	mg/kg			WG702261	01/22/14 08:11
PCB 1242	< .017	mg/kg			WG702261	01/22/14 08:11
PCB 1248	< .017	mg/kg			WG702261	01/22/14 08:11
PCB 1254	< .017	mg/kg			WG702261	01/22/14 08:11
PCB 1260	< .017	mg/kg			WG702261	01/22/14 08:11
Decachlorobiphenyl		% Rec.	86.80	10-145	WG702261	01/22/14 08:11
Tetrachloro-m-xylene		% Rec.	89.10	21.1-148	WG702261	01/22/14 08:11
Antimony	< .001	mg/l			WG702315	01/22/14 16:05
PCB 1016	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1221	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1232	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1242	< .0005	mg/l			WG702276	01/23/14 14:22

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678897

January 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
PCB 1248	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1254	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1260	< .0005	mg/l			WG702276	01/23/14 14:22
Decachlorobiphenyl		% Rec.	76.70	10-156	WG702276	01/23/14 14:22
Tetrachloro-m-xylene		% Rec.	79.80	13.9-137	WG702276	01/23/14 14:22

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Beryllium	mg/l	0.0	0.000302	47.0*	20	L678726-01	WG702313
Cadmium	mg/l	0.0	0.000479	12.0	20	L678726-01	WG702313
Chromium	mg/l	0.0	0.000706	91.0*	20	L678726-01	WG702313
Copper	mg/l	0.0	0.0000103	202.*	20	L678726-01	WG702313
Nickel	mg/l	0.0	0.00249	63.0*	20	L678726-01	WG702313
Selenium	mg/l	0.0	0.00319	99.0*	20	L678726-01	WG702313
Silver	mg/l	0.0	-0.00307	618.*	20	L678726-01	WG702313
Zinc	mg/l	0.0	0.00271	13.0	20	L678726-01	WG702313
Mercury	mg/l	0.0	0.0000536	1.00	20	L678913-02	WG702302
Mercury	mg/kg	0.0	0.00142	8.00	20	L678874-10	WG702214
Arsenic	mg/l	0.00170	0.00170	0.0	20	L678603-04	WG702315
Lead	mg/l	0.00150	0.00160	6.45	20	L678603-04	WG702315
Thallium	mg/l	0.0	0.0	0.0	20	L678603-04	WG702315
Total Solids	%	76.9	76.6	0.331	5	L678902-01	WG702527
Mercury	mg/kg	0.0	0.0866	175.*	20	L678967-01	WG702460
Antimony	mg/kg	0.0	0.0762	48.0*	20	L678894-01	WG702285
Arsenic	mg/kg	2.80	2.89	3.00	20	L678894-01	WG702285
Beryllium	mg/kg	0.390	0.432	11.0	20	L678894-01	WG702285
Cadmium	mg/kg	0.0	0.235	16.0	20	L678894-01	WG702285
Chromium	mg/kg	9.70	12.2	23.0*	20	L678894-01	WG702285
Copper	mg/kg	13.0	15.1	16.0	20	L678894-01	WG702285
Lead	mg/kg	35.0	29.6	17.0	20	L678894-01	WG702285
Nickel	mg/kg	4.90	5.88	19.0	20	L678894-01	WG702285
Selenium	mg/kg	0.0	0.583	10.0	20	L678894-01	WG702285
Silver	mg/kg	0.0	-0.439	28.0*	20	L678894-01	WG702285
Thallium	mg/kg	0.0	0.316	682.*	20	L678894-01	WG702285
Zinc	mg/kg	37.0	32.0	14.0	20	L678894-01	WG702285
Antimony	mg/l	0.0	0.0	0.0	20	L678603-04	WG702315

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Beryllium	mg/l	1	1.04	104.	85-115	WG702313
Cadmium	mg/l	1	1.04	104.	85-115	WG702313
Chromium	mg/l	1	1.06	106.	85-115	WG702313
Copper	mg/l	1	1.03	103.	85-115	WG702313

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Mt. Juliet, TN 37122
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1-800-767-5859
Fax (615) 758-5859

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Level II

L678897

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Nickel	mg/l	1	0.946	95.0	85-115	WG702313
Selenium	mg/l	1	1.01	101.	85-115	WG702313
Silver	mg/l	1	1.00	100.	85-115	WG702313
Zinc	mg/l	1	1.02	102.	85-115	WG702313
Mercury	mg/l	.003	0.00306	102.	85-115	WG702302
Mercury	mg/kg	12.4	14.5	117.	71.6-128	WG702214
Arsenic	mg/l	.05	0.0492	98.4	85-115	WG702315
Lead	mg/l	.05	0.0492	98.4	85-115	WG702315
Thallium	mg/l	.05	0.0500	100.	85-115	WG702315
Total Solids	%	50	50.0	100.	85-115	WG702527
Mercury	mg/kg	12.4	14.4	116.	71.6-128	WG702460
Antimony	mg/kg	113	61.9	55.0	0.88-223	WG702285
Arsenic	mg/kg	237	241.	102.	83.1-117	WG702285
Beryllium	mg/kg	93.3	88.3	95.0	83.3-117	WG702285
Cadmium	mg/kg	191	177.	93.0	83.2-117	WG702285
Chromium	mg/kg	128	125.	98.0	81.3-118	WG702285
Copper	mg/kg	123	123.	100.	83.7-116	WG702285
Lead	mg/kg	103	99.1	96.0	83.1-117	WG702285
Nickel	mg/kg	118	113.	96.0	82-118	WG702285
Selenium	mg/kg	110	113.	102.	78.7-122	WG702285
Silver	mg/kg	47.3	47.1	100.	66.2-134	WG702285
Thallium	mg/kg	158	155.	98.0	81-119	WG702285
Zinc	mg/kg	183	172.	94.0	82-118	WG702285
PCB 1016	mg/kg	.167	0.155	92.8	63.2-118	WG702261
PCB 1260	mg/kg	.167	0.182	109.	64.6-123	WG702261
Decachlorobiphenyl				98.70	10-145	WG702261
Tetrachloro-m-xylene				102.0	21.1-148	WG702261
Antimony	mg/l	.05	0.0443	88.6	85-115	WG702315
PCB 1016	mg/l	.0005	0.000452	90.5	24.7-128	WG702276
PCB 1260	mg/l	.0005	0.000445	89.0	47.7-149	WG702276
Decachlorobiphenyl				77.80	10-156	WG702276
Tetrachloro-m-xylene				51.30	13.9-137	WG702276

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
PCB 1016	mg/kg	0.162	0.155	97.0	63.2-118	4.56	20	WG702261
PCB 1260	mg/kg	0.190	0.182	114.	64.6-123	3.99	20.8	WG702261
Decachlorobiphenyl				100.0	10-145			WG702261
Tetrachloro-m-xylene				106.0	21.1-148			WG702261

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Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
PCB 1016	mg/l	0.000420	0.000452	84.0	24.7-128	7.51	34.9	WG702276
PCB 1260	mg/l	0.000412	0.000445	82.0	47.7-149	7.65	28.8	WG702276
Decachlorobiphenyl				74.80	10-156			WG702276
Tetrachloro-m-xylene				49.80	13.9-137			WG702276

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/l	0.00291	0.0000536	.003	95.0	80-120	L678913-02	WG702302
Mercury	mg/kg	0.241	0.00142	.25	96.0	80-120	L678874-10	WG702214
Arsenic	mg/l	0.0535	0.00170	.05	100.	75-125	L678603-04	WG702315
Lead	mg/l	0.0481	0.00160	.05	93.0	75-125	L678603-04	WG702315
Thallium	mg/l	0.0483	0.0	.05	97.0	75-125	L678603-04	WG702315
Beryllium	mg/l	1.01	0.000302	1	100.	75-125	L678726-01	WG702313
Cadmium	mg/l	1.01	0.000479	1	100.	75-125	L678726-01	WG702313
Chromium	mg/l	1.01	0.000706	1	100.	75-125	L678726-01	WG702313
Copper	mg/l	1.02	0.0000103	1	100.	75-125	L678726-01	WG702313
Nickel	mg/l	0.942	0.00249	1	94.0	75-125	L678726-01	WG702313
Selenium	mg/l	0.997	0.00319	1	99.0	75-125	L678726-01	WG702313
Silver	mg/l	0.156	-0.00307	1	16.0*	75-125	L678726-01	WG702313
Zinc	mg/l	1.03	0.00271	1	100.	75-125	L678726-01	WG702313
Mercury	mg/kg	0.339	0.0866	.025	100.	80-120	L678967-01	WG702460
Antimony	mg/kg	20.5	0.0762	50	41.0*	75-125	L678894-01	WG702285
Arsenic	mg/kg	53.8	2.89	50	100.	75-125	L678894-01	WG702285
Beryllium	mg/kg	51.7	0.432	50	100.	75-125	L678894-01	WG702285
Cadmium	mg/kg	50.2	0.235	50	100.	75-125	L678894-01	WG702285
Chromium	mg/kg	71.5	12.2	50	120.	75-125	L678894-01	WG702285
Copper	mg/kg	68.4	15.1	50	110.	75-125	L678894-01	WG702285
Lead	mg/kg	79.9	29.6	50	100.	75-125	L678894-01	WG702285
Nickel	mg/kg	54.9	5.88	50	98.0	75-125	L678894-01	WG702285
Selenium	mg/kg	52.3	0.583	50	100.	75-125	L678894-01	WG702285
Silver	mg/kg	51.9	-0.439	50	100.	75-125	L678894-01	WG702285
Thallium	mg/kg	50.6	0.316	50	100.	75-125	L678894-01	WG702285
Zinc	mg/kg	82.4	32.0	50	100.	75-125	L678894-01	WG702285
PCB 1016	mg/kg	0.156	0.0	.167	94.0	23.5-134	L678897-05	WG702261
PCB 1260	mg/kg	0.156	0.0	.167	93.0	16.1-139	L678897-05	WG702261
Decachlorobiphenyl					86.70	10-145		WG702261
Tetrachloro-m-xylene					103.0	21.1-148		WG702261
Antimony	mg/l	0.0463	0.0	.05	93.0	75-125	L678603-04	WG702315

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/l	0.00275	0.00291	89.7	80-120	6.00	20	L678913-02	WG702302

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Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/kg	0.255	0.241	101.	80-120	5.00	20	L678874-10	WG702214
Arsenic	mg/l	0.0541	0.0535	105.	75-125	1.12	20	L678603-04	WG702315
Lead	mg/l	0.0488	0.0481	94.4	75-125	1.44	20	L678603-04	WG702315
Thallium	mg/l	0.0492	0.0483	98.4	75-125	1.85	20	L678603-04	WG702315
Beryllium	mg/l	1.04	1.01	104.	75-125	3.00	20	L678726-01	WG702313
Cadmium	mg/l	1.04	1.01	104.	75-125	4.00	20	L678726-01	WG702313
Chromium	mg/l	1.02	1.01	102.	75-125	1.00	20	L678726-01	WG702313
Copper	mg/l	1.05	1.02	105.	75-125	2.00	20	L678726-01	WG702313
Nickel	mg/l	0.950	0.942	94.7	75-125	1.00	20	L678726-01	WG702313
Selenium	mg/l	0.993	0.997	98.9	75-125	0.0	20	L678726-01	WG702313
Silver	mg/l	0.546	0.156	54.9*	75-125	111.*	20	L678726-01	WG702313
Zinc	mg/l	1.06	1.03	106.	75-125	3.00	20	L678726-01	WG702313
Mercury	mg/kg	0.330	0.339	97.2	80-120	3.00	20	L678967-01	WG702460
Antimony	mg/kg	23.0	20.5	45.8*	75-125	11.0	20	L678894-01	WG702285
Arsenic	mg/kg	49.6	53.8	93.3	75-125	8.00	20	L678894-01	WG702285
Beryllium	mg/kg	46.9	51.7	92.9	75-125	10.0	20	L678894-01	WG702285
Cadmium	mg/kg	46.8	50.2	93.1	75-125	7.00	20	L678894-01	WG702285
Chromium	mg/kg	59.5	71.5	94.7	75-125	18.0	20	L678894-01	WG702285
Copper	mg/kg	61.7	68.4	93.2	75-125	10.0	20	L678894-01	WG702285
Lead	mg/kg	71.3	79.9	83.3	75-125	11.0	20	L678894-01	WG702285
Nickel	mg/kg	51.2	54.9	90.7	75-125	7.00	20	L678894-01	WG702285
Selenium	mg/kg	48.8	52.3	96.5	75-125	7.00	20	L678894-01	WG702285
Silver	mg/kg	48.2	51.9	97.2	75-125	7.00	20	L678894-01	WG702285
Thallium	mg/kg	46.4	50.6	92.1	75-125	9.00	20	L678894-01	WG702285
Zinc	mg/kg	71.4	82.4	78.8	75-125	14.0	20	L678894-01	WG702285
PCB 1016	mg/kg	0.159	0.156	95.4	23.5-134	1.82	25.8	L678897-05	WG702261
PCB 1260	mg/kg	0.166	0.156	99.6	16.1-139	6.65	25.9	L678897-05	WG702261
Decachlorobiphenyl				84.00	10-145				WG702261
Tetrachloro-m-xylene				101.0	21.1-148				WG702261
Antimony	mg/l	0.0473	0.0463	94.6	75-125	2.14	20	L678603-04	WG702315

Post Spike

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Mt. Juliet, TN 37122
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1-800-767-5859
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Quality Assurance Report
Level II

L678897

January 24, 2014

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

WG702193: R2877804: L678897-06
WG702313: R2877886 R2878353: L678897-06
WG702302: R2878087: L678897-06
WG702214: R2878101: L678897-01 02 03 04
WG702315: R2878172: L678897-06
WG702527: R2878260: L678897-01 02 03 04 05 07
WG702460: R2878605: L678897-05 07
WG702285: R2878638: L678897-01 02 03 04 05 07

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January 24, 2014

WG702261: R2878674 R2879255: L678897-01 02 03 04 05 07
WG702276: R2878923 R2879285: L678897-06

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
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January 24, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project #: 201336

Lab Project #:

Collected by (print): Phillip Jones

Site/Facility ID #:

P.O. #:

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

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L# 67589

C163

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem/Contaminant	Sample # (lab only)
9HA-A (6-12")	G	SS	6-12"	1/17/14	0815	2			X		X							-01
9HA-B (6-12")					0840				X		X							-02
9HA-C (6-12")					0905				X		X							-03
9HA-D (6-12")			6-12"		0940				X		X							-04
9HA-E (6-12")					0955				X		X							-05
EB-3		OT			1010	3			X		X							-06
DUP-3 (6-12")		SS	6-12"		0915	2			X		X							-07
~~TRIP BLANK~~		~~OT~~				~~1~~	X										No TICs	

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other DI water (Lab)

Remarks: no TICs on duplicates

pH ____ Temp ____
Flow ____ Other ____

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ Swift
[signature]	1/17/14	17:15	[signature]	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1 °C Bottles Received: 15
[signature]	1/17/14	17:55	[signature]	Date: 1-18-14 Time: @1430

Condition: OK (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: <2

NCF:

Divider
Page

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PO Box 639
Cary, NC 27512

Report Summary

Wednesday January 22, 2014

Report Number: L678121
Samples Received: 01/15/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Est. 1970

REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-01

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-A 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 09:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	72.1	0.0333	0.100	%		2540 G-2	01/16/14	1
Mercury	0.058	0.0070	0.14	mg/kg	JO1P1J6	7471	01/16/14	5
Antimony	U	0.38	1.4	mg/kg		6010C	01/20/14	1
Arsenic	4.6	0.32	1.4	mg/kg		6010C	01/20/14	1
Beryllium	1.8	0.035	0.14	mg/kg		6010C	01/20/14	1
Cadmium	0.55	0.035	0.35	mg/kg		6010C	01/20/14	1
Chromium	39.	0.070	0.69	mg/kg		6010C	01/20/14	1
Copper	90.	0.26	1.4	mg/kg	B	6010C	01/21/14	1
Lead	11.	0.095	0.35	mg/kg		6010C	01/20/14	1
Nickel	21.	0.24	1.4	mg/kg		6010C	01/20/14	1
Selenium	1.8	0.37	1.4	mg/kg		6010C	01/20/14	1
Silver	U	0.70	3.5	mg/kg	O	6010C	01/21/14	5
Thallium	2.4	0.32	1.4	mg/kg		6010C	01/20/14	1
Zinc	74.	0.30	2.1	mg/kg		6010C	01/20/14	1
Volatile Organics								
Acetone	U	0.010	0.069	mg/kg		8260B	01/16/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg		8260B	01/16/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/16/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/16/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/16/14	1
Bromomethane	U	0.0013	0.0069	mg/kg		8260B	01/16/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/16/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/16/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/16/14	1
Chloroethane	U	0.00095	0.0069	mg/kg		8260B	01/16/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.069	mg/kg		8260B	01/16/14	1
Chloroform	U	0.00023	0.0069	mg/kg		8260B	01/16/14	1
Chloromethane	U	0.00038	0.0035	mg/kg		8260B	01/16/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0069	mg/kg		8260B	01/16/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/16/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/16/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-01

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-A 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 09:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0069	mg/kg		8260B	01/16/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/16/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/16/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/16/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/16/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/16/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg	J4	8260B	01/16/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg	J4	8260B	01/16/14	1
Methylene Chloride	U	0.0010	0.0069	mg/kg		8260B	01/16/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/16/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Naphthalene	U	0.0010	0.0069	mg/kg		8260B	01/16/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/16/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/16/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Toluene	U	0.00043	0.0069	mg/kg		8260B	01/16/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/16/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/16/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/16/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Trichlorofluoromethane	U	0.00038	0.0069	mg/kg	J4	8260B	01/16/14	1
1,2,3-Trichloropropane	U	0.00074	0.0035	mg/kg		8260B	01/16/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg	J4	8260B	01/16/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/16/14	1
Xylenes, Total	U	0.00070	0.0042	mg/kg		8260B	01/16/14	1
Surrogate Recovery								
Toluene-d8	97.0			% Rec.		8260B	01/16/14	1
Dibromofluoromethane	92.5			% Rec.		8260B	01/16/14	1
a,a,a-Trifluorotoluene	97.7			% Rec.		8260B	01/16/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-01

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-A 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 09:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	95.9			% Rec.		8260B	01/16/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.046	mg/kg		8270D	01/16/14	1
Acenaphthylene	U	0.0067	0.046	mg/kg		8270D	01/16/14	1
Anthracene	U	0.0063	0.046	mg/kg		8270D	01/16/14	1
Benzidine	U	0.064	0.46	mg/kg		8270D	01/16/14	1
Benzo(a)anthracene	U	0.0043	0.046	mg/kg		8270D	01/16/14	1
Benzo(b)fluoranthene	U	0.0070	0.046	mg/kg		8270D	01/16/14	1
Benzo(k)fluoranthene	U	0.0058	0.046	mg/kg		8270D	01/16/14	1
Benzo(g,h,i)perylene	U	0.0072	0.046	mg/kg		8270D	01/16/14	1
Benzo(a)pyrene	U	0.0055	0.046	mg/kg		8270D	01/16/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.46	mg/kg		8270D	01/16/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.46	mg/kg		8270D	01/16/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.46	mg/kg		8270D	01/16/14	1
4-Bromophenyl-phenylether	U	0.011	0.46	mg/kg		8270D	01/16/14	1
2-Chloronaphthalene	U	0.0064	0.046	mg/kg		8270D	01/16/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.46	mg/kg		8270D	01/16/14	1
Chrysene	U	0.0056	0.046	mg/kg		8270D	01/16/14	1
Dibenz(a,h)anthracene	U	0.0082	0.046	mg/kg		8270D	01/16/14	1
3,3-Dichlorobenzidine	U	0.079	0.46	mg/kg		8270D	01/16/14	1
2,4-Dinitrotoluene	U	0.0061	0.46	mg/kg		8270D	01/16/14	1
2,6-Dinitrotoluene	U	0.0074	0.46	mg/kg		8270D	01/16/14	1
Fluoranthene	U	0.0050	0.046	mg/kg		8270D	01/16/14	1
Fluorene	U	0.0068	0.046	mg/kg		8270D	01/16/14	1
Hexachlorobenzene	U	0.0086	0.46	mg/kg		8270D	01/16/14	1
Hexachloro-1,3-butadiene	U	0.010	0.46	mg/kg		8270D	01/16/14	1
Hexachlorocyclopentadiene	U	0.059	0.46	mg/kg	J	8270D	01/16/14	1
Hexachloroethane	U	0.013	0.46	mg/kg		8270D	01/16/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.046	mg/kg		8270D	01/16/14	1
Isophorone	U	0.0052	0.46	mg/kg		8270D	01/16/14	1
Naphthalene	U	0.0089	0.046	mg/kg		8270D	01/16/14	1
Nitrobenzene	U	0.0070	0.46	mg/kg		8270D	01/16/14	1
n-Nitrosodimethylamine	U	0.065	0.46	mg/kg		8270D	01/16/14	1
n-Nitrosodiphenylamine	U	0.0059	0.46	mg/kg		8270D	01/16/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.46	mg/kg		8270D	01/16/14	1
Phenanthrene	U	0.0053	0.046	mg/kg		8270D	01/16/14	1
Benzylbutyl phthalate	U	0.010	0.46	mg/kg		8270D	01/16/14	1
Bis(2-ethylhexyl)phthalate	0.018	0.012	0.46	mg/kg	J	8270D	01/16/14	1
Di-n-butyl phthalate	U	0.011	0.46	mg/kg		8270D	01/16/14	1
Diethyl phthalate	U	0.0069	0.46	mg/kg		8270D	01/16/14	1
Dimethyl phthalate	U	0.0054	0.46	mg/kg		8270D	01/16/14	1
Di-n-octyl phthalate	U	0.0091	0.46	mg/kg		8270D	01/16/14	1

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REPORT OF ANALYSIS

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Cary, NC 27512

January 22,2014

ESC Sample # : L678121-01

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-A 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 09:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.046	mg/kg		8270D	01/16/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.46	mg/kg		8270D	01/16/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.46	mg/kg		8270D	01/16/14	1
2-Chlorophenol	U	0.0083	0.46	mg/kg		8270D	01/16/14	1
2,4-Dichlorophenol	U	0.0075	0.46	mg/kg		8270D	01/16/14	1
2,4-Dimethylphenol	U	0.047	0.46	mg/kg		8270D	01/16/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.46	mg/kg		8270D	01/16/14	1
2,4-Dinitrophenol	U	0.098	0.46	mg/kg		8270D	01/16/14	1
2-Nitrophenol	U	0.013	0.46	mg/kg		8270D	01/16/14	1
4-Nitrophenol	U	0.052	0.46	mg/kg		8270D	01/16/14	1
Pentachlorophenol	U	0.048	0.46	mg/kg		8270D	01/16/14	1
Phenol	U	0.0070	0.46	mg/kg		8270D	01/16/14	1
2,4,6-Trichlorophenol	U	0.0078	0.46	mg/kg		8270D	01/16/14	1
Surrogate Recovery								
2-Fluorophenol	67.6			% Rec.		8270D	01/16/14	1
Phenol-d5	69.9			% Rec.		8270D	01/16/14	1
Nitrobenzene-d5	64.4			% Rec.		8270D	01/16/14	1
2-Fluorobiphenyl	68.1			% Rec.		8270D	01/16/14	1
2,4,6-Tribromophenol	67.7			% Rec.		8270D	01/16/14	1
p-Terphenyl-d14	57.6			% Rec.		8270D	01/16/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-02

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-B 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 09:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	71.9	0.0333	0.100	%		2540 G-2	01/16/14	1
Mercury	0.040	0.0014	0.028	mg/kg		7471	01/16/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/20/14	1
Arsenic	3.2	1.6	7.0	mg/kg	J	6010C	01/21/14	5
Beryllium	3.5	0.035	0.14	mg/kg		6010C	01/20/14	1
Cadmium	0.76	0.035	0.35	mg/kg		6010C	01/20/14	1
Chromium	190	0.35	3.5	mg/kg		6010C	01/21/14	5
Copper	150	0.26	1.4	mg/kg	B	6010C	01/21/14	1
Lead	7.9	0.48	1.7	mg/kg		6010C	01/21/14	5
Nickel	33.	1.2	7.0	mg/kg		6010C	01/21/14	5
Selenium	2.6	1.8	7.0	mg/kg	J	6010C	01/21/14	5
Silver	U	0.70	3.5	mg/kg	O	6010C	01/21/14	5
Thallium	5.7	1.6	7.0	mg/kg	J	6010C	01/21/14	5
Zinc	57.	0.30	2.1	mg/kg		6010C	01/20/14	1
Volatile Organics								
Acetone	U	0.011	0.076	mg/kg		8260B	01/16/14	1.09
Acrylonitrile	U	0.0020	0.015	mg/kg		8260B	01/16/14	1.09
Benzene	U	0.00029	0.0015	mg/kg		8260B	01/16/14	1.09
Bromobenzene	U	0.00031	0.0015	mg/kg		8260B	01/16/14	1.09
Bromodichloromethane	U	0.00028	0.0015	mg/kg		8260B	01/16/14	1.09
Bromoform	U	0.00046	0.0015	mg/kg		8260B	01/16/14	1.09
Bromomethane	U	0.0015	0.0076	mg/kg		8260B	01/16/14	1.09
n-Butylbenzene	U	0.00028	0.0015	mg/kg		8260B	01/16/14	1.09
sec-Butylbenzene	U	0.00022	0.0015	mg/kg		8260B	01/16/14	1.09
tert-Butylbenzene	U	0.00022	0.0015	mg/kg		8260B	01/16/14	1.09
Carbon tetrachloride	U	0.00036	0.0015	mg/kg		8260B	01/16/14	1.09
Chlorobenzene	U	0.00023	0.0015	mg/kg		8260B	01/16/14	1.09
Chlorodibromomethane	U	0.00041	0.0015	mg/kg		8260B	01/16/14	1.09
Chloroethane	U	0.0010	0.0076	mg/kg		8260B	01/16/14	1.09
2-Chloroethyl vinyl ether	U	0.0026	0.076	mg/kg		8260B	01/16/14	1.09
Chloroform	U	0.00025	0.0076	mg/kg		8260B	01/16/14	1.09
Chloromethane	U	0.00041	0.0038	mg/kg		8260B	01/16/14	1.09
2-Chlorotoluene	U	0.00033	0.0015	mg/kg		8260B	01/16/14	1.09
4-Chlorotoluene	U	0.00026	0.0015	mg/kg		8260B	01/16/14	1.09
1,2-Dibromo-3-Chloropropane	U	0.0011	0.0076	mg/kg		8260B	01/16/14	1.09
1,2-Dibromoethane	U	0.00037	0.0015	mg/kg		8260B	01/16/14	1.09
Dibromomethane	U	0.00042	0.0015	mg/kg		8260B	01/16/14	1.09
1,2-Dichlorobenzene	U	0.00033	0.0015	mg/kg		8260B	01/16/14	1.09
1,3-Dichlorobenzene	U	0.00026	0.0015	mg/kg		8260B	01/16/14	1.09
1,4-Dichlorobenzene	U	0.00025	0.0015	mg/kg		8260B	01/16/14	1.09

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Est. 1970

REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-02

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-B 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 09:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00078	0.0076	mg/kg		8260B	01/16/14	1.09
1,1-Dichloroethane	U	0.00022	0.0015	mg/kg		8260B	01/16/14	1.09
1,2-Dichloroethane	U	0.00029	0.0015	mg/kg		8260B	01/16/14	1.09
1,1-Dichloroethene	U	0.00033	0.0015	mg/kg		8260B	01/16/14	1.09
cis-1,2-Dichloroethene	U	0.00026	0.0015	mg/kg		8260B	01/16/14	1.09
trans-1,2-Dichloroethene	U	0.00029	0.0015	mg/kg		8260B	01/16/14	1.09
1,2-Dichloropropane	U	0.00039	0.0015	mg/kg		8260B	01/16/14	1.09
1,1-Dichloropropene	U	0.00034	0.0015	mg/kg		8260B	01/16/14	1.09
1,3-Dichloropropane	U	0.00022	0.0015	mg/kg		8260B	01/16/14	1.09
cis-1,3-Dichloropropene	U	0.00028	0.0015	mg/kg		8260B	01/16/14	1.09
trans-1,3-Dichloropropene	U	0.00029	0.0015	mg/kg		8260B	01/16/14	1.09
2,2-Dichloropropane	U	0.00030	0.0015	mg/kg		8260B	01/16/14	1.09
Di-isopropyl ether	U	0.00027	0.0015	mg/kg		8260B	01/16/14	1.09
Ethylbenzene	U	0.00032	0.0015	mg/kg		8260B	01/16/14	1.09
Hexachloro-1,3-butadiene	U	0.00037	0.0015	mg/kg		8260B	01/16/14	1.09
Isopropylbenzene	U	0.00026	0.0015	mg/kg		8260B	01/16/14	1.09
p-Isopropyltoluene	U	0.00022	0.0015	mg/kg	J4	8260B	01/16/14	1.09
2-Butanone (MEK)	U	0.0051	0.015	mg/kg	J4	8260B	01/16/14	1.09
Methylene Chloride	U	0.0011	0.0076	mg/kg		8260B	01/16/14	1.09
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.015	mg/kg		8260B	01/16/14	1.09
Methyl tert-butyl ether	U	0.00023	0.0015	mg/kg		8260B	01/16/14	1.09
Naphthalene	U	0.0011	0.0076	mg/kg		8260B	01/16/14	1.09
n-Propylbenzene	U	0.00022	0.0015	mg/kg		8260B	01/16/14	1.09
Styrene	U	0.00026	0.0015	mg/kg		8260B	01/16/14	1.09
1,1,1,2-Tetrachloroethane	U	0.00029	0.0015	mg/kg		8260B	01/16/14	1.09
1,1,2,2-Tetrachloroethane	U	0.00040	0.0015	mg/kg		8260B	01/16/14	1.09
Tetrachloroethene	U	0.00030	0.0015	mg/kg		8260B	01/16/14	1.09
Toluene	U	0.00047	0.0076	mg/kg		8260B	01/16/14	1.09
1,2,3-Trichlorobenzene	U	0.00033	0.0015	mg/kg		8260B	01/16/14	1.09
1,2,4-Trichlorobenzene	U	0.00042	0.0015	mg/kg		8260B	01/16/14	1.09
1,1,1-Trichloroethane	U	0.00031	0.0015	mg/kg		8260B	01/16/14	1.09
1,1,2-Trichloroethane	U	0.00030	0.0015	mg/kg		8260B	01/16/14	1.09
Trichloroethene	U	0.00030	0.0015	mg/kg		8260B	01/16/14	1.09
Trichlorofluoromethane	U	0.00042	0.0076	mg/kg	J4	8260B	01/16/14	1.09
1,2,3-Trichloropropane	U	0.00081	0.0038	mg/kg		8260B	01/16/14	1.09
1,2,4-Trimethylbenzene	U	0.00023	0.0015	mg/kg		8260B	01/16/14	1.09
1,3,5-Trimethylbenzene	U	0.00029	0.0015	mg/kg	J4	8260B	01/16/14	1.09
Vinyl chloride	U	0.00032	0.0015	mg/kg		8260B	01/16/14	1.09
Xylenes, Total	0.0028	0.00076	0.0045	mg/kg	J	8260B	01/16/14	1.09
Surrogate Recovery								
Toluene-d8	95.3			% Rec.		8260B	01/16/14	1.09
Dibromofluoromethane	91.4			% Rec.		8260B	01/16/14	1.09
a,a,a-Trifluorotoluene	97.4			% Rec.		8260B	01/16/14	1.09

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-02

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-B 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 09:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	93.3			% Rec.		8260B	01/16/14	1.09
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.046	mg/kg		8270D	01/19/14	1
Acenaphthylene	U	0.0067	0.046	mg/kg		8270D	01/19/14	1
Anthracene	U	0.0063	0.046	mg/kg		8270D	01/19/14	1
Benzidine	U	0.064	0.46	mg/kg		8270D	01/19/14	1
Benzo(a)anthracene	U	0.0043	0.046	mg/kg		8270D	01/19/14	1
Benzo(b)fluoranthene	U	0.0070	0.046	mg/kg		8270D	01/19/14	1
Benzo(k)fluoranthene	U	0.0058	0.046	mg/kg		8270D	01/19/14	1
Benzo(g,h,i)perylene	U	0.0072	0.046	mg/kg		8270D	01/19/14	1
Benzo(a)pyrene	U	0.0055	0.046	mg/kg		8270D	01/19/14	1
Bis(2-chlorethoxy)methane	U	0.077	4.6	mg/kg	O	8270D	01/22/14	10
Bis(2-chloroethyl)ether	U	0.090	4.6	mg/kg	O	8270D	01/22/14	10
Bis(2-chloroisopropyl)ether	U	0.076	4.6	mg/kg	O	8270D	01/22/14	10
4-Bromophenyl-phenylether	U	0.011	0.46	mg/kg		8270D	01/19/14	1
2-Chloronaphthalene	U	0.0064	0.046	mg/kg		8270D	01/19/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.46	mg/kg		8270D	01/19/14	1
Chrysene	U	0.0056	0.046	mg/kg		8270D	01/19/14	1
Dibenz(a,h)anthracene	U	0.0082	0.046	mg/kg		8270D	01/19/14	1
3,3-Dichlorobenzidine	U	0.079	0.46	mg/kg		8270D	01/19/14	1
2,4-Dinitrotoluene	U	0.0061	0.46	mg/kg		8270D	01/19/14	1
2,6-Dinitrotoluene	U	0.0074	0.46	mg/kg		8270D	01/19/14	1
Fluoranthene	U	0.0050	0.046	mg/kg		8270D	01/19/14	1
Fluorene	U	0.0068	0.046	mg/kg		8270D	01/19/14	1
Hexachlorobenzene	U	0.0086	0.46	mg/kg	J	8270D	01/19/14	1
Hexachloro-1,3-butadiene	U	0.10	4.6	mg/kg	O	8270D	01/22/14	10
Hexachlorocyclopentadiene	U	0.059	0.46	mg/kg	J	8270D	01/19/14	1
Hexachloroethane	U	0.13	4.6	mg/kg	O	8270D	01/22/14	10
Indeno(1,2,3-cd)pyrene	U	0.0077	0.046	mg/kg		8270D	01/19/14	1
Isophorone	U	0.052	4.6	mg/kg	O	8270D	01/22/14	10
Naphthalene	U	0.089	0.46	mg/kg	O	8270D	01/22/14	10
Nitrobenzene	U	0.070	4.6	mg/kg	O	8270D	01/22/14	10
n-Nitrosodimethylamine	U	0.65	4.6	mg/kg	O	8270D	01/22/14	10
n-Nitrosodiphenylamine	U	0.0059	0.46	mg/kg		8270D	01/19/14	1
n-Nitrosodi-n-propylamine	U	0.091	4.6	mg/kg	O	8270D	01/22/14	10
Phenanthrene	U	0.0053	0.046	mg/kg		8270D	01/19/14	1
Benzylbutyl phthalate	U	0.010	0.46	mg/kg		8270D	01/19/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.46	mg/kg		8270D	01/19/14	1
Di-n-butyl phthalate	U	0.011	0.46	mg/kg		8270D	01/19/14	1
Diethyl phthalate	U	0.0069	0.46	mg/kg		8270D	01/19/14	1
Dimethyl phthalate	U	0.0054	0.46	mg/kg		8270D	01/19/14	1
Di-n-octyl phthalate	U	0.0091	0.46	mg/kg		8270D	01/19/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-02

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-B 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 09:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.046	mg/kg		8270D	01/19/14	1
1,2,4-Trichlorobenzene	U	0.088	4.6	mg/kg	O	8270D	01/22/14	10
Acid Extractables								
4-Chloro-3-methylphenol	U	0.048	4.6	mg/kg	O	8270D	01/22/14	10
2-Chlorophenol	U	0.083	4.6	mg/kg	O	8270D	01/22/14	10
2,4-Dichlorophenol	U	0.075	4.6	mg/kg	O	8270D	01/22/14	10
2,4-Dimethylphenol	U	0.47	4.6	mg/kg	O	8270D	01/22/14	10
4,6-Dinitro-2-methylphenol	U	0.12	0.46	mg/kg		8270D	01/19/14	1
2,4-Dinitrophenol	U	0.098	0.46	mg/kg		8270D	01/19/14	1
2-Nitrophenol	U	0.13	4.6	mg/kg	O	8270D	01/22/14	10
4-Nitrophenol	U	0.052	0.46	mg/kg		8270D	01/19/14	1
Pentachlorophenol	U	0.048	0.46	mg/kg		8270D	01/19/14	1
Phenol	U	0.070	4.6	mg/kg	O	8270D	01/22/14	10
2,4,6-Trichlorophenol	U	0.0078	0.46	mg/kg		8270D	01/19/14	1
Surrogate Recovery								
2-Fluorophenol	72.1			% Rec.		8270D	01/22/14	10
Phenol-d5	73.8			% Rec.		8270D	01/22/14	10
Nitrobenzene-d5	65.9			% Rec.		8270D	01/22/14	10
2-Fluorobiphenyl	48.2			% Rec.		8270D	01/19/14	1
2,4,6-Tribromophenol	54.0			% Rec.		8270D	01/19/14	1
p-Terphenyl-d14	47.0			% Rec.		8270D	01/19/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-03

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-C 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 10:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	72.0	0.0333	0.100	%		2540 G-2	01/16/14	1
Mercury	0.14	0.0014	0.028	mg/kg		7471	01/16/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/20/14	1
Arsenic	6.4	1.6	6.9	mg/kg	J	6010C	01/21/14	5
Beryllium	2.1	0.035	0.14	mg/kg		6010C	01/20/14	1
Cadmium	0.71	0.035	0.35	mg/kg		6010C	01/20/14	1
Chromium	64.	0.35	3.5	mg/kg		6010C	01/21/14	5
Copper	100	0.26	1.4	mg/kg	B	6010C	01/21/14	1
Lead	10.	0.48	1.7	mg/kg		6010C	01/21/14	5
Nickel	25.	1.2	6.9	mg/kg		6010C	01/21/14	5
Selenium	U	1.8	6.9	mg/kg	O	6010C	01/21/14	5
Silver	U	0.70	3.5	mg/kg	O	6010C	01/21/14	5
Thallium	4.6	1.6	6.9	mg/kg	J	6010C	01/21/14	5
Zinc	47.	0.30	2.1	mg/kg		6010C	01/20/14	1
Volatile Organics								
Acetone	U	0.010	0.069	mg/kg		8260B	01/16/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg		8260B	01/16/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/16/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/16/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/16/14	1
Bromomethane	U	0.0013	0.0069	mg/kg		8260B	01/16/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/16/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/16/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/16/14	1
Chloroethane	U	0.00095	0.0069	mg/kg		8260B	01/16/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.069	mg/kg		8260B	01/16/14	1
Chloroform	U	0.00023	0.0069	mg/kg		8260B	01/16/14	1
Chloromethane	U	0.00038	0.0035	mg/kg		8260B	01/16/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0069	mg/kg		8260B	01/16/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/16/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/16/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-03

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-C 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 10:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0069	mg/kg		8260B	01/16/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/16/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/16/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/16/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/16/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/16/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg	J4	8260B	01/16/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg	J4	8260B	01/16/14	1
Methylene Chloride	U	0.0010	0.0069	mg/kg		8260B	01/16/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/16/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Naphthalene	U	0.0010	0.0069	mg/kg		8260B	01/16/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/16/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/16/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Toluene	U	0.00043	0.0069	mg/kg		8260B	01/16/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/16/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/16/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/16/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Trichlorofluoromethane	U	0.00038	0.0069	mg/kg	J4	8260B	01/16/14	1
1,2,3-Trichloropropane	U	0.00074	0.0035	mg/kg		8260B	01/16/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg	J4	8260B	01/16/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/16/14	1
Xylenes, Total	U	0.00070	0.0042	mg/kg		8260B	01/16/14	1
Surrogate Recovery								
Toluene-d8	94.4			% Rec.		8260B	01/16/14	1
Dibromofluoromethane	94.7			% Rec.		8260B	01/16/14	1
a,a,a-Trifluorotoluene	98.0			% Rec.		8260B	01/16/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
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Est. 1970

REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-03

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-C 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 10:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	93.7			% Rec.		8260B	01/16/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.046	mg/kg		8270D	01/19/14	1
Acenaphthylene	U	0.0067	0.046	mg/kg		8270D	01/19/14	1
Anthracene	U	0.0063	0.046	mg/kg		8270D	01/19/14	1
Benzidine	U	0.064	0.46	mg/kg		8270D	01/19/14	1
Benzo(a)anthracene	U	0.0043	0.046	mg/kg		8270D	01/19/14	1
Benzo(b)fluoranthene	U	0.0070	0.046	mg/kg		8270D	01/19/14	1
Benzo(k)fluoranthene	U	0.0058	0.046	mg/kg		8270D	01/19/14	1
Benzo(g,h,i)perylene	U	0.0072	0.046	mg/kg		8270D	01/19/14	1
Benzo(a)pyrene	U	0.0055	0.046	mg/kg		8270D	01/19/14	1
Bis(2-chlorethoxy)methane	U	0.0077	0.46	mg/kg		8270D	01/19/14	1
Bis(2-chloroethyl)ether	U	0.0090	0.46	mg/kg		8270D	01/19/14	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.46	mg/kg		8270D	01/19/14	1
4-Bromophenyl-phenylether	U	0.011	0.46	mg/kg		8270D	01/19/14	1
2-Chloronaphthalene	U	0.0064	0.046	mg/kg		8270D	01/19/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.46	mg/kg		8270D	01/19/14	1
Chrysene	U	0.0056	0.046	mg/kg		8270D	01/19/14	1
Dibenz(a,h)anthracene	U	0.0082	0.046	mg/kg		8270D	01/19/14	1
3,3-Dichlorobenzidine	U	0.079	0.46	mg/kg		8270D	01/19/14	1
2,4-Dinitrotoluene	U	0.0061	0.46	mg/kg		8270D	01/19/14	1
2,6-Dinitrotoluene	U	0.0074	0.46	mg/kg		8270D	01/19/14	1
Fluoranthene	U	0.0050	0.046	mg/kg		8270D	01/19/14	1
Fluorene	U	0.0068	0.046	mg/kg		8270D	01/19/14	1
Hexachlorobenzene	U	0.0086	0.46	mg/kg	J	8270D	01/19/14	1
Hexachloro-1,3-butadiene	U	0.010	0.46	mg/kg		8270D	01/19/14	1
Hexachlorocyclopentadiene	U	0.059	0.46	mg/kg	J	8270D	01/19/14	1
Hexachloroethane	U	0.013	0.46	mg/kg		8270D	01/19/14	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.046	mg/kg		8270D	01/19/14	1
Isophorone	U	0.0052	0.46	mg/kg		8270D	01/19/14	1
Naphthalene	U	0.0089	0.046	mg/kg		8270D	01/19/14	1
Nitrobenzene	U	0.0070	0.46	mg/kg		8270D	01/19/14	1
n-Nitrosodimethylamine	U	0.065	0.46	mg/kg		8270D	01/19/14	1
n-Nitrosodiphenylamine	U	0.0059	0.46	mg/kg		8270D	01/19/14	1
n-Nitrosodi-n-propylamine	U	0.0091	0.46	mg/kg		8270D	01/19/14	1
Phenanthrene	U	0.0053	0.046	mg/kg		8270D	01/19/14	1
Benzylbutyl phthalate	U	0.010	0.46	mg/kg		8270D	01/19/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.46	mg/kg		8270D	01/19/14	1
Di-n-butyl phthalate	U	0.011	0.46	mg/kg		8270D	01/19/14	1
Diethyl phthalate	U	0.0069	0.46	mg/kg		8270D	01/19/14	1
Dimethyl phthalate	U	0.0054	0.46	mg/kg		8270D	01/19/14	1
Di-n-octyl phthalate	U	0.0091	0.46	mg/kg		8270D	01/19/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-03

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 11-SB-C 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 10:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.046	mg/kg		8270D	01/19/14	1
1,2,4-Trichlorobenzene	U	0.0088	0.46	mg/kg		8270D	01/19/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.46	mg/kg		8270D	01/19/14	1
2-Chlorophenol	U	0.0083	0.46	mg/kg		8270D	01/19/14	1
2,4-Dichlorophenol	U	0.0075	0.46	mg/kg		8270D	01/19/14	1
2,4-Dimethylphenol	U	0.047	0.46	mg/kg		8270D	01/19/14	1
4,6-Dinitro-2-methylphenol	U	0.12	0.46	mg/kg		8270D	01/19/14	1
2,4-Dinitrophenol	U	0.098	0.46	mg/kg		8270D	01/19/14	1
2-Nitrophenol	U	0.013	0.46	mg/kg		8270D	01/19/14	1
4-Nitrophenol	U	0.052	0.46	mg/kg		8270D	01/19/14	1
Pentachlorophenol	U	0.048	0.46	mg/kg		8270D	01/19/14	1
Phenol	U	0.0070	0.46	mg/kg		8270D	01/19/14	1
2,4,6-Trichlorophenol	U	0.0078	0.46	mg/kg		8270D	01/19/14	1
Surrogate Recovery								
2-Fluorophenol	60.4			% Rec.		8270D	01/19/14	1
Phenol-d5	65.2			% Rec.		8270D	01/19/14	1
Nitrobenzene-d5	57.4			% Rec.		8270D	01/19/14	1
2-Fluorobiphenyl	61.0			% Rec.		8270D	01/19/14	1
2,4,6-Tribromophenol	61.3			% Rec.		8270D	01/19/14	1
p-Terphenyl-d14	48.8			% Rec.		8270D	01/19/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-04

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : DUP 1 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 10:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	72.3	0.0333	0.100	%		2540 G-2	01/16/14	1
Mercury	0.066	0.0014	0.028	mg/kg		7471	01/16/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/20/14	1
Arsenic	7.7	1.6	6.9	mg/kg		6010C	01/21/14	5
Beryllium	2.1	0.035	0.14	mg/kg		6010C	01/20/14	1
Cadmium	0.58	0.035	0.34	mg/kg		6010C	01/20/14	1
Chromium	55.	0.35	3.4	mg/kg		6010C	01/21/14	5
Copper	110	0.26	1.4	mg/kg	B	6010C	01/21/14	1
Lead	9.8	0.48	1.7	mg/kg		6010C	01/21/14	5
Nickel	28.	1.2	6.9	mg/kg		6010C	01/21/14	5
Selenium	3.0	1.8	6.9	mg/kg	J	6010C	01/21/14	5
Silver	U	0.70	3.4	mg/kg	O	6010C	01/21/14	5
Thallium	8.4	1.6	6.9	mg/kg		6010C	01/21/14	5
Zinc	48.	0.30	2.1	mg/kg		6010C	01/20/14	1
Volatile Organics								
Acetone	U	0.010	0.069	mg/kg		8260B	01/16/14	1
Acrylonitrile	U	0.0018	0.014	mg/kg		8260B	01/16/14	1
Benzene	U	0.00027	0.0014	mg/kg		8260B	01/16/14	1
Bromobenzene	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Bromodichloromethane	U	0.00025	0.0014	mg/kg		8260B	01/16/14	1
Bromoform	U	0.00042	0.0014	mg/kg		8260B	01/16/14	1
Bromomethane	U	0.0013	0.0069	mg/kg		8260B	01/16/14	1
n-Butylbenzene	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
sec-Butylbenzene	U	0.00020	0.0014	mg/kg		8260B	01/16/14	1
tert-Butylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Carbon tetrachloride	U	0.00033	0.0014	mg/kg		8260B	01/16/14	1
Chlorobenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Chlorodibromomethane	U	0.00037	0.0014	mg/kg		8260B	01/16/14	1
Chloroethane	U	0.00095	0.0069	mg/kg		8260B	01/16/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.069	mg/kg		8260B	01/16/14	1
Chloroform	U	0.00023	0.0069	mg/kg		8260B	01/16/14	1
Chloromethane	U	0.00038	0.0034	mg/kg		8260B	01/16/14	1
2-Chlorotoluene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
4-Chlorotoluene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0069	mg/kg		8260B	01/16/14	1
1,2-Dibromoethane	U	0.00034	0.0014	mg/kg		8260B	01/16/14	1
Dibromomethane	U	0.00038	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dichlorobenzene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
1,3-Dichlorobenzene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
1,4-Dichlorobenzene	U	0.00023	0.0014	mg/kg		8260B	01/16/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-04

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : DUP 1 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 10:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0069	mg/kg		8260B	01/16/14	1
1,1-Dichloroethane	U	0.00020	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dichloroethane	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
1,1-Dichloroethene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
1,2-Dichloropropane	U	0.00036	0.0014	mg/kg		8260B	01/16/14	1
1,1-Dichloropropene	U	0.00032	0.0014	mg/kg		8260B	01/16/14	1
1,3-Dichloropropane	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0014	mg/kg		8260B	01/16/14	1
2,2-Dichloropropane	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Di-isopropyl ether	U	0.00025	0.0014	mg/kg		8260B	01/16/14	1
Ethylbenzene	U	0.00030	0.0014	mg/kg		8260B	01/16/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0014	mg/kg		8260B	01/16/14	1
Isopropylbenzene	U	0.00024	0.0014	mg/kg		8260B	01/16/14	1
p-Isopropyltoluene	U	0.00020	0.0014	mg/kg	J4	8260B	01/16/14	1
2-Butanone (MEK)	U	0.0047	0.014	mg/kg	J4	8260B	01/16/14	1
Methylene Chloride	U	0.0010	0.0069	mg/kg		8260B	01/16/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.014	mg/kg		8260B	01/16/14	1
Methyl tert-butyl ether	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Naphthalene	U	0.0010	0.0069	mg/kg		8260B	01/16/14	1
n-Propylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
Styrene	U	0.00023	0.0014	mg/kg		8260B	01/16/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0014	mg/kg		8260B	01/16/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0014	mg/kg		8260B	01/16/14	1
Tetrachloroethene	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Toluene	U	0.00043	0.0069	mg/kg		8260B	01/16/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0014	mg/kg		8260B	01/16/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0014	mg/kg		8260B	01/16/14	1
1,1,1-Trichloroethane	U	0.00029	0.0014	mg/kg		8260B	01/16/14	1
1,1,2-Trichloroethane	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Trichloroethene	U	0.00028	0.0014	mg/kg		8260B	01/16/14	1
Trichlorofluoromethane	U	0.00038	0.0069	mg/kg	J4	8260B	01/16/14	1
1,2,3-Trichloropropane	U	0.00074	0.0034	mg/kg		8260B	01/16/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0014	mg/kg		8260B	01/16/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0014	mg/kg	J4	8260B	01/16/14	1
Vinyl chloride	U	0.00029	0.0014	mg/kg		8260B	01/16/14	1
Xylenes, Total	U	0.00070	0.0041	mg/kg		8260B	01/16/14	1
Surrogate Recovery								
Toluene-d8	92.3			% Rec.		8260B	01/16/14	1
Dibromofluoromethane	92.4			% Rec.		8260B	01/16/14	1
a,a,a-Trifluorotoluene	95.4			% Rec.		8260B	01/16/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-04

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : DUP 1 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 10:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	96.9			% Rec.		8260B	01/16/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.046	mg/kg		8270D	01/19/14	1
Acenaphthylene	U	0.0067	0.046	mg/kg		8270D	01/19/14	1
Anthracene	U	0.0063	0.046	mg/kg		8270D	01/19/14	1
Benzidine	U	0.064	0.46	mg/kg		8270D	01/19/14	1
Benzo(a)anthracene	U	0.0043	0.046	mg/kg		8270D	01/19/14	1
Benzo(b)fluoranthene	U	0.0070	0.046	mg/kg		8270D	01/19/14	1
Benzo(k)fluoranthene	U	0.0058	0.046	mg/kg		8270D	01/19/14	1
Benzo(g,h,i)perylene	U	0.0072	0.046	mg/kg		8270D	01/19/14	1
Benzo(a)pyrene	U	0.0055	0.046	mg/kg		8270D	01/19/14	1
Bis(2-chlorethoxy)methane	U	0.038	2.3	mg/kg	O	8270D	01/22/14	5
Bis(2-chloroethyl)ether	U	0.045	2.3	mg/kg	O	8270D	01/22/14	5
Bis(2-chloroisopropyl)ether	U	0.038	2.3	mg/kg	O	8270D	01/22/14	5
4-Bromophenyl-phenylether	U	0.011	0.46	mg/kg		8270D	01/19/14	1
2-Chloronaphthalene	U	0.0064	0.046	mg/kg		8270D	01/19/14	1
4-Chlorophenyl-phenylether	U	0.0063	0.46	mg/kg		8270D	01/19/14	1
Chrysene	U	0.0056	0.046	mg/kg		8270D	01/19/14	1
Dibenz(a,h)anthracene	U	0.0082	0.046	mg/kg		8270D	01/19/14	1
3,3-Dichlorobenzidine	U	0.079	0.46	mg/kg		8270D	01/19/14	1
2,4-Dinitrotoluene	U	0.0061	0.46	mg/kg		8270D	01/19/14	1
2,6-Dinitrotoluene	U	0.0074	0.46	mg/kg		8270D	01/19/14	1
Fluoranthene	U	0.0050	0.046	mg/kg		8270D	01/19/14	1
Fluorene	U	0.0068	0.046	mg/kg		8270D	01/19/14	1
Hexachlorobenzene	U	0.0086	0.46	mg/kg	J	8270D	01/19/14	1
Hexachloro-1,3-butadiene	U	0.050	2.3	mg/kg	O	8270D	01/22/14	5
Hexachlorocyclopentadiene	U	0.059	0.46	mg/kg	J	8270D	01/19/14	1
Hexachloroethane	U	0.067	2.3	mg/kg	O	8270D	01/22/14	5
Indeno(1,2,3-cd)pyrene	U	0.0077	0.046	mg/kg		8270D	01/19/14	1
Isophorone	U	0.026	2.3	mg/kg	O	8270D	01/22/14	5
Naphthalene	U	0.044	0.23	mg/kg	O	8270D	01/22/14	5
Nitrobenzene	U	0.035	2.3	mg/kg	O	8270D	01/22/14	5
n-Nitrosodimethylamine	U	0.32	2.3	mg/kg	O	8270D	01/22/14	5
n-Nitrosodiphenylamine	U	0.0059	0.46	mg/kg		8270D	01/19/14	1
n-Nitrosodi-n-propylamine	U	0.045	2.3	mg/kg	O	8270D	01/22/14	5
Phenanthrene	U	0.0053	0.046	mg/kg		8270D	01/19/14	1
Benzylbutyl phthalate	U	0.010	0.46	mg/kg		8270D	01/19/14	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.46	mg/kg		8270D	01/19/14	1
Di-n-butyl phthalate	U	0.011	0.46	mg/kg		8270D	01/19/14	1
Diethyl phthalate	U	0.0069	0.46	mg/kg		8270D	01/19/14	1
Dimethyl phthalate	U	0.0054	0.46	mg/kg		8270D	01/19/14	1
Di-n-octyl phthalate	U	0.0091	0.46	mg/kg		8270D	01/19/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-04

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : DUP 1 2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 10:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.012	0.046	mg/kg		8270D	01/19/14	1
1,2,4-Trichlorobenzene	U	0.044	2.3	mg/kg	O	8270D	01/22/14	5
Acid Extractables								
4-Chloro-3-methylphenol	U	0.024	2.3	mg/kg	O	8270D	01/22/14	5
2-Chlorophenol	U	0.042	2.3	mg/kg	O	8270D	01/22/14	5
2,4-Dichlorophenol	U	0.037	2.3	mg/kg	O	8270D	01/22/14	5
2,4-Dimethylphenol	U	0.24	2.3	mg/kg	O	8270D	01/22/14	5
4,6-Dinitro-2-methylphenol	U	0.12	0.46	mg/kg		8270D	01/19/14	1
2,4-Dinitrophenol	U	0.098	0.46	mg/kg		8270D	01/19/14	1
2-Nitrophenol	U	0.065	2.3	mg/kg	O	8270D	01/22/14	5
4-Nitrophenol	U	0.052	0.46	mg/kg		8270D	01/19/14	1
Pentachlorophenol	U	0.048	0.46	mg/kg		8270D	01/19/14	1
Phenol	U	0.035	2.3	mg/kg	O	8270D	01/22/14	5
2,4,6-Trichlorophenol	U	0.0078	0.46	mg/kg		8270D	01/19/14	1
Surrogate Recovery								
2-Fluorophenol	68.0			% Rec.		8270D	01/22/14	5
Phenol-d5	72.8			% Rec.		8270D	01/22/14	5
Nitrobenzene-d5	66.4			% Rec.		8270D	01/22/14	5
2-Fluorobiphenyl	44.0			% Rec.		8270D	01/19/14	1
2,4,6-Tribromophenol	55.0			% Rec.		8270D	01/19/14	1
p-Terphenyl-d14	44.5			% Rec.		8270D	01/19/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
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PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-05

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 13-SB-A 5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 11:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	71.2	0.0333	0.100	%		2540 G-2	01/16/14	1
TPH (GC/FID) Low Fraction	U	0.46	2.9	mg/kg		GRO	01/16/14	21
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	97.9			% Rec.		GRO	01/16/14	21
TPH (GC/FID) High Fraction	U	0.77	5.6	mg/kg		3546/DRO	01/16/14	1
Surrogate recovery(%)								
o-Terphenyl	82.2			% Rec.		3546/DRO	01/16/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
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PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-06

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 13-SB-B 5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 11:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	74.6	0.0333	0.100	%		2540 G-2	01/16/14	1
TPH (GC/FID) Low Fraction	U	0.47	2.9	mg/kg		GRO	01/16/14	21.75
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	98.2			% Rec.		GRO	01/16/14	21.75
TPH (GC/FID) High Fraction	1.7	0.77	5.4	mg/kg	J	3546/DRO	01/16/14	1
Surrogate recovery(%)								
o-Terphenyl	78.8			% Rec.		3546/DRO	01/16/14	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
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Cary, NC 27512

January 22,2014

ESC Sample # : L678121-07

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 13-SB-C 5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 13:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	72.5	0.0333	0.100	%		2540 G-2	01/16/14	1
TPH (GC/FID) Low Fraction	U	0.58	3.7	mg/kg		GRO	01/16/14	26.75
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	97.6			% Rec.		GRO	01/16/14	26.75
TPH (GC/FID) High Fraction	U	0.77	5.5	mg/kg		3546/DRO	01/16/14	1
Surrogate recovery(%)								
o-Terphenyl	89.6			% Rec.		3546/DRO	01/16/14	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

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January 22, 2014

ESC Sample # : L678121-08

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 13-SB-D 5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 13:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	82.7	0.0333	0.100	%		2540 G-2	01/16/14	1
TPH (GC/FID) Low Fraction	U	0.49	2.8	mg/kg		GRO	01/16/14	22.75
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	98.2			% Rec.		GRO	01/16/14	22.75
TPH (GC/FID) High Fraction	U	0.77	4.8	mg/kg		3546/DRO	01/16/14	1
Surrogate recovery(%)								
o-Terphenyl	92.9			% Rec.		3546/DRO	01/16/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
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PO Box 639
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January 22,2014

ESC Sample # : L678121-09

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : EB-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 13:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	U	0.21	1.0	ug/l		6020	01/16/14	1
Arsenic	0.79	0.25	1.0	ug/l	J	6020	01/16/14	1
Lead	U	0.24	1.0	ug/l		6020	01/16/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/16/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/16/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/17/14	1
Cadmium	2.7	0.70	5.0	ug/l	J	6010C	01/17/14	1
Chromium	U	1.4	10.	ug/l		6010C	01/17/14	1
Copper	U	5.3	20.	ug/l		6010C	01/17/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/17/14	1
Selenium	U	7.4	20.	ug/l		6010C	01/17/14	1
Silver	U	2.8	10.	ug/l		6010C	01/17/14	1
Zinc	U	5.9	30.	ug/l		6010C	01/17/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/16/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/16/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/16/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/16/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/16/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/16/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/16/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/16/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/16/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/16/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/16/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/16/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/16/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/16/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/16/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/16/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/16/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/16/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/16/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/16/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/16/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/16/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/16/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/16/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/16/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/16/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-09

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : EB-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 13:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/16/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/16/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/16/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/16/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/16/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/16/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/16/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/16/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/16/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/16/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/16/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/16/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/16/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/16/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/16/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/16/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/16/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/16/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/16/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/16/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/16/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/16/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/16/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/16/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/16/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/16/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	01/16/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/16/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/16/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/16/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/16/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/16/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/16/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/16/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/16/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/16/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/16/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	01/16/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/16/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/16/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/16/14	1
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260B	01/16/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-09

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : EB-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 13:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dibromofluoromethane	108.			% Rec.		8260B	01/16/14	1
4-Bromofluorobenzene	101.			% Rec.		8260B	01/16/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	01/17/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	01/17/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	01/17/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	01/17/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	01/17/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	01/17/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	01/17/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	01/17/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	01/17/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	01/17/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	01/17/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	01/17/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	01/17/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	01/17/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	01/17/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	01/17/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	01/17/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	01/17/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	01/17/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	01/17/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	01/17/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	01/17/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	01/17/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	01/17/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	01/17/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	01/17/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	01/17/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	01/17/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	01/17/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	01/17/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	01/17/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	01/17/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	01/17/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	01/17/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	01/17/14	1
Bis(2-ethylhexyl)phthalate	0.78	0.71	3.0	ug/l	J	8270 D	01/17/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	01/17/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/17/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/17/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-09

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : EB-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 13:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	01/17/14	1
Pyrene	U	0.33	1.0	ug/l		8270 D	01/17/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	01/17/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	01/17/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	01/17/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	01/17/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	01/17/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	01/17/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l	J	8270 D	01/17/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	01/17/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	01/17/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	01/17/14	1
Phenol	U	0.33	10.	ug/l		8270 D	01/17/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	01/17/14	1
Surrogate Recovery								
2-Fluorophenol	39.5			% Rec.		8270 D	01/17/14	1
Phenol-d5	23.2			% Rec.		8270 D	01/17/14	1
Nitrobenzene-d5	56.9			% Rec.		8270 D	01/17/14	1
2-Fluorobiphenyl	60.0			% Rec.		8270 D	01/17/14	1
2,4,6-Tribromophenol	56.6			% Rec.		8270 D	01/17/14	1
p-Terphenyl-d14	57.6			% Rec.		8270 D	01/17/14	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-10

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 13-SB-E 5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 14:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	79.3	0.0333	0.100	%		2540 G-2	01/17/14	1
TPH (GC/FID) Low Fraction	U	0.43	2.5	mg/kg		GRO	01/16/14	20
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	97.7			% Rec.		GRO	01/16/14	20
TPH (GC/FID) High Fraction	U	0.77	5.0	mg/kg		3546/DRO	01/16/14	1
Surrogate recovery(%)								
o-Terphenyl	86.3			% Rec.		3546/DRO	01/16/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-11

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 13-SB-F 5-6 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 14:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	75.9	0.0333	0.100	%		2540 G-2	01/17/14	1
TPH (GC/FID) Low Fraction	U	0.47	2.8	mg/kg		GRO	01/16/14	21.5
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	98.2			% Rec.		GRO	01/16/14	21.5
TPH (GC/FID) High Fraction	U	0.77	5.3	mg/kg		3546/DRO	01/16/14	1
Surrogate recovery(%)								
o-Terphenyl	121.			% Rec.		3546/DRO	01/16/14	1

Results listed are dry weight basis.
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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22,2014

ESC Sample # : L678121-12

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 13-SB-G 1-2 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 15:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	77.9	0.0333	0.100	%		2540 G-2	01/16/14	1
TPH (GC/FID) Low Fraction	U	0.58	3.4	mg/kg		GRO	01/16/14	26.75
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	97.8			% Rec.		GRO	01/16/14	26.75
TPH (GC/FID) High Fraction	2.0	0.77	5.1	mg/kg	J	3546/DRO	01/16/14	1
Surrogate recovery(%)								
o-Terphenyl	89.9			% Rec.		3546/DRO	01/16/14	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

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January 22,2014

ESC Sample # : L678121-13

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 13-SB-H 7-8 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 16:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	68.5	0.0333	0.100	%		2540 G-2	01/17/14	1
TPH (GC/FID) Low Fraction	U	0.72	4.8	mg/kg		GRO	01/16/14	33.25
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	97.8			% Rec.		GRO	01/16/14	33.25
TPH (GC/FID) High Fraction	U	0.77	5.8	mg/kg		3546/DRO	01/16/14	1
Surrogate recovery(%)								
o-Terphenyl	85.2			% Rec.		3546/DRO	01/16/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
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January 22, 2014

ESC Sample # : L678121-14

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : 13-SB-I 7-8 FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 16:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	75.6	0.0333	0.100	%		2540 G-2	01/17/14	1
TPH (GC/FID) Low Fraction	U	0.60	3.7	mg/kg		GRO	01/16/14	27.75
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	97.7			% Rec.		GRO	01/16/14	27.75
TPH (GC/FID) High Fraction	U	0.77	5.3	mg/kg		3546/DRO	01/16/14	1
Surrogate recovery(%)								
o-Terphenyl	74.3			% Rec.		3546/DRO	01/16/14	1

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
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PO Box 639
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January 22, 2014

ESC Sample # : L678121-15

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : TB-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	15.	10.	50.	ug/l	J	8260B	01/16/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/16/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/16/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/16/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/16/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/16/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/16/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/16/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/16/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/16/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/16/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/16/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/16/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/16/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/16/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/16/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/16/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/16/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/16/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/16/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/16/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/16/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/16/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/16/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/16/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/16/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/16/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/16/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/16/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/16/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/16/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/16/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/16/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/16/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/16/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/16/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/16/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/16/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/16/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/16/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/16/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/16/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 22, 2014

ESC Sample # : L678121-15

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : DOROTHEA DIX

Sample ID : TB-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/14/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/16/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/16/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/16/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/16/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/16/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/16/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/16/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/16/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/16/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/16/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	01/16/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/16/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/16/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/16/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/16/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/16/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/16/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/16/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/16/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/16/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/16/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	01/16/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/16/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/16/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/16/14	1
Surrogate Recovery								
Toluene-d8	109.			% Rec.		8260B	01/16/14	1
Dibromofluoromethane	107.			% Rec.		8260B	01/16/14	1
4-Bromofluorobenzene	102.			% Rec.		8260B	01/16/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
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Reported: 01/22/14 11:26 Printed: 01/22/14 14:18

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678121-01	WG701658	SAMP	Mercury	R2876801	JO1P1J6
	WG701697	SAMP	Copper	R2878115	B
	WG701697	SAMP	Silver	R2878110	O
	WG701609	SAMP	Hexachlorocyclopentadiene	R2876842	J
	WG701609	SAMP	Bis(2-ethylhexyl)phthalate	R2876842	J
	WG701669	SAMP	p-Isopropyltoluene	R2876961	J4
	WG701669	SAMP	2-Butanone (MEK)	R2876961	J4
	WG701669	SAMP	Trichlorofluoromethane	R2876961	J4
	WG701669	SAMP	1,3,5-Trimethylbenzene	R2876961	J4
L678121-02	WG701697	SAMP	Arsenic	R2878110	J
	WG701697	SAMP	Copper	R2878115	B
	WG701697	SAMP	Selenium	R2878110	J
	WG701697	SAMP	Silver	R2878110	O
	WG701697	SAMP	Thallium	R2878110	J
	WG702393	SAMP	Bis(2-chlorethoxy)methane	R2878289	O
	WG702393	SAMP	Bis(2-chloroethyl)ether	R2878289	O
	WG702393	SAMP	Bis(2-chloroisopropyl)ether	R2878289	O
	WG701973	SAMP	Hexachlorobenzene	R2877683	J
	WG702393	SAMP	Hexachloro-1,3-butadiene	R2878289	O
	WG701973	SAMP	Hexachlorocyclopentadiene	R2877683	J
	WG702393	SAMP	Hexachloroethane	R2878289	O
	WG702393	SAMP	Isophorone	R2878289	O
	WG702393	SAMP	Naphthalene	R2878289	O
	WG702393	SAMP	Nitrobenzene	R2878289	O
	WG702393	SAMP	n-Nitrosodimethylamine	R2878289	O
	WG702393	SAMP	n-Nitrosodi-n-propylamine	R2878289	O
	WG702393	SAMP	1,2,4-Trichlorobenzene	R2878289	O
	WG702393	SAMP	4-Chloro-3-methylphenol	R2878289	O
	WG702393	SAMP	2-Chlorophenol	R2878289	O
	WG702393	SAMP	2,4-Dichlorophenol	R2878289	O
	WG702393	SAMP	2,4-Dimethylphenol	R2878289	O
	WG702393	SAMP	2-Nitrophenol	R2878289	O
	WG702393	SAMP	Phenol	R2878289	O
	WG701669	SAMP	p-Isopropyltoluene	R2876961	J4
	WG701669	SAMP	2-Butanone (MEK)	R2876961	J4
	WG701669	SAMP	Trichlorofluoromethane	R2876961	J4
	WG701669	SAMP	1,3,5-Trimethylbenzene	R2876961	J4
	WG701669	SAMP	Xylenes, Total	R2876961	J
L678121-03	WG701697	SAMP	Arsenic	R2878110	J
	WG701697	SAMP	Copper	R2878115	B
	WG701697	SAMP	Selenium	R2878110	O
	WG701697	SAMP	Silver	R2878110	O
	WG701697	SAMP	Thallium	R2878110	J
	WG701973	SAMP	Hexachlorobenzene	R2877683	J
	WG701973	SAMP	Hexachlorocyclopentadiene	R2877683	J
	WG701669	SAMP	p-Isopropyltoluene	R2876961	J4
	WG701669	SAMP	2-Butanone (MEK)	R2876961	J4
	WG701669	SAMP	Trichlorofluoromethane	R2876961	J4
	WG701669	SAMP	1,3,5-Trimethylbenzene	R2876961	J4
L678121-04	WG701697	SAMP	Copper	R2878115	B
	WG701697	SAMP	Selenium	R2878110	J
	WG701697	SAMP	Silver	R2878110	O
	WG702393	SAMP	Bis(2-chlorethoxy)methane	R2878289	O
	WG702393	SAMP	Bis(2-chloroethyl)ether	R2878289	O
	WG702393	SAMP	Bis(2-chloroisopropyl)ether	R2878289	O
	WG701973	SAMP	Hexachlorobenzene	R2877683	J
	WG702393	SAMP	Hexachloro-1,3-butadiene	R2878289	O
	WG701973	SAMP	Hexachlorocyclopentadiene	R2877683	J
	WG702393	SAMP	Hexachloroethane	R2878289	O
	WG702393	SAMP	Isophorone	R2878289	O
	WG702393	SAMP	Naphthalene	R2878289	O
	WG702393	SAMP	Nitrobenzene	R2878289	O
	WG702393	SAMP	n-Nitrosodimethylamine	R2878289	O
	WG702393	SAMP	n-Nitrosodi-n-propylamine	R2878289	O
	WG702393	SAMP	1,2,4-Trichlorobenzene	R2878289	O
	WG702393	SAMP	4-Chloro-3-methylphenol	R2878289	O
	WG702393	SAMP	2-Chlorophenol	R2878289	O
	WG702393	SAMP	2,4-Dichlorophenol	R2878289	O
	WG702393	SAMP	2,4-Dimethylphenol	R2878289	O

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
	WG702393	SAMP	2-Nitrophenol	R2878289	O
	WG702393	SAMP	Phenol	R2878289	O
	WG701669	SAMP	p-Isopropyltoluene	R2876961	J4
	WG701669	SAMP	2-Butanone (MEK)	R2876961	J4
	WG701669	SAMP	Trichlorofluoromethane	R2876961	J4
	WG701669	SAMP	1,3,5-Trimethylbenzene	R2876961	J4
L678121-06	WG701546	SAMP	TPH (GC/FID) High Fraction	R2876887	J
L678121-09	WG701614	SAMP	Bis(2-ethylhexyl)phthalate	R2877620	J
	WG701614	SAMP	2,4-Dinitrophenol	R2877620	J
	WG701699	SAMP	Arsenic	R2877237	J
	WG701682	SAMP	Cadmium	R2877221	J
L678121-12	WG701546	SAMP	TPH (GC/FID) High Fraction	R2876887	J
L678121-15	WG701664	SAMP	Acetone	R2877348	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
B	(EPA) - The indicated compound was found in the associated method blank as well as the laboratory sample.
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/22/14 at 14:18:09

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678121-01 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-02 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-03 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-04 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-05 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-06 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-07 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-08 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-09 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-10 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-11 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-12 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-13 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-14 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

Sample: L678121-15 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 01/22/14 00:00 RPT Date: 01/22/14 11:26

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678121

January 22, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG701619	01/16/14 08:58
Mercury	< .02	mg/kg			WG701658	01/16/14 10:20
1,2,4-Trichlorobenzene	< .333	mg/kg			WG701609	01/16/14 04:35
2,4,6-Trichlorophenol	< .333	mg/kg			WG701609	01/16/14 04:35
2,4-Dichlorophenol	< .333	mg/kg			WG701609	01/16/14 04:35
2,4-Dimethylphenol	< .333	mg/kg			WG701609	01/16/14 04:35
2,4-Dinitrophenol	< .333	mg/kg			WG701609	01/16/14 04:35
2,4-Dinitrotoluene	< .333	mg/kg			WG701609	01/16/14 04:35
2,6-Dinitrotoluene	< .333	mg/kg			WG701609	01/16/14 04:35
2-Chloronaphthalene	< .033	mg/kg			WG701609	01/16/14 04:35
2-Chlorophenol	< .333	mg/kg			WG701609	01/16/14 04:35
2-Nitrophenol	< .333	mg/kg			WG701609	01/16/14 04:35
3,3-Dichlorobenzidine	< .333	mg/kg			WG701609	01/16/14 04:35
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG701609	01/16/14 04:35
4-Bromophenyl-phenylether	< .333	mg/kg			WG701609	01/16/14 04:35
4-Chloro-3-methylphenol	< .333	mg/kg			WG701609	01/16/14 04:35
4-Chlorophenyl-phenylether	< .333	mg/kg			WG701609	01/16/14 04:35
4-Nitrophenol	< .333	mg/kg			WG701609	01/16/14 04:35
Acenaphthene	< .033	mg/kg			WG701609	01/16/14 04:35
Acenaphthylene	< .033	mg/kg			WG701609	01/16/14 04:35
Anthracene	< .033	mg/kg			WG701609	01/16/14 04:35
Benzidine	< .333	mg/kg			WG701609	01/16/14 04:35
Benzo(a)anthracene	< .033	mg/kg			WG701609	01/16/14 04:35
Benzo(a)pyrene	< .033	mg/kg			WG701609	01/16/14 04:35
Benzo(b)fluoranthene	< .033	mg/kg			WG701609	01/16/14 04:35
Benzo(g,h,i)perylene	< .033	mg/kg			WG701609	01/16/14 04:35
Benzo(k)fluoranthene	< .033	mg/kg			WG701609	01/16/14 04:35
Benzylbutyl phthalate	< .333	mg/kg			WG701609	01/16/14 04:35
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG701609	01/16/14 04:35
Bis(2-chloroethyl)ether	< .333	mg/kg			WG701609	01/16/14 04:35
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG701609	01/16/14 04:35
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG701609	01/16/14 04:35
Chrysene	< .033	mg/kg			WG701609	01/16/14 04:35
Di-n-butyl phthalate	< .333	mg/kg			WG701609	01/16/14 04:35
Di-n-octyl phthalate	< .333	mg/kg			WG701609	01/16/14 04:35
Dibenz(a,h)anthracene	< .033	mg/kg			WG701609	01/16/14 04:35
Diethyl phthalate	< .333	mg/kg			WG701609	01/16/14 04:35
Dimethyl phthalate	< .333	mg/kg			WG701609	01/16/14 04:35
Fluoranthene	< .033	mg/kg			WG701609	01/16/14 04:35
Fluorene	< .033	mg/kg			WG701609	01/16/14 04:35
Hexachloro-1,3-butadiene	< .333	mg/kg			WG701609	01/16/14 04:35
Hexachlorobenzene	< .333	mg/kg			WG701609	01/16/14 04:35
Hexachlorocyclopentadiene	< .333	mg/kg			WG701609	01/16/14 04:35
Hexachloroethane	< .333	mg/kg			WG701609	01/16/14 04:35
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG701609	01/16/14 04:35
Isophorone	< .333	mg/kg			WG701609	01/16/14 04:35
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG701609	01/16/14 04:35
n-Nitrosodimethylamine	< .333	mg/kg			WG701609	01/16/14 04:35
n-Nitrosodiphenylamine	< .333	mg/kg			WG701609	01/16/14 04:35
Naphthalene	< .033	mg/kg			WG701609	01/16/14 04:35
Nitrobenzene	< .333	mg/kg			WG701609	01/16/14 04:35
Pentachlorophenol	< .333	mg/kg			WG701609	01/16/14 04:35
Phenanthrene	< .033	mg/kg			WG701609	01/16/14 04:35
Phenol	< .333	mg/kg			WG701609	01/16/14 04:35
Pyrene	< .033	mg/kg			WG701609	01/16/14 04:35

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678121

January 22, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
2,4,6-Tribromophenol		% Rec.	61.30	21.6-142		01/16/14 04:35
2-Fluorobiphenyl		% Rec.	65.20	34.9-129		01/16/14 04:35
2-Fluorophenol		% Rec.	63.40	21.1-116		01/16/14 04:35
Nitrobenzene-d5		% Rec.	61.60	21.9-129		01/16/14 04:35
Phenol-d5		% Rec.	72.30	26.3-121		01/16/14 04:35
p-Terphenyl-d14		% Rec.	62.70	21.5-128		01/16/14 04:35
TPH (GC/FID) High Fraction	< 4	mg/kg			WG701546	01/16/14 11:54
o-Terphenyl		% Rec.	80.20	50-150	WG701546	01/16/14 11:54
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG701669	01/16/14 11:44
1,1,1-Trichloroethane	< .001	mg/kg			WG701669	01/16/14 11:44
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG701669	01/16/14 11:44
1,1,2-Trichloroethane	< .001	mg/kg			WG701669	01/16/14 11:44
1,1-Dichloroethane	< .001	mg/kg			WG701669	01/16/14 11:44
1,1-Dichloroethene	< .001	mg/kg			WG701669	01/16/14 11:44
1,1-Dichloropropene	< .001	mg/kg			WG701669	01/16/14 11:44
1,2,3-Trichlorobenzene	< .001	mg/kg			WG701669	01/16/14 11:44
1,2,3-Trichloropropane	< .0025	mg/kg			WG701669	01/16/14 11:44
1,2,4-Trichlorobenzene	< .001	mg/kg			WG701669	01/16/14 11:44
1,2,4-Trimethylbenzene	< .001	mg/kg			WG701669	01/16/14 11:44
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG701669	01/16/14 11:44
1,2-Dibromoethane	< .001	mg/kg			WG701669	01/16/14 11:44
1,2-Dichlorobenzene	< .001	mg/kg			WG701669	01/16/14 11:44
1,2-Dichloroethane	< .001	mg/kg			WG701669	01/16/14 11:44
1,2-Dichloropropane	< .001	mg/kg			WG701669	01/16/14 11:44
1,3,5-Trimethylbenzene	< .001	mg/kg			WG701669	01/16/14 11:44
1,3-Dichlorobenzene	< .001	mg/kg			WG701669	01/16/14 11:44
1,3-Dichloropropane	< .001	mg/kg			WG701669	01/16/14 11:44
1,4-Dichlorobenzene	< .001	mg/kg			WG701669	01/16/14 11:44
2,2-Dichloropropane	< .001	mg/kg			WG701669	01/16/14 11:44
2-Butanone (MEK)	< .01	mg/kg			WG701669	01/16/14 11:44
2-Chloroethyl vinyl ether	< .05	mg/kg			WG701669	01/16/14 11:44
2-Chlorotoluene	< .001	mg/kg			WG701669	01/16/14 11:44
4-Chlorotoluene	< .001	mg/kg			WG701669	01/16/14 11:44
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG701669	01/16/14 11:44
Acetone	< .05	mg/kg			WG701669	01/16/14 11:44
Acrylonitrile	< .01	mg/kg			WG701669	01/16/14 11:44
Benzene	< .001	mg/kg			WG701669	01/16/14 11:44
Bromobenzene	< .001	mg/kg			WG701669	01/16/14 11:44
Bromodichloromethane	< .001	mg/kg			WG701669	01/16/14 11:44
Bromoform	< .001	mg/kg			WG701669	01/16/14 11:44
Bromomethane	< .005	mg/kg			WG701669	01/16/14 11:44
Carbon tetrachloride	< .001	mg/kg			WG701669	01/16/14 11:44
Chlorobenzene	< .001	mg/kg			WG701669	01/16/14 11:44
Chlorodibromomethane	< .001	mg/kg			WG701669	01/16/14 11:44
Chloroethane	< .005	mg/kg			WG701669	01/16/14 11:44
Chloroform	< .005	mg/kg			WG701669	01/16/14 11:44
Chloromethane	< .0025	mg/kg			WG701669	01/16/14 11:44
cis-1,2-Dichloroethene	< .001	mg/kg			WG701669	01/16/14 11:44
cis-1,3-Dichloropropene	< .001	mg/kg			WG701669	01/16/14 11:44
Di-isopropyl ether	< .001	mg/kg			WG701669	01/16/14 11:44
Dibromomethane	< .001	mg/kg			WG701669	01/16/14 11:44
Dichlorodifluoromethane	< .005	mg/kg			WG701669	01/16/14 11:44
Ethylbenzene	< .001	mg/kg			WG701669	01/16/14 11:44
Hexachloro-1,3-butadiene	< .001	mg/kg			WG701669	01/16/14 11:44
Isopropylbenzene	< .001	mg/kg			WG701669	01/16/14 11:44
Methyl tert-butyl ether	< .001	mg/kg			WG701669	01/16/14 11:44
Methylene Chloride	< .005	mg/kg			WG701669	01/16/14 11:44

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678121

January 22, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
n-Butylbenzene	< .001	mg/kg			WG701669	01/16/14 11:44
n-Propylbenzene	< .001	mg/kg			WG701669	01/16/14 11:44
Naphthalene	< .005	mg/kg			WG701669	01/16/14 11:44
p-Isopropyltoluene	< .001	mg/kg			WG701669	01/16/14 11:44
sec-Butylbenzene	< .001	mg/kg			WG701669	01/16/14 11:44
Styrene	< .001	mg/kg			WG701669	01/16/14 11:44
tert-Butylbenzene	< .001	mg/kg			WG701669	01/16/14 11:44
Tetrachloroethene	< .001	mg/kg			WG701669	01/16/14 11:44
Toluene	< .005	mg/kg			WG701669	01/16/14 11:44
trans-1,2-Dichloroethene	< .001	mg/kg			WG701669	01/16/14 11:44
trans-1,3-Dichloropropene	< .001	mg/kg			WG701669	01/16/14 11:44
Trichloroethene	< .001	mg/kg			WG701669	01/16/14 11:44
Trichlorofluoromethane	< .005	mg/kg			WG701669	01/16/14 11:44
Vinyl chloride	< .001	mg/kg			WG701669	01/16/14 11:44
Xylenes, Total	< .003	mg/kg			WG701669	01/16/14 11:44
4-Bromofluorobenzene		% Rec.	96.00	71-126	WG701669	01/16/14 11:44
Dibromofluoromethane		% Rec.	92.90	78.3-121	WG701669	01/16/14 11:44
Toluene-d8		% Rec.	94.40	88.5-111	WG701669	01/16/14 11:44
a,a,a-Trifluorotoluene		% Rec.	96.10	85-114	WG701669	01/16/14 11:44
Mercury	< .0002	mg/l			WG701605	01/16/14 16:25
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG701663	01/16/14 13:32
a,a,a-Trifluorotoluene(FID)		% Rec.	98.40	59-128	WG701663	01/16/14 13:32
Beryllium	< .002	mg/l			WG701682	01/16/14 18:55
Cadmium	< .005	mg/l			WG701682	01/16/14 18:55
Chromium	< .01	mg/l			WG701682	01/16/14 18:55
Copper	< .02	mg/l			WG701682	01/16/14 18:55
Nickel	< .02	mg/l			WG701682	01/16/14 18:55
Selenium	< .02	mg/l			WG701682	01/16/14 18:55
Silver	< .01	mg/l			WG701682	01/16/14 18:55
Zinc	< .03	mg/l			WG701682	01/16/14 18:55
Total Solids	< .1	%			WG701688	01/17/14 07:49
Total Solids	< .1	%			WG701687	01/17/14 08:01
Antimony	< .001	mg/l			WG701699	01/16/14 14:12
Arsenic	< .001	mg/l			WG701699	01/16/14 14:12
Lead	< .001	mg/l			WG701699	01/16/14 14:12
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG701664	01/16/14 20:29
1,1,1-Trichloroethane	< .001	mg/l			WG701664	01/16/14 20:29
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG701664	01/16/14 20:29
1,1,2-Trichloroethane	< .001	mg/l			WG701664	01/16/14 20:29
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG701664	01/16/14 20:29
1,1-Dichloroethane	< .001	mg/l			WG701664	01/16/14 20:29
1,1-Dichloroethene	< .001	mg/l			WG701664	01/16/14 20:29
1,1-Dichloropropene	< .001	mg/l			WG701664	01/16/14 20:29
1,2,3-Trichlorobenzene	< .001	mg/l			WG701664	01/16/14 20:29
1,2,3-Trichloropropane	< .001	mg/l			WG701664	01/16/14 20:29

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Quality Assurance Report
Level II

L678121

January 22, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,2,3-Trimethylbenzene	< .001	mg/l			WG701664	01/16/14 20:29
1,2,4-Trichlorobenzene	< .001	mg/l			WG701664	01/16/14 20:29
1,2,4-Trimethylbenzene	< .001	mg/l			WG701664	01/16/14 20:29
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG701664	01/16/14 20:29
1,2-Dibromoethane	< .001	mg/l			WG701664	01/16/14 20:29
1,2-Dichlorobenzene	< .001	mg/l			WG701664	01/16/14 20:29
1,2-Dichloroethane	< .001	mg/l			WG701664	01/16/14 20:29
1,2-Dichloropropane	< .001	mg/l			WG701664	01/16/14 20:29
1,3,5-Trimethylbenzene	< .001	mg/l			WG701664	01/16/14 20:29
1,3-Dichlorobenzene	< .001	mg/l			WG701664	01/16/14 20:29
1,3-Dichloropropane	< .001	mg/l			WG701664	01/16/14 20:29
1,4-Dichlorobenzene	< .001	mg/l			WG701664	01/16/14 20:29
2,2-Dichloropropane	< .001	mg/l			WG701664	01/16/14 20:29
2-Butanone (MEK)	< .01	mg/l			WG701664	01/16/14 20:29
2-Chloroethyl vinyl ether	< .05	mg/l			WG701664	01/16/14 20:29
2-Chlorotoluene	< .001	mg/l			WG701664	01/16/14 20:29
4-Chlorotoluene	< .001	mg/l			WG701664	01/16/14 20:29
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG701664	01/16/14 20:29
Acetone	< .05	mg/l			WG701664	01/16/14 20:29
Acrolein	< .025	mg/l			WG701664	01/16/14 20:29
Acrylonitrile	< .01	mg/l			WG701664	01/16/14 20:29
Benzene	< .001	mg/l			WG701664	01/16/14 20:29
Bromobenzene	< .001	mg/l			WG701664	01/16/14 20:29
Bromodichloromethane	< .001	mg/l			WG701664	01/16/14 20:29
Bromoform	< .001	mg/l			WG701664	01/16/14 20:29
Bromomethane	< .005	mg/l			WG701664	01/16/14 20:29
Carbon tetrachloride	< .001	mg/l			WG701664	01/16/14 20:29
Chlorobenzene	< .001	mg/l			WG701664	01/16/14 20:29
Chlorodibromomethane	< .001	mg/l			WG701664	01/16/14 20:29
Chloroethane	< .005	mg/l			WG701664	01/16/14 20:29
Chloroform	< .005	mg/l			WG701664	01/16/14 20:29
Chloromethane	< .0025	mg/l			WG701664	01/16/14 20:29
cis-1,2-Dichloroethene	< .001	mg/l			WG701664	01/16/14 20:29
cis-1,3-Dichloropropene	< .001	mg/l			WG701664	01/16/14 20:29
Di-isopropyl ether	< .001	mg/l			WG701664	01/16/14 20:29
Dibromomethane	< .001	mg/l			WG701664	01/16/14 20:29
Dichlorodifluoromethane	< .005	mg/l			WG701664	01/16/14 20:29
Ethylbenzene	< .001	mg/l			WG701664	01/16/14 20:29
Hexachloro-1,3-butadiene	< .001	mg/l			WG701664	01/16/14 20:29
Isopropylbenzene	< .001	mg/l			WG701664	01/16/14 20:29
Methyl tert-butyl ether	< .001	mg/l			WG701664	01/16/14 20:29
Methylene Chloride	< .005	mg/l			WG701664	01/16/14 20:29
n-Butylbenzene	< .001	mg/l			WG701664	01/16/14 20:29
n-Propylbenzene	< .001	mg/l			WG701664	01/16/14 20:29
Naphthalene	< .005	mg/l			WG701664	01/16/14 20:29
p-Isopropyltoluene	< .001	mg/l			WG701664	01/16/14 20:29
sec-Butylbenzene	< .001	mg/l			WG701664	01/16/14 20:29
Styrene	< .001	mg/l			WG701664	01/16/14 20:29
tert-Butylbenzene	< .001	mg/l			WG701664	01/16/14 20:29
Tetrachloroethene	< .001	mg/l			WG701664	01/16/14 20:29
Toluene	< .005	mg/l			WG701664	01/16/14 20:29
trans-1,2-Dichloroethene	< .001	mg/l			WG701664	01/16/14 20:29
trans-1,3-Dichloropropene	< .001	mg/l			WG701664	01/16/14 20:29
Trichloroethene	< .001	mg/l			WG701664	01/16/14 20:29
Trichlorofluoromethane	< .005	mg/l			WG701664	01/16/14 20:29
Vinyl chloride	< .001	mg/l			WG701664	01/16/14 20:29
Xylenes, Total	< .003	mg/l			WG701664	01/16/14 20:29
4-Bromofluorobenzene		% Rec.	104.0	71-126	WG701664	01/16/14 20:29
Dibromofluoromethane		% Rec.	105.0	78.3-121	WG701664	01/16/14 20:29

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Level II

L678121

January 22, 2014

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Toluene-d8		% Rec.	107.0	88.5-111		01/16/14 20:29
a,a,a-Trifluorotoluene		% Rec.	106.0	85-114		01/16/14 20:29
1,2,4-Trichlorobenzene	< .01	mg/l			WG701614	01/17/14 05:17
2,4,6-Trichlorophenol	< .01	mg/l			WG701614	01/17/14 05:17
2,4-Dichlorophenol	< .01	mg/l			WG701614	01/17/14 05:17
2,4-Dimethylphenol	< .01	mg/l			WG701614	01/17/14 05:17
2,4-Dinitrophenol	< .01	mg/l			WG701614	01/17/14 05:17
2,4-Dinitrotoluene	< .01	mg/l			WG701614	01/17/14 05:17
2,6-Dinitrotoluene	< .01	mg/l			WG701614	01/17/14 05:17
2-Chloronaphthalene	< .001	mg/l			WG701614	01/17/14 05:17
2-Chlorophenol	< .01	mg/l			WG701614	01/17/14 05:17
2-Nitrophenol	< .01	mg/l			WG701614	01/17/14 05:17
3,3-Dichlorobenzidine	< .01	mg/l			WG701614	01/17/14 05:17
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG701614	01/17/14 05:17
4-Bromophenyl-phenylether	< .01	mg/l			WG701614	01/17/14 05:17
4-Chloro-3-methylphenol	< .01	mg/l			WG701614	01/17/14 05:17
4-Chlorophenyl-phenylether	< .01	mg/l			WG701614	01/17/14 05:17
4-Nitrophenol	< .01	mg/l			WG701614	01/17/14 05:17
Acenaphthene	< .001	mg/l			WG701614	01/17/14 05:17
Acenaphthylene	< .001	mg/l			WG701614	01/17/14 05:17
Anthracene	< .001	mg/l			WG701614	01/17/14 05:17
Benzidine	< .01	mg/l			WG701614	01/17/14 05:17
Benzo(a)anthracene	< .001	mg/l			WG701614	01/17/14 05:17
Benzo(a)pyrene	< .001	mg/l			WG701614	01/17/14 05:17
Benzo(b)fluoranthene	< .001	mg/l			WG701614	01/17/14 05:17
Benzo(g,h,i)perylene	< .001	mg/l			WG701614	01/17/14 05:17
Benzo(k)fluoranthene	< .001	mg/l			WG701614	01/17/14 05:17
Benzylbutyl phthalate	< .003	mg/l			WG701614	01/17/14 05:17
Bis(2-chlorethoxy)methane	< .01	mg/l			WG701614	01/17/14 05:17
Bis(2-chloroethyl)ether	< .01	mg/l			WG701614	01/17/14 05:17
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG701614	01/17/14 05:17
Bis(2-ethylhexyl)phthalate	< .003	mg/l			WG701614	01/17/14 05:17
Chrysene	< .001	mg/l			WG701614	01/17/14 05:17
Di-n-butyl phthalate	< .003	mg/l			WG701614	01/17/14 05:17
Di-n-octyl phthalate	< .003	mg/l			WG701614	01/17/14 05:17
Dibenz(a,h)anthracene	< .001	mg/l			WG701614	01/17/14 05:17
Diethyl phthalate	< .003	mg/l			WG701614	01/17/14 05:17
Dimethyl phthalate	< .003	mg/l			WG701614	01/17/14 05:17
Fluoranthene	< .001	mg/l			WG701614	01/17/14 05:17
Fluorene	< .001	mg/l			WG701614	01/17/14 05:17
Hexachloro-1,3-butadiene	< .01	mg/l			WG701614	01/17/14 05:17
Hexachlorobenzene	< .001	mg/l			WG701614	01/17/14 05:17
Hexachlorocyclopentadiene	< .01	mg/l			WG701614	01/17/14 05:17
Hexachloroethane	< .01	mg/l			WG701614	01/17/14 05:17
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG701614	01/17/14 05:17
Isophorone	< .01	mg/l			WG701614	01/17/14 05:17
n-Nitrosodi-n-propylamine	< .01	mg/l			WG701614	01/17/14 05:17
n-Nitrosodimethylamine	< .01	mg/l			WG701614	01/17/14 05:17
n-Nitrosodiphenylamine	< .01	mg/l			WG701614	01/17/14 05:17
Naphthalene	< .001	mg/l			WG701614	01/17/14 05:17
Nitrobenzene	< .01	mg/l			WG701614	01/17/14 05:17
Pentachlorophenol	< .001	mg/l			WG701614	01/17/14 05:17
Phenanthrene	< .001	mg/l			WG701614	01/17/14 05:17
Phenol	< .01	mg/l			WG701614	01/17/14 05:17
Pyrene	< .001	mg/l			WG701614	01/17/14 05:17
2,4,6-Tribromophenol		% Rec.	66.60	11.2-130	WG701614	01/17/14 05:17
2-Fluorobiphenyl		% Rec.	60.90	29.5-131	WG701614	01/17/14 05:17
2-Fluorophenol		% Rec.	43.40	10-77.9	WG701614	01/17/14 05:17
Nitrobenzene-d5		% Rec.	54.10	21.8-123	WG701614	01/17/14 05:17

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Phenol-d5		% Rec.	26.40	5-70.1		01/17/14 05:17
p-Terphenyl-d14		% Rec.	74.30	29.3-137		01/17/14 05:17
1,2,4-Trichlorobenzene	< .333	mg/kg			WG701973	01/19/14 12:45
2,4,6-Trichlorophenol	< .333	mg/kg			WG701973	01/19/14 12:45
2,4-Dichlorophenol	< .333	mg/kg			WG701973	01/19/14 12:45
2,4-Dimethylphenol	< .333	mg/kg			WG701973	01/19/14 12:45
2,4-Dinitrophenol	< .333	mg/kg			WG701973	01/19/14 12:45
2,4-Dinitrotoluene	< .333	mg/kg			WG701973	01/19/14 12:45
2,6-Dinitrotoluene	< .333	mg/kg			WG701973	01/19/14 12:45
2-Chloronaphthalene	< .033	mg/kg			WG701973	01/19/14 12:45
2-Chlorophenol	< .333	mg/kg			WG701973	01/19/14 12:45
2-Nitrophenol	< .333	mg/kg			WG701973	01/19/14 12:45
3,3-Dichlorobenzidine	< .333	mg/kg			WG701973	01/19/14 12:45
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG701973	01/19/14 12:45
4-Bromophenyl-phenylether	< .333	mg/kg			WG701973	01/19/14 12:45
4-Chloro-3-methylphenol	< .333	mg/kg			WG701973	01/19/14 12:45
4-Chlorophenyl-phenylether	< .333	mg/kg			WG701973	01/19/14 12:45
4-Nitrophenol	< .333	mg/kg			WG701973	01/19/14 12:45
Acenaphthene	< .033	mg/kg			WG701973	01/19/14 12:45
Acenaphthylene	< .033	mg/kg			WG701973	01/19/14 12:45
Anthracene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzidine	< .333	mg/kg			WG701973	01/19/14 12:45
Benzo(a)anthracene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzo(a)pyrene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzo(b)fluoranthene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzo(g,h,i)perylene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzo(k)fluoranthene	< .033	mg/kg			WG701973	01/19/14 12:45
Benzylbutyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG701973	01/19/14 12:45
Bis(2-chloroethyl)ether	< .333	mg/kg			WG701973	01/19/14 12:45
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG701973	01/19/14 12:45
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Chrysene	< .033	mg/kg			WG701973	01/19/14 12:45
Di-n-butyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Di-n-octyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Dibenz(a,h)anthracene	< .033	mg/kg			WG701973	01/19/14 12:45
Diethyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Dimethyl phthalate	< .333	mg/kg			WG701973	01/19/14 12:45
Fluoranthene	< .033	mg/kg			WG701973	01/19/14 12:45
Fluorene	< .033	mg/kg			WG701973	01/19/14 12:45
Hexachloro-1,3-butadiene	< .333	mg/kg			WG701973	01/19/14 12:45
Hexachlorobenzene	< .333	mg/kg			WG701973	01/19/14 12:45
Hexachlorocyclopentadiene	< .333	mg/kg			WG701973	01/19/14 12:45
Hexachloroethane	< .333	mg/kg			WG701973	01/19/14 12:45
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG701973	01/19/14 12:45
Isophorone	< .333	mg/kg			WG701973	01/19/14 12:45
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG701973	01/19/14 12:45
n-Nitrosodimethylamine	< .333	mg/kg			WG701973	01/19/14 12:45
n-Nitrosodiphenylamine	< .333	mg/kg			WG701973	01/19/14 12:45
Naphthalene	< .033	mg/kg			WG701973	01/19/14 12:45
Nitrobenzene	< .333	mg/kg			WG701973	01/19/14 12:45
Pentachlorophenol	< .333	mg/kg			WG701973	01/19/14 12:45
Phenanthrene	< .033	mg/kg			WG701973	01/19/14 12:45
Phenol	< .333	mg/kg			WG701973	01/19/14 12:45
Pyrene	< .033	mg/kg			WG701973	01/19/14 12:45
2,4,6-Tribromophenol		% Rec.	51.00	21.6-142	WG701973	01/19/14 12:45
2-Fluorobiphenyl		% Rec.	57.50	34.9-129	WG701973	01/19/14 12:45
2-Fluorophenol		% Rec.	50.90	21.1-116	WG701973	01/19/14 12:45
Nitrobenzene-d5		% Rec.	50.30	21.9-129	WG701973	01/19/14 12:45

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Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678121

January 22, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Phenol-d5		% Rec.	57.30	26.3-121		01/19/14 12:45
p-Terphenyl-d14		% Rec.	50.20	21.5-128		01/19/14 12:45
Antimony	< 1	mg/kg			WG701697	01/20/14 23:02
Arsenic	< 1	mg/kg			WG701697	01/20/14 23:02
Beryllium	< .1	mg/kg			WG701697	01/20/14 23:02
Cadmium	< .25	mg/kg			WG701697	01/20/14 23:02
Chromium	< .5	mg/kg			WG701697	01/20/14 23:02
Lead	< .25	mg/kg			WG701697	01/20/14 23:02
Nickel	< 1	mg/kg			WG701697	01/20/14 23:02
Selenium	< 1	mg/kg			WG701697	01/20/14 23:02
Silver	< .5	mg/kg			WG701697	01/20/14 23:02
Thallium	< 1	mg/kg			WG701697	01/20/14 23:02
Zinc	< 1.5	mg/kg			WG701697	01/20/14 23:02
Copper	< 1	mg/kg			WG701697	01/21/14 05:46
1,2,4-Trichlorobenzene	< .333	mg/kg			WG702393	01/22/14 05:52
2,4-Dichlorophenol	< .333	mg/kg			WG702393	01/22/14 05:52
2,4-Dimethylphenol	< .333	mg/kg			WG702393	01/22/14 05:52
2-Chlorophenol	< .333	mg/kg			WG702393	01/22/14 05:52
2-Nitrophenol	< .333	mg/kg			WG702393	01/22/14 05:52
4-Chloro-3-methylphenol	< .333	mg/kg			WG702393	01/22/14 05:52
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG702393	01/22/14 05:52
Bis(2-chloroethyl)ether	< .333	mg/kg			WG702393	01/22/14 05:52
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG702393	01/22/14 05:52
Hexachloro-1,3-butadiene	< .333	mg/kg			WG702393	01/22/14 05:52
Hexachloroethane	< .333	mg/kg			WG702393	01/22/14 05:52
Isophorone	< .333	mg/kg			WG702393	01/22/14 05:52
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG702393	01/22/14 05:52
n-Nitrosodimethylamine	< .333	mg/kg			WG702393	01/22/14 05:52
Naphthalene	< .033	mg/kg			WG702393	01/22/14 05:52
Nitrobenzene	< .333	mg/kg			WG702393	01/22/14 05:52
Phenol	< .333	mg/kg			WG702393	01/22/14 05:52
2,4,6-Tribromophenol		% Rec.	73.90	21.6-142	WG702393	01/22/14 05:52
2-Fluorobiphenyl		% Rec.	72.50	34.9-129	WG702393	01/22/14 05:52
2-Fluorophenol		% Rec.	63.70	21.1-116	WG702393	01/22/14 05:52
Nitrobenzene-d5		% Rec.	61.60	21.9-129	WG702393	01/22/14 05:52
Phenol-d5		% Rec.	71.30	26.3-121	WG702393	01/22/14 05:52
p-Terphenyl-d14		% Rec.	63.60	21.5-128	WG702393	01/22/14 05:52

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	85.0	85.1	0.114	5	L678122-01	WG701619
Mercury	mg/kg	0.0	0.0425	22.0*	20	L678121-01	WG701658
Mercury	mg/l	0.0	0.0000221	10.0	20	L677771-01	WG701605
Beryllium	mg/l	0.0	-0.0000341	27.0*	20	L678119-06	WG701682
Cadmium	mg/l	0.0	0.000433	11.0	20	L678119-06	WG701682
Chromium	mg/l	0.0	0.00132	32.0*	20	L678119-06	WG701682
Copper	mg/l	0.0	0.000739	8.00	20	L678119-06	WG701682
Nickel	mg/l	0.0	-0.000697	57.0*	20	L678119-06	WG701682
Selenium	mg/l	0.0	-0.00581	206.*	20	L678119-06	WG701682
Silver	mg/l	0.0	-0.00313	1020*	20	L678119-06	WG701682

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Zinc	mg/l	0.0	0.00428	7.00	20	L678119-06	WG701682
Total Solids	%	78.5	78.2	0.353	5	L678145-04	WG701688
Total Solids	%	75.6	74.8	1.17	5	L678057-09	WG701687
Arsenic	mg/l	0.00940	0.0100	6.19	20	L678202-33	WG701699
Lead	mg/l	0.00530	0.00539	1.68	20	L678202-33	WG701699
Thallium	mg/l	0.0	0.00451	NA	20	L678202-33	WG701699
Antimony	mg/kg	0.0	-0.216	36.0*	20	L678245-02	WG701697
Arsenic	mg/kg	2.70	2.42	12.0	20	L678245-02	WG701697
Beryllium	mg/kg	0.350	0.354	1.00	20	L678245-02	WG701697
Cadmium	mg/kg	0.0	0.256	14.0	20	L678245-02	WG701697
Chromium	mg/kg	4.30	3.94	8.00	20	L678245-02	WG701697
Lead	mg/kg	4.10	3.44	19.0	20	L678245-02	WG701697
Nickel	mg/kg	3.60	2.77	25.0*	20	L678245-02	WG701697
Selenium	mg/kg	0.0	0.402	31.0*	20	L678245-02	WG701697
Silver	mg/kg	0.0	-0.408	3.00	20	L678245-02	WG701697
Thallium	mg/kg	0.0	-0.980	27.0*	20	L678245-02	WG701697
Zinc	mg/kg	18.0	17.6	5.00	20	L678245-02	WG701697
Copper	mg/kg	6.90	6.05	14.0	20	L678245-02	WG701697

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
			Laboratory Control Sample			
Total Solids	%	50	50.1	100.	85-115	WG701619
Mercury	mg/kg	12.4	14.7	118.	71.6-128	WG701658
1,2,4-Trichlorobenzene	mg/kg	.333	0.200	60.0	39.8-100	WG701609
2,4,6-Trichlorophenol	mg/kg	.333	0.226	67.8	44.4-108	WG701609
2,4-Dichlorophenol	mg/kg	.333	0.216	64.8	46.2-109	WG701609
2,4-Dimethylphenol	mg/kg	.333	0.224	67.2	42.2-110	WG701609
2,4-Dinitrophenol	mg/kg	.333	0.149	44.8	10-105	WG701609
2,4-Dinitrotoluene	mg/kg	.333	0.258	77.4	53-112	WG701609
2,6-Dinitrotoluene	mg/kg	.333	0.268	80.5	51.6-110	WG701609
2-Chloronaphthalene	mg/kg	.333	0.248	74.4	47.1-105	WG701609
2-Chlorophenol	mg/kg	.333	0.241	72.3	40.8-103	WG701609
2-Nitrophenol	mg/kg	.333	0.253	75.9	44.2-113	WG701609
3,3-Dichlorobenzidine	mg/kg	.333	0.149	44.7	21-101	WG701609
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.230	69.0	23.1-119	WG701609
4-Bromophenyl-phenylether	mg/kg	.333	0.216	64.8	51.4-110	WG701609
4-Chloro-3-methylphenol	mg/kg	.333	0.251	75.3	51.1-113	WG701609
4-Chlorophenyl-phenylether	mg/kg	.333	0.224	67.3	48.1-108	WG701609
4-Nitrophenol	mg/kg	.333	0.280	84.0	34.8-109	WG701609
Acenaphthene	mg/kg	.333	0.239	71.7	48.9-107	WG701609
Acenaphthylene	mg/kg	.333	0.246	74.0	49.2-111	WG701609
Anthracene	mg/kg	.333	0.252	75.6	52-112	WG701609
Benzidine	mg/kg	.333	0.000982	0.295	0-48	WG701609
Benzo(a)anthracene	mg/kg	.333	0.234	70.1	52.3-106	WG701609
Benzo(a)pyrene	mg/kg	.333	0.227	68.2	51.9-106	WG701609
Benzo(b)fluoranthene	mg/kg	.333	0.254	76.2	51.3-106	WG701609

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Benzo(g,h,i)perylene	mg/kg	.333	0.241	72.2	45.8-108	WG701609
Benzo(k)fluoranthene	mg/kg	.333	0.251	75.4	52.9-107	WG701609
Benzylbutyl phthalate	mg/kg	.333	0.274	82.2	47.5-115	WG701609
Bis(2-chlorethoxy)methane	mg/kg	.333	0.228	68.3	44.9-108	WG701609
Bis(2-chloroethyl)ether	mg/kg	.333	0.235	70.5	32.5-112	WG701609
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.233	69.8	40.4-99	WG701609
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.269	80.8	48.1-116	WG701609
Chrysene	mg/kg	.333	0.236	70.9	54.4-110	WG701609
Di-n-butyl phthalate	mg/kg	.333	0.251	75.5	49.7-113	WG701609
Di-n-octyl phthalate	mg/kg	.333	0.276	83.0	49.6-112	WG701609
Dibenz(a,h)anthracene	mg/kg	.333	0.240	72.1	45.7-111	WG701609
Diethyl phthalate	mg/kg	.333	0.255	76.5	52-112	WG701609
Dimethyl phthalate	mg/kg	.333	0.249	74.7	51.4-108	WG701609
Fluoranthene	mg/kg	.333	0.226	68.0	53.7-110	WG701609
Fluorene	mg/kg	.333	0.239	71.9	51.1-109	WG701609
Hexachloro-1,3-butadiene	mg/kg	.333	0.183	55.0	41.5-112	WG701609
Hexachlorobenzene	mg/kg	.333	0.199	59.7	43.2-104	WG701609
Hexachlorocyclopentadiene	mg/kg	.333	0.161	48.4	13.5-123	WG701609
Hexachloroethane	mg/kg	.333	0.234	70.1	36.2-103	WG701609
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.242	72.5	47.5-109	WG701609
Isophorone	mg/kg	.333	0.246	73.8	28.8-104	WG701609
n-Nitrosodi-n-propylamine	mg/kg	.333	0.230	69.2	43.3-109	WG701609
n-Nitrosodimethylamine	mg/kg	.333	0.205	61.4	18.1-122	WG701609
n-Nitrosodiphenylamine	mg/kg	.333	0.236	70.9	48.8-107	WG701609
Naphthalene	mg/kg	.333	0.216	64.8	43.4-103	WG701609
Nitrobenzene	mg/kg	.333	0.244	73.4	40.7-109	WG701609
Pentachlorophenol	mg/kg	.333	0.177	53.1	16.2-102	WG701609
Phenanthrene	mg/kg	.333	0.240	72.0	51.6-107	WG701609
Phenol	mg/kg	.333	0.247	74.3	41.5-106	WG701609
Pyrene	mg/kg	.333	0.252	75.6	47.1-108	WG701609
2,4,6-Tribromophenol				69.10	21.6-142	WG701609
2-Fluorobiphenyl				69.90	34.9-129	WG701609
2-Fluorophenol				69.50	21.1-116	WG701609
Nitrobenzene-d5				69.20	21.9-129	WG701609
Phenol-d5				75.50	26.3-121	WG701609
p-Terphenyl-d14				60.60	21.5-128	WG701609
TPH (GC/FID) High Fraction	mg/kg	60	54.3	90.6	50-150	WG701546
o-Terphenyl				89.80	50-150	WG701546
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0257	103.	72.9-124	WG701669
1,1,1-Trichloroethane	mg/kg	.025	0.0264	106.	73.7-124	WG701669
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0234	93.8	69.4-122	WG701669
1,1,2-Trichloroethane	mg/kg	.025	0.0261	104.	79.1-118	WG701669
1,1-Dichloroethane	mg/kg	.025	0.0238	95.0	75-124	WG701669
1,1-Dichloroethene	mg/kg	.025	0.0252	101.	70.4-129	WG701669
1,1-Dichloropropene	mg/kg	.025	0.0243	97.2	74.9-124	WG701669
1,2,3-Trichlorobenzene	mg/kg	.025	0.0279	111.	69.3-131	WG701669
1,2,3-Trichloropropane	mg/kg	.025	0.0265	106.	71.4-123	WG701669
1,2,4-Trichlorobenzene	mg/kg	.025	0.0294	118.	71.9-137	WG701669
1,2,4-Trimethylbenzene	mg/kg	.025	0.0264	105.	75.5-122	WG701669
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0255	102.	62.8-133	WG701669
1,2-Dibromoethane	mg/kg	.025	0.0264	105.	78.6-120	WG701669
1,2-Dichlorobenzene	mg/kg	.025	0.0251	101.	78.3-118	WG701669
1,2-Dichloroethane	mg/kg	.025	0.0247	98.6	70.1-124	WG701669
1,2-Dichloropropane	mg/kg	.025	0.0223	89.1	77.9-119	WG701669
1,3,5-Trimethylbenzene	mg/kg	.025	0.0276	110.	75.9-124	WG701669

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Quality Assurance Report
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January 22, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,3-Dichlorobenzene	mg/kg	.025	0.0266	106.	72-126	WG701669
1,3-Dichloropropane	mg/kg	.025	0.0251	101.	79.1-117	WG701669
1,4-Dichlorobenzene	mg/kg	.025	0.0256	102.	78.3-117	WG701669
2,2-Dichloropropane	mg/kg	.025	0.0294	117.	61.3-136	WG701669
2-Butanone (MEK)	mg/kg	.125	0.0796	63.7	53.7-153	WG701669
2-Chloroethyl vinyl ether	mg/kg	.125	0.126	101.	37.7-157	WG701669
2-Chlorotoluene	mg/kg	.025	0.0253	101.	75.6-121	WG701669
4-Chlorotoluene	mg/kg	.025	0.0267	107.	77.3-120	WG701669
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.122	97.7	70.4-137	WG701669
Acetone	mg/kg	.125	0.0542	43.4	35.1-175	WG701669
Acrylonitrile	mg/kg	.125	0.111	88.8	56.4-128	WG701669
Benzene	mg/kg	.025	0.0234	93.8	77.1-121	WG701669
Bromobenzene	mg/kg	.025	0.0246	98.2	78.2-115	WG701669
Bromodichloromethane	mg/kg	.025	0.0245	97.8	74.9-115	WG701669
Bromoform	mg/kg	.025	0.0303	121.	65.9-132	WG701669
Bromomethane	mg/kg	.025	0.0301	120.	48.7-165	WG701669
Carbon tetrachloride	mg/kg	.025	0.0263	105.	70-124	WG701669
Chlorobenzene	mg/kg	.025	0.0252	101.	79.1-119	WG701669
Chlorodibromomethane	mg/kg	.025	0.0265	106.	73.5-121	WG701669
Chloroethane	mg/kg	.025	0.0275	110.	66.2-132	WG701669
Chloroform	mg/kg	.025	0.0254	102.	76.7-122	WG701669
Chloromethane	mg/kg	.025	0.0209	83.6	63.4-131	WG701669
cis-1,2-Dichloroethene	mg/kg	.025	0.0244	97.5	78.2-119	WG701669
cis-1,3-Dichloropropene	mg/kg	.025	0.0250	100.	79.6-120	WG701669
Di-isopropyl ether	mg/kg	.025	0.0202	80.7	70.4-133	WG701669
Dibromomethane	mg/kg	.025	0.0251	100.	79.4-120	WG701669
Dichlorodifluoromethane	mg/kg	.025	0.0281	113.	57.1-137	WG701669
Ethylbenzene	mg/kg	.025	0.0261	104.	79.7-122	WG701669
Hexachloro-1,3-butadiene	mg/kg	.025	0.0290	116.	68.2-123	WG701669
Isopropylbenzene	mg/kg	.025	0.0290	116.	80-135	WG701669
Methyl tert-butyl ether	mg/kg	.025	0.0248	99.2	73-129	WG701669
Methylene Chloride	mg/kg	.025	0.0240	96.1	72.6-120	WG701669
n-Butylbenzene	mg/kg	.025	0.0271	108.	77.5-126	WG701669
n-Propylbenzene	mg/kg	.025	0.0262	105.	77.9-123	WG701669
Naphthalene	mg/kg	.025	0.0255	102.	69.8-128	WG701669
p-Isopropyltoluene	mg/kg	.025	0.0279	111.	75.8-129	WG701669
sec-Butylbenzene	mg/kg	.025	0.0264	106.	75.8-126	WG701669
Styrene	mg/kg	.025	0.0272	109.	82.4-126	WG701669
tert-Butylbenzene	mg/kg	.025	0.0267	107.	76.4-126	WG701669
Tetrachloroethene	mg/kg	.025	0.0264	105.	73.9-125	WG701669
Toluene	mg/kg	.025	0.0242	96.8	79.7-118	WG701669
trans-1,2-Dichloroethene	mg/kg	.025	0.0241	96.3	73.8-122	WG701669
trans-1,3-Dichloropropene	mg/kg	.025	0.0271	108.	75.9-124	WG701669
Trichloroethene	mg/kg	.025	0.0247	98.9	77.9-118	WG701669
Trichlorofluoromethane	mg/kg	.025	0.0310	124.	67.7-131	WG701669
Vinyl chloride	mg/kg	.025	0.0252	101.	66.7-130	WG701669
Xylenes, Total	mg/kg	.075	0.0783	104.	78.8-121	WG701669
4-Bromofluorobenzene				99.20	71-126	WG701669
Dibromofluoromethane				93.40	78.3-121	WG701669
Toluene-d8				94.60	88.5-111	WG701669
a,a,a-Trifluorotoluene				96.20	85-114	WG701669
Mercury	mg/l	.003	0.00338	113.	85-115	WG701605
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.48	99.6	63.5-137	WG701663
a,a,a-Trifluorotoluene(FID)				103.0	59-128	WG701663

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Beryllium	mg/l	1	1.03	103.	85-115	WG701682
Cadmium	mg/l	1	1.05	105.	85-115	WG701682
Chromium	mg/l	1	1.05	105.	85-115	WG701682
Copper	mg/l	1	1.05	105.	85-115	WG701682
Nickel	mg/l	1	0.923	92.0	85-115	WG701682
Selenium	mg/l	1	1.02	102.	85-115	WG701682
Silver	mg/l	1	1.01	101.	85-115	WG701682
Zinc	mg/l	1	1.02	102.	85-115	WG701682
Total Solids	%	50	50.0	100.	85-115	WG701688
Total Solids	%	50	50.0	100.	85-115	WG701687
Antimony	mg/l	.05	0.0465	93.0	85-115	WG701699
Arsenic	mg/l	.05	0.0486	97.2	85-115	WG701699
Lead	mg/l	.05	0.0476	95.2	85-115	WG701699
Thallium	mg/l	.05	0.0472	94.4	85-115	WG701699
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0243	97.1	74.2-124	WG701664
1,1,1-Trichloroethane	mg/l	.025	0.0245	97.8	73.2-123	WG701664
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0234	93.5	70.7-122	WG701664
1,1,2-Trichloroethane	mg/l	.025	0.0242	96.8	77.7-118	WG701664
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0252	101.	67.2-143	WG701664
1,1-Dichloroethane	mg/l	.025	0.0234	93.7	70.7-126	WG701664
1,1-Dichloroethene	mg/l	.025	0.0249	99.7	67.8-129	WG701664
1,1-Dichloropropene	mg/l	.025	0.0239	95.5	73.1-125	WG701664
1,2,3-Trichlorobenzene	mg/l	.025	0.0246	98.2	64.9-135	WG701664
1,2,3-Trichloropropane	mg/l	.025	0.0235	94.2	71.8-121	WG701664
1,2,3-Trimethylbenzene	mg/l	.025	0.0208	83.1	72.3-116	WG701664
1,2,4-Trichlorobenzene	mg/l	.025	0.0261	104.	69.7-136	WG701664
1,2,4-Trimethylbenzene	mg/l	.025	0.0250	99.9	75-123	WG701664
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0230	92.0	65.4-128	WG701664
1,2-Dibromoethane	mg/l	.025	0.0234	93.7	76.6-121	WG701664
1,2-Dichlorobenzene	mg/l	.025	0.0251	100.	78.4-117	WG701664
1,2-Dichloroethane	mg/l	.025	0.0249	99.5	68.8-124	WG701664
1,2-Dichloropropane	mg/l	.025	0.0237	94.9	76.5-119	WG701664
1,3,5-Trimethylbenzene	mg/l	.025	0.0248	99.2	75.6-124	WG701664
1,3-Dichlorobenzene	mg/l	.025	0.0262	105.	70.8-128	WG701664
1,3-Dichloropropane	mg/l	.025	0.0239	95.6	77.4-117	WG701664
1,4-Dichlorobenzene	mg/l	.025	0.0251	100.	78.8-115	WG701664
2,2-Dichloropropane	mg/l	.025	0.0242	96.9	62.4-133	WG701664
2-Butanone (MEK)	mg/l	.125	0.123	98.1	55-149	WG701664
2-Chloroethyl vinyl ether	mg/l	.125	0.140	112.	43.8-150	WG701664
2-Chlorotoluene	mg/l	.025	0.0246	98.3	74.7-122	WG701664
4-Chlorotoluene	mg/l	.025	0.0250	100.	77.5-120	WG701664
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.126	100.	70.5-133	WG701664
Acetone	mg/l	.125	0.115	91.8	35.6-163	WG701664
Acrolein	mg/l	.125	0.127	102.	10-190	WG701664
Acrylonitrile	mg/l	.125	0.124	99.5	55.2-130	WG701664
Benzene	mg/l	.025	0.0241	96.2	74.8-121	WG701664
Bromobenzene	mg/l	.025	0.0247	98.6	77.5-116	WG701664
Bromodichloromethane	mg/l	.025	0.0243	97.0	75.1-116	WG701664
Bromoform	mg/l	.025	0.0264	106.	67.5-130	WG701664
Bromomethane	mg/l	.025	0.0316	126.	49.9-162	WG701664

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Carbon tetrachloride	mg/l	.025	0.0246	98.5	70.2-123	WG701664
Chlorobenzene	mg/l	.025	0.0248	99.3	78.1-119	WG701664
Chlorodibromomethane	mg/l	.025	0.0244	97.8	74-121	WG701664
Chloroethane	mg/l	.025	0.0264	106.	61.7-135	WG701664
Chloroform	mg/l	.025	0.0241	96.5	76-121	WG701664
Chloromethane	mg/l	.025	0.0225	89.9	61.5-129	WG701664
cis-1,2-Dichloroethene	mg/l	.025	0.0241	96.3	76-119	WG701664
cis-1,3-Dichloropropene	mg/l	.025	0.0249	99.8	78.2-120	WG701664
Di-isopropyl ether	mg/l	.025	0.0239	95.5	65.6-132	WG701664
Dibromomethane	mg/l	.025	0.0242	96.8	79.5-118	WG701664
Dichlorodifluoromethane	mg/l	.025	0.0251	100.	54.8-135	WG701664
Ethylbenzene	mg/l	.025	0.0245	98.1	78.8-122	WG701664
Hexachloro-1,3-butadiene	mg/l	.025	0.0232	93.0	64.7-129	WG701664
Isopropylbenzene	mg/l	.025	0.0268	107.	78.6-132	WG701664
Methyl tert-butyl ether	mg/l	.025	0.0243	97.4	71.2-126	WG701664
Methylene Chloride	mg/l	.025	0.0227	90.7	70.3-120	WG701664
n-Butylbenzene	mg/l	.025	0.0247	98.7	76.2-126	WG701664
n-Propylbenzene	mg/l	.025	0.0254	101.	78.2-122	WG701664
Naphthalene	mg/l	.025	0.0230	92.2	68.4-128	WG701664
p-Isopropyltoluene	mg/l	.025	0.0252	101.	74-131	WG701664
sec-Butylbenzene	mg/l	.025	0.0245	98.0	74.4-127	WG701664
Styrene	mg/l	.025	0.0265	106.	80.4-126	WG701664
tert-Butylbenzene	mg/l	.025	0.0255	102.	75.3-126	WG701664
Tetrachloroethene	mg/l	.025	0.0255	102.	72.6-126	WG701664
Toluene	mg/l	.025	0.0240	96.2	79.7-116	WG701664
trans-1,2-Dichloroethene	mg/l	.025	0.0240	96.0	72.6-121	WG701664
trans-1,3-Dichloropropene	mg/l	.025	0.0248	99.1	74.3-123	WG701664
Trichloroethene	mg/l	.025	0.0241	96.2	77.7-118	WG701664
Trichlorofluoromethane	mg/l	.025	0.0285	114.	63.5-135	WG701664
Vinyl chloride	mg/l	.025	0.0246	98.5	65.9-128	WG701664
Xylenes, Total	mg/l	.075	0.0741	98.7	78.7-121	WG701664
4-Bromofluorobenzene				103.0	71-126	WG701664
Dibromofluoromethane				105.0	78.3-121	WG701664
Toluene-d8				107.0	88.5-111	WG701664
a,a,a-Trifluorotoluene				106.0	85-114	WG701664
1,2,4-Trichlorobenzene	mg/l	.025	0.0146	58.4	22.9-96.1	WG701614
2,4,6-Trichlorophenol	mg/l	.025	0.0161	64.2	29.8-107	WG701614
2,4-Dichlorophenol	mg/l	.025	0.0182	72.6	31.4-103	WG701614
2,4-Dimethylphenol	mg/l	.025	0.0184	73.5	31.9-107	WG701614
2,4-Dinitrophenol	mg/l	.025	0.0134	53.6	24.2-128	WG701614
2,4-Dinitrotoluene	mg/l	.025	0.0200	80.2	31.2-105	WG701614
2,6-Dinitrotoluene	mg/l	.025	0.0194	77.6	30.6-106	WG701614
2-Chloronaphthalene	mg/l	.025	0.0189	75.6	33.6-105	WG701614
2-Chlorophenol	mg/l	.025	0.0145	58.2	26.2-91.5	WG701614
2-Nitrophenol	mg/l	.025	0.0154	61.5	25.9-106	WG701614
3,3-Dichlorobenzidine	mg/l	.025	0.0212	84.8	27.2-142	WG701614
4,6-Dinitro-2-methylphenol	mg/l	.025	0.0169	67.5	18.4-148	WG701614
4-Bromophenyl-phenylether	mg/l	.025	0.0216	86.4	40.7-116	WG701614
4-Chloro-3-methylphenol	mg/l	.025	0.0188	75.3	35.7-100	WG701614
4-Chlorophenyl-phenylether	mg/l	.025	0.0204	81.5	39-113	WG701614
4-Nitrophenol	mg/l	.025	0.00945	37.8	10-52.7	WG701614
Acenaphthene	mg/l	.025	0.0182	72.6	38.7-109	WG701614
Acenaphthylene	mg/l	.025	0.0194	77.5	36-106	WG701614
Anthracene	mg/l	.025	0.0191	76.4	43.6-113	WG701614
Benzidine	mg/l	.025	0.0240	95.9	10-165.2	WG701614
Benzo(a)anthracene	mg/l	.025	0.0216	86.3	51.2-112	WG701614
Benzo(a)pyrene	mg/l	.025	0.0190	75.9	45.6-106	WG701614

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Benzo(b)fluoranthene	mg/l	.025	0.0221	88.4	47.6-111	WG701614
Benzo(g,h,i)perylene	mg/l	.025	0.0224	89.6	45.2-117	WG701614
Benzo(k)fluoranthene	mg/l	.025	0.0202	80.8	49.4-114	WG701614
Benzylbutyl phthalate	mg/l	.025	0.0214	85.6	31.8-123	WG701614
Bis(2-chlorethoxy)methane	mg/l	.025	0.0179	71.8	37.2-111	WG701614
Bis(2-chloroethyl)ether	mg/l	.025	0.0172	68.7	22.6-108	WG701614
Bis(2-chloroisopropyl)ether	mg/l	.025	0.0172	68.8	32.9-100	WG701614
Bis(2-ethylhexyl)phthalate	mg/l	.025	0.0216	86.6	36.9-134	WG701614
Chrysene	mg/l	.025	0.0211	84.3	54.6-120	WG701614
Di-n-butyl phthalate	mg/l	.025	0.0221	88.3	41.8-120	WG701614
Di-n-octyl phthalate	mg/l	.025	0.0210	83.9	39.7-112	WG701614
Dibenz(a,h)anthracene	mg/l	.025	0.0221	88.5	42.8-118	WG701614
Diethyl phthalate	mg/l	.025	0.0227	90.8	36.5-129	WG701614
Dimethyl phthalate	mg/l	.025	0.0215	86.2	35.3-128	WG701614
Fluoranthene	mg/l	.025	0.0205	82.0	45.9-115	WG701614
Fluorene	mg/l	.025	0.0186	74.4	41-112	WG701614
Hexachloro-1,3-butadiene	mg/l	.025	0.0149	59.6	16.1-104	WG701614
Hexachlorobenzene	mg/l	.025	0.0215	85.9	38.5-116	WG701614
Hexachlorocyclopentadiene	mg/l	.025	0.0116	46.5	10-121	WG701614
Hexachloroethane	mg/l	.025	0.0134	53.7	16.5-89.8	WG701614
Indeno(1,2,3-cd)pyrene	mg/l	.025	0.0223	89.2	45-116	WG701614
Isophorone	mg/l	.025	0.0208	83.1	35.4-112	WG701614
n-Nitrosodi-n-propylamine	mg/l	.025	0.0182	72.9	33.2-106	WG701614
n-Nitrosodimethylamine	mg/l	.025	0.00988	39.5	10-80.1	WG701614
n-Nitrosodiphenylamine	mg/l	.025	0.0190	76.0	44.4-113	WG701614
Naphthalene	mg/l	.025	0.0154	61.6	32.2-101	WG701614
Nitrobenzene	mg/l	.025	0.0172	68.8	31.4-106	WG701614
Pentachlorophenol	mg/l	.025	0.0137	54.7	10-97.4	WG701614
Phenanthrene	mg/l	.025	0.0189	75.4	46.4-113	WG701614
Phenol	mg/l	.025	0.00755	30.2	10-57.9	WG701614
Pyrene	mg/l	.025	0.0205	81.8	46.3-117	WG701614
2,4,6-Tribromophenol				66.90	11.2-130	WG701614
2-Fluorobiphenyl				73.60	29.5-131	WG701614
2-Fluorophenol				38.00	10-77.9	WG701614
Nitrobenzene-d5				68.00	21.8-123	WG701614
Phenol-d5				27.50	5-70.1	WG701614
p-Terphenyl-d14				68.10	29.3-137	WG701614
1,2,4-Trichlorobenzene	mg/kg	.333	0.194	58.2	39.8-100	WG701973
2,4,6-Trichlorophenol	mg/kg	.333	0.221	66.2	44.4-108	WG701973
2,4-Dichlorophenol	mg/kg	.333	0.216	64.8	46.2-109	WG701973
2,4-Dimethylphenol	mg/kg	.333	0.199	59.8	42.2-110	WG701973
2,4-Dinitrophenol	mg/kg	.333	0.223	67.0	10-105	WG701973
2,4-Dinitrotoluene	mg/kg	.333	0.250	75.2	53-112	WG701973
2,6-Dinitrotoluene	mg/kg	.333	0.252	75.8	51.6-110	WG701973
2-Chloronaphthalene	mg/kg	.333	0.229	68.7	47.1-105	WG701973
2-Chlorophenol	mg/kg	.333	0.218	65.4	40.8-103	WG701973
2-Nitrophenol	mg/kg	.333	0.260	78.1	44.2-113	WG701973
3,3-Dichlorobenzidine	mg/kg	.333	0.191	57.5	21-101	WG701973
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.254	76.1	23.1-119	WG701973
4-Bromophenyl-phenylether	mg/kg	.333	0.201	60.4	51.4-110	WG701973
4-Chloro-3-methylphenol	mg/kg	.333	0.247	74.1	51.1-113	WG701973
4-Chlorophenyl-phenylether	mg/kg	.333	0.215	64.5	48.1-108	WG701973
4-Nitrophenol	mg/kg	.333	0.272	81.8	34.8-109	WG701973
Acenaphthene	mg/kg	.333	0.225	67.6	48.9-107	WG701973
Acenaphthylene	mg/kg	.333	0.239	71.7	49.2-111	WG701973
Anthracene	mg/kg	.333	0.221	66.5	52-112	WG701973
Benzidine	mg/kg	.333	0.0144	4.31	0-48	WG701973

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Benzo(a)anthracene	mg/kg	.333	0.218	65.4	52.3-106	WG701973
Benzo(a)pyrene	mg/kg	.333	0.221	66.4	51.9-106	WG701973
Benzo(b)fluoranthene	mg/kg	.333	0.249	74.8	51.3-106	WG701973
Benzo(g,h,i)perylene	mg/kg	.333	0.240	72.1	45.8-108	WG701973
Benzo(k)fluoranthene	mg/kg	.333	0.232	69.7	52.9-107	WG701973
Benzylbutyl phthalate	mg/kg	.333	0.253	76.0	47.5-115	WG701973
Bis(2-chlorethoxy)methane	mg/kg	.333	0.218	65.3	44.9-108	WG701973
Bis(2-chloroethyl)ether	mg/kg	.333	0.206	61.8	32.5-112	WG701973
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.212	63.5	40.4-99	WG701973
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.254	76.3	48.1-116	WG701973
Chrysene	mg/kg	.333	0.220	66.1	54.4-110	WG701973
Di-n-butyl phthalate	mg/kg	.333	0.216	64.8	49.7-113	WG701973
Di-n-octyl phthalate	mg/kg	.333	0.268	80.4	49.6-112	WG701973
Dibenz(a,h)anthracene	mg/kg	.333	0.236	70.9	45.7-111	WG701973
Diethyl phthalate	mg/kg	.333	0.232	69.8	52-112	WG701973
Dimethyl phthalate	mg/kg	.333	0.241	72.5	51.4-108	WG701973
Fluoranthene	mg/kg	.333	0.197	59.2	53.7-110	WG701973
Fluorene	mg/kg	.333	0.228	68.3	51.1-109	WG701973
Hexachloro-1,3-butadiene	mg/kg	.333	0.179	53.9	41.5-112	WG701973
Hexachlorobenzene	mg/kg	.333	0.193	58.0	43.2-104	WG701973
Hexachlorocyclopentadiene	mg/kg	.333	0.133	39.8	13.5-123	WG701973
Hexachloroethane	mg/kg	.333	0.208	62.6	36.2-103	WG701973
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.240	72.1	47.5-109	WG701973
Isophorone	mg/kg	.333	0.239	71.9	28.8-104	WG701973
n-Nitrosodi-n-propylamine	mg/kg	.333	0.230	68.9	43.3-109	WG701973
n-Nitrosodimethylamine	mg/kg	.333	0.185	55.6	18.1-122	WG701973
n-Nitrosodiphenylamine	mg/kg	.333	0.219	65.8	48.8-107	WG701973
Naphthalene	mg/kg	.333	0.202	60.7	43.4-103	WG701973
Nitrobenzene	mg/kg	.333	0.235	70.7	40.7-109	WG701973
Pentachlorophenol	mg/kg	.333	0.189	56.7	16.2-102	WG701973
Phenanthrene	mg/kg	.333	0.228	68.5	51.6-107	WG701973
Phenol	mg/kg	.333	0.230	68.9	41.5-106	WG701973
Pyrene	mg/kg	.333	0.227	68.3	47.1-108	WG701973
2,4,6-Tribromophenol				58.50	21.6-142	WG701973
2-Fluorobiphenyl				62.10	34.9-129	WG701973
2-Fluorophenol				56.00	21.1-116	WG701973
Nitrobenzene-d5				62.30	21.9-129	WG701973
Phenol-d5				62.70	26.3-121	WG701973
p-Terphenyl-d14				51.20	21.5-128	WG701973
Antimony	mg/kg	113	58.4	52.0	0.88-223	WG701697
Arsenic	mg/kg	237	248.	105.	83.1-117	WG701697
Beryllium	mg/kg	93.3	93.7	100.	83.3-117	WG701697
Cadmium	mg/kg	191	192.	101.	83.2-117	WG701697
Chromium	mg/kg	128	131.	102.	81.3-118	WG701697
Lead	mg/kg	103	102.	99.0	83.1-117	WG701697
Nickel	mg/kg	118	116.	98.0	82-118	WG701697
Selenium	mg/kg	110	115.	105.	78.7-122	WG701697
Silver	mg/kg	47.3	48.4	102.	66.2-134	WG701697
Thallium	mg/kg	158	162.	102.	81-119	WG701697
Zinc	mg/kg	183	187.	102.	82-118	WG701697
Copper	mg/kg	123	120.	98.0	83.7-116	WG701697
1,2,4-Trichlorobenzene	mg/kg	.333	0.241	72.4	39.8-100	WG702393
2,4-Dichlorophenol	mg/kg	.333	0.274	82.3	46.2-109	WG702393
2,4-Dimethylphenol	mg/kg	.333	0.276	82.8	42.2-110	WG702393
2-Chlorophenol	mg/kg	.333	0.267	80.1	40.8-103	WG702393

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Quality Assurance Report
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2-Nitrophenol	mg/kg	.333	0.302	90.6	44.2-113	WG702393
4-Chloro-3-methylphenol	mg/kg	.333	0.288	86.6	51.1-113	WG702393
Bis(2-chlorethoxy)methane	mg/kg	.333	0.254	76.1	44.9-108	WG702393
Bis(2-chloroethyl)ether	mg/kg	.333	0.243	73.0	32.5-112	WG702393
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.248	74.4	40.4-99	WG702393
Hexachloro-1,3-butadiene	mg/kg	.333	0.241	72.4	41.5-112	WG702393
Hexachloroethane	mg/kg	.333	0.246	74.0	36.2-103	WG702393
Isophorone	mg/kg	.333	0.272	81.5	28.8-104	WG702393
n-Nitrosodi-n-propylamine	mg/kg	.333	0.246	73.9	43.3-109	WG702393
n-Nitrosodimethylamine	mg/kg	.333	0.214	64.3	18.1-122	WG702393
Naphthalene	mg/kg	.333	0.245	73.5	43.4-103	WG702393
Nitrobenzene	mg/kg	.333	0.279	83.8	40.7-109	WG702393
Phenol	mg/kg	.333	0.268	80.6	41.5-106	WG702393
2,4,6-Tribromophenol				86.00	21.6-142	WG702393
2-Fluorobiphenyl				77.00	34.9-129	WG702393
2-Fluorophenol				71.40	21.1-116	WG702393
Nitrobenzene-d5				75.00	21.9-129	WG702393
Phenol-d5				77.10	26.3-121	WG702393
p-Terphenyl-d14				67.10	21.5-128	WG702393

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2,4-Trichlorobenzene	mg/kg	0.195	0.200	59.0	39.8-100	2.19	20	WG701609
2,4,6-Trichlorophenol	mg/kg	0.206	0.226	62.0	44.4-108	9.05	20	WG701609
2,4-Dichlorophenol	mg/kg	0.213	0.216	64.0	46.2-109	1.33	20	WG701609
2,4-Dimethylphenol	mg/kg	0.207	0.224	62.0	42.2-110	7.68	20	WG701609
2,4-Dinitrophenol	mg/kg	0.138	0.149	41.0	10-105	7.64	36.5	WG701609
2,4-Dinitrotoluene	mg/kg	0.246	0.258	74.0	53-112	4.57	20	WG701609
2,6-Dinitrotoluene	mg/kg	0.248	0.268	74.0	51.6-110	7.92	20	WG701609
2-Chloronaphthalene	mg/kg	0.230	0.248	69.0	47.1-105	7.50	20	WG701609
2-Chlorophenol	mg/kg	0.211	0.241	63.0	40.8-103	13.4	20	WG701609
2-Nitrophenol	mg/kg	0.252	0.253	76.0	44.2-113	0.230	20.9	WG701609
3,3-Dichlorobenzidine	mg/kg	0.136	0.149	41.0	21-101	8.99	22	WG701609
4,6-Dinitro-2-methylphenol	mg/kg	0.214	0.230	64.0	23.1-119	7.12	23.7	WG701609
4-Bromophenyl-phenylether	mg/kg	0.199	0.216	60.0	51.4-110	7.95	20	WG701609
4-Chloro-3-methylphenol	mg/kg	0.243	0.251	73.0	51.1-113	3.18	20	WG701609
4-Chlorophenyl-phenylether	mg/kg	0.205	0.224	62.0	48.1-108	8.75	20	WG701609
4-Nitrophenol	mg/kg	0.257	0.280	77.0	34.8-109	8.34	20	WG701609
Acenaphthene	mg/kg	0.221	0.239	66.0	48.9-107	7.66	20	WG701609
Acenaphthylene	mg/kg	0.230	0.246	69.0	49.2-111	6.68	20	WG701609
Anthracene	mg/kg	0.223	0.252	67.0	52-112	12.3	20	WG701609
Benzidine	mg/kg	0.00114	0.000982	0.00	0-48	15.0	40	WG701609
Benzo(a)anthracene	mg/kg	0.220	0.234	66.0	52.3-106	5.95	20	WG701609
Benzo(a)pyrene	mg/kg	0.214	0.227	64.0	51.9-106	5.70	20	WG701609
Benzo(b)fluoranthene	mg/kg	0.228	0.254	69.0	51.3-106	10.5	20	WG701609
Benzo(g,h,i)perylene	mg/kg	0.224	0.241	67.0	45.8-108	7.24	20	WG701609
Benzo(k)fluoranthene	mg/kg	0.240	0.251	72.0	52.9-107	4.53	20	WG701609
Benzylbutyl phthalate	mg/kg	0.257	0.274	77.0	47.5-115	6.20	20	WG701609
Bis(2-chlorethoxy)methane	mg/kg	0.212	0.228	64.0	44.9-108	7.03	20	WG701609
Bis(2-chloroethyl)ether	mg/kg	0.211	0.235	63.0	32.5-112	10.7	26	WG701609
Bis(2-chloroisopropyl)ether	mg/kg	0.208	0.233	62.0	40.4-99	11.1	20.7	WG701609
Bis(2-ethylhexyl)phthalate	mg/kg	0.252	0.269	76.0	48.1-116	6.47	20.5	WG701609
Chrysene	mg/kg	0.224	0.236	67.0	54.4-110	5.30	20	WG701609
Di-n-butyl phthalate	mg/kg	0.230	0.251	69.0	49.7-113	9.07	20	WG701609
Di-n-octyl phthalate	mg/kg	0.264	0.276	79.0	49.6-112	4.50	22	WG701609
Dibenz(a,h)anthracene	mg/kg	0.223	0.240	67.0	45.7-111	7.58	20	WG701609
Diethyl phthalate	mg/kg	0.236	0.255	71.0	52-112	7.65	20	WG701609
Dimethyl phthalate	mg/kg	0.236	0.249	71.0	51.4-108	5.39	20	WG701609

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Quality Assurance Report
Level II

L678121

January 22, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Fluoranthene	mg/kg	0.205	0.226	62.0	53.7-110	9.86	20	WG701609
Fluorene	mg/kg	0.225	0.239	68.0	51.1-109	6.22	20	WG701609
Hexachloro-1,3-butadiene	mg/kg	0.180	0.183	54.0	41.5-112	1.67	20	WG701609
Hexachlorobenzene	mg/kg	0.185	0.199	56.0	43.2-104	7.22	20.1	WG701609
Hexachlorocyclopentadiene	mg/kg	0.152	0.161	46.0	13.5-123	5.99	20.7	WG701609
Hexachloroethane	mg/kg	0.214	0.234	64.0	36.2-103	8.91	22.7	WG701609
Indeno(1,2,3-cd)pyrene	mg/kg	0.224	0.242	67.0	47.5-109	7.49	20	WG701609
Isophorone	mg/kg	0.237	0.246	71.0	28.8-104	3.47	20	WG701609
n-Nitrosodi-n-propylamine	mg/kg	0.208	0.230	62.0	43.3-109	10.3	20	WG701609
n-Nitrosodimethylamine	mg/kg	0.183	0.205	55.0	18.1-122	11.2	23.5	WG701609
n-Nitrosodiphenylamine	mg/kg	0.210	0.236	63.0	48.8-107	11.6	20	WG701609
Naphthalene	mg/kg	0.212	0.216	64.0	43.4-103	1.68	20	WG701609
Nitrobenzene	mg/kg	0.234	0.244	70.0	40.7-109	4.42	21	WG701609
Pentachlorophenol	mg/kg	0.158	0.177	47.0	16.2-102	11.1	22.9	WG701609
Phenanthrene	mg/kg	0.223	0.240	67.0	51.6-107	7.44	20	WG701609
Phenol	mg/kg	0.225	0.247	68.0	41.5-106	9.27	20	WG701609
Pyrene	mg/kg	0.238	0.252	71.0	47.1-108	5.80	20	WG701609
2,4,6-Tribromophenol				60.80	21.6-142			WG701609
2-Fluorobiphenyl				63.30	34.9-129			WG701609
2-Fluorophenol				62.70	21.1-116			WG701609
Nitrobenzene-d5				66.10	21.9-129			WG701609
Phenol-d5				65.00	26.3-121			WG701609
p-Terphenyl-d14				55.30	21.5-128			WG701609
TPH (GC/FID) High Fraction	mg/kg	52.1	54.3	87.0	50-150	4.10	20	WG701546
o-Terphenyl				85.00	50-150			WG701546
1,1,1,2-Tetrachloroethane	mg/kg	0.0297	0.0257	119.	72.9-124	14.4	20	WG701669
1,1,1-Trichloroethane	mg/kg	0.0272	0.0264	109.	73.7-124	2.89	20	WG701669
1,1,2,2-Tetrachloroethane	mg/kg	0.0252	0.0234	101.	69.4-122	7.30	20	WG701669
1,1,2-Trichloroethane	mg/kg	0.0240	0.0261	96.0	79.1-118	8.48	20	WG701669
1,1-Dichloroethane	mg/kg	0.0243	0.0238	97.0	75-124	2.35	20	WG701669
1,1-Dichloroethene	mg/kg	0.0274	0.0252	110.	70.4-129	8.51	20	WG701669
1,1-Dichloropropene	mg/kg	0.0243	0.0243	97.0	74.9-124	0.130	20	WG701669
1,2,3-Trichlorobenzene	mg/kg	0.0283	0.0279	113.	69.3-131	1.50	20	WG701669
1,2,3-Trichloropropane	mg/kg	0.0264	0.0265	106.	71.4-123	0.540	20	WG701669
1,2,4-Trichlorobenzene	mg/kg	0.0280	0.0294	112.	71.9-137	5.01	20	WG701669
1,2,4-Trimethylbenzene	mg/kg	0.0305	0.0264	122.	75.5-122	14.5	20	WG701669
1,2-Dibromo-3-Chloropropane	mg/kg	0.0259	0.0255	104.	62.8-133	1.43	20	WG701669
1,2-Dibromoethane	mg/kg	0.0259	0.0264	104.	78.6-120	1.71	20	WG701669
1,2-Dichlorobenzene	mg/kg	0.0258	0.0251	103.	78.3-118	2.64	20	WG701669
1,2-Dichloroethane	mg/kg	0.0226	0.0247	90.0	70.1-124	8.67	20	WG701669
1,2-Dichloropropane	mg/kg	0.0230	0.0223	92.0	77.9-119	3.35	20	WG701669
1,3,5-Trimethylbenzene	mg/kg	0.0313	0.0276	125*	75.9-124	12.3	20	WG701669
1,3-Dichlorobenzene	mg/kg	0.0299	0.0266	120.	72-126	11.6	20	WG701669
1,3-Dichloropropane	mg/kg	0.0233	0.0251	93.0	79.1-117	7.68	20	WG701669
1,4-Dichlorobenzene	mg/kg	0.0266	0.0256	106.	78.3-117	3.80	20	WG701669
2,2-Dichloropropane	mg/kg	0.0280	0.0294	112.	61.3-136	4.75	20	WG701669
2-Butanone (MEK)	mg/kg	0.0663	0.0796	53*	53.7-153	18.2	21.2	WG701669
2-Chloroethyl vinyl ether	mg/kg	0.116	0.126	93.0	37.7-157	8.27	20	WG701669
2-Chlorotoluene	mg/kg	0.0291	0.0253	116.	75.6-121	14.0	20	WG701669
4-Chlorotoluene	mg/kg	0.0299	0.0267	120.	77.3-120	11.3	20	WG701669
4-Methyl-2-pentanone (MIBK)	mg/kg	0.119	0.122	96.0	70.4-137	2.25	20	WG701669
Acetone	mg/kg	0.0470	0.0542	38.0	35.1-175	14.4	26.1	WG701669
Acrylonitrile	mg/kg	0.103	0.111	82.0	56.4-128	7.76	20	WG701669
Benzene	mg/kg	0.0229	0.0234	92.0	77.1-121	2.38	20	WG701669
Bromobenzene	mg/kg	0.0277	0.0246	111.	78.2-115	12.1	20	WG701669

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Fax (615) 758-5859

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Daphne Jones, Matt Flinchum
PO Box 639

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Bromodichloromethane	mg/kg	0.0254	0.0245	102.	74.9-115	3.73	20	WG701669
Bromoform	mg/kg	0.0314	0.0303	126.	65.9-132	3.60	20	WG701669
Bromomethane	mg/kg	0.0330	0.0301	132.	48.7-165	9.21	20	WG701669
Carbon tetrachloride	mg/kg	0.0274	0.0263	109.	70-124	3.92	20	WG701669
Chlorobenzene	mg/kg	0.0265	0.0252	106.	79.1-119	4.88	20	WG701669
Chlorodibromomethane	mg/kg	0.0269	0.0265	107.	73.5-121	1.18	20	WG701669
Chloroethane	mg/kg	0.0297	0.0275	119.	66.2-132	8.01	20	WG701669
Chloroform	mg/kg	0.0248	0.0254	99.0	76.7-122	2.42	20	WG701669
Chloromethane	mg/kg	0.0215	0.0209	86.0	63.4-131	2.70	20	WG701669
cis-1,2-Dichloroethene	mg/kg	0.0243	0.0244	97.0	78.2-119	0.170	20	WG701669
cis-1,3-Dichloropropene	mg/kg	0.0243	0.0250	97.0	79.6-120	2.78	20	WG701669
Di-isopropyl ether	mg/kg	0.0197	0.0202	79.0	70.4-133	2.28	20	WG701669
Dibromomethane	mg/kg	0.0250	0.0251	100.	79.4-120	0.420	20	WG701669
Dichlorodifluoromethane	mg/kg	0.0285	0.0281	114.	57.1-137	1.43	20	WG701669
Ethylbenzene	mg/kg	0.0277	0.0261	111.	79.7-122	5.96	20	WG701669
Hexachloro-1,3-butadiene	mg/kg	0.0281	0.0290	112.	68.2-123	2.98	20	WG701669
Isopropylbenzene	mg/kg	0.0331	0.0290	132.	80-135	13.3	20	WG701669
Methyl tert-butyl ether	mg/kg	0.0236	0.0248	94.0	73-129	4.92	20	WG701669
Methylene Chloride	mg/kg	0.0235	0.0240	94.0	72.6-120	2.08	20	WG701669
n-Butylbenzene	mg/kg	0.0286	0.0271	114.	77.5-126	5.51	20	WG701669
n-Propylbenzene	mg/kg	0.0303	0.0262	121.	77.9-123	14.4	20	WG701669
Naphthalene	mg/kg	0.0254	0.0255	101.	69.8-128	0.580	20	WG701669
p-Isopropyltoluene	mg/kg	0.0324	0.0279	130*	75.8-129	15.1	20	WG701669
sec-Butylbenzene	mg/kg	0.0311	0.0264	124.	75.8-126	16.3	20	WG701669
Styrene	mg/kg	0.0297	0.0272	119.	82.4-126	8.89	20	WG701669
tert-Butylbenzene	mg/kg	0.0314	0.0267	126.	76.4-126	16.3	20	WG701669
Tetrachloroethene	mg/kg	0.0289	0.0264	116.	73.9-125	9.12	20	WG701669
Toluene	mg/kg	0.0246	0.0242	98.0	79.7-118	1.71	20	WG701669
trans-1,2-Dichloroethene	mg/kg	0.0249	0.0241	100.	73.8-122	3.38	20	WG701669
trans-1,3-Dichloropropene	mg/kg	0.0248	0.0271	99.0	75.9-124	8.59	20	WG701669
Trichloroethene	mg/kg	0.0258	0.0247	103.	77.9-118	4.18	20	WG701669
Trichlorofluoromethane	mg/kg	0.0329	0.0310	132*	67.7-131	6.01	20	WG701669
Vinyl chloride	mg/kg	0.0278	0.0252	111.	66.7-130	9.68	20	WG701669
Xylenes, Total	mg/kg	0.0863	0.0783	115.	78.8-121	9.69	20	WG701669
4-Bromofluorobenzene				105.0	71-126			WG701669
Dibromofluoromethane				93.00	78.3-121			WG701669
Toluene-d8				96.00	88.5-111			WG701669
a,a,a-Trifluorotoluene				103.0	85-114			WG701669
TPH (GC/FID) Low Fraction	mg/kg	5.07	5.48	92.0	63.5-137	7.84	20	WG701663
a,a,a-Trifluorotoluene(FID)				103.0	59-128			WG701663
1,1,1,2-Tetrachloroethane	mg/l	0.0242	0.0243	97.0	74.2-124	0.110	20	WG701664
1,1,1-Trichloroethane	mg/l	0.0246	0.0245	98.0	73.2-123	0.460	20	WG701664
1,1,2,2-Tetrachloroethane	mg/l	0.0223	0.0234	89.0	70.7-122	4.60	20	WG701664
1,1,2-Trichloroethane	mg/l	0.0240	0.0242	96.0	77.7-118	1.03	20	WG701664
1,1,2-Trichlorotrifluoroethane	mg/l	0.0226	0.0252	90.0	67.2-143	11.2	20	WG701664
1,1-Dichloroethane	mg/l	0.0236	0.0234	94.0	70.7-126	0.630	20	WG701664
1,1-Dichloroethene	mg/l	0.0233	0.0249	93.0	67.8-129	6.85	20	WG701664
1,1-Dichloropropene	mg/l	0.0240	0.0239	96.0	73.1-125	0.620	20	WG701664
1,2,3-Trichlorobenzene	mg/l	0.0239	0.0246	95.0	64.9-135	2.82	20	WG701664
1,2,3-Trichloropropane	mg/l	0.0219	0.0235	88.0	71.8-121	7.26	20	WG701664
1,2,3-Trimethylbenzene	mg/l	0.0213	0.0208	85.0	72.3-116	2.23	20	WG701664
1,2,4-Trichlorobenzene	mg/l	0.0258	0.0261	103.	69.7-136	1.04	20	WG701664
1,2,4-Trimethylbenzene	mg/l	0.0250	0.0250	100.	75-123	0.0100	20	WG701664
1,2-Dibromo-3-Chloropropane	mg/l	0.0225	0.0230	90.0	65.4-128	2.13	20	WG701664
1,2-Dibromoethane	mg/l	0.0231	0.0234	92.0	76.6-121	1.29	20	WG701664

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Quality Assurance Report
Level II

L678121

January 22, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2-Dichlorobenzene	mg/l	0.0250	0.0251	100.	78.4-117	0.230	20	WG701664
1,2-Dichloroethane	mg/l	0.0242	0.0249	97.0	68.8-124	2.91	20	WG701664
1,2-Dichloropropane	mg/l	0.0242	0.0237	97.0	76.5-119	1.88	20	WG701664
1,3,5-Trimethylbenzene	mg/l	0.0252	0.0248	101.	75.6-124	1.66	20	WG701664
1,3-Dichlorobenzene	mg/l	0.0256	0.0262	102.	70.8-128	2.27	20	WG701664
1,3-Dichloropropane	mg/l	0.0237	0.0239	95.0	77.4-117	0.760	20	WG701664
1,4-Dichlorobenzene	mg/l	0.0250	0.0251	100.	78.8-115	0.0400	20	WG701664
2,2-Dichloropropane	mg/l	0.0245	0.0242	98.0	62.4-133	0.970	20	WG701664
2-Butanone (MEK)	mg/l	0.113	0.123	91.0	55-149	7.71	20	WG701664
2-Chloroethyl vinyl ether	mg/l	0.134	0.140	108.	43.8-150	4.44	20	WG701664
2-Chlorotoluene	mg/l	0.0246	0.0246	98.0	74.7-122	0.0300	20	WG701664
4-Chlorotoluene	mg/l	0.0248	0.0250	99.0	77.5-120	0.980	20	WG701664
4-Methyl-2-pentanone (MIBK)	mg/l	0.115	0.126	92.0	70.5-133	8.58	20	WG701664
Acetone	mg/l	0.109	0.115	87.0	35.6-163	5.60	23.9	WG701664
Acrolein	mg/l	0.116	0.127	92.0	10-190	9.29	28.1	WG701664
Acrylonitrile	mg/l	0.117	0.124	94.0	55.2-130	6.15	20	WG701664
Benzene	mg/l	0.0240	0.0241	96.0	74.8-121	0.110	20	WG701664
Bromobenzene	mg/l	0.0247	0.0247	99.0	77.5-116	0.150	20	WG701664
Bromodichloromethane	mg/l	0.0243	0.0243	97.0	75.1-116	0.0100	20	WG701664
Bromoform	mg/l	0.0260	0.0264	104.	67.5-130	1.44	20	WG701664
Bromomethane	mg/l	0.0301	0.0316	120.	49.9-162	4.73	20	WG701664
Carbon tetrachloride	mg/l	0.0248	0.0246	99.0	70.2-123	0.550	20	WG701664
Chlorobenzene	mg/l	0.0249	0.0248	100.	78.1-119	0.470	20	WG701664
Chlorodibromomethane	mg/l	0.0245	0.0244	98.0	74-121	0.390	20	WG701664
Chloroethane	mg/l	0.0260	0.0264	104.	61.7-135	1.34	20	WG701664
Chloroform	mg/l	0.0237	0.0241	95.0	76-121	1.76	20	WG701664
Chloromethane	mg/l	0.0224	0.0225	90.0	61.5-129	0.110	20	WG701664
cis-1,2-Dichloroethene	mg/l	0.0245	0.0241	98.0	76-119	1.78	20	WG701664
cis-1,3-Dichloropropene	mg/l	0.0250	0.0249	100.	78.2-120	0.360	20	WG701664
Di-isopropyl ether	mg/l	0.0234	0.0239	94.0	65.6-132	1.83	20	WG701664
Dibromomethane	mg/l	0.0241	0.0242	96.0	79.5-118	0.460	20	WG701664
Dichlorodifluoromethane	mg/l	0.0264	0.0251	106.	54.8-135	4.99	20	WG701664
Ethylbenzene	mg/l	0.0254	0.0245	102.	78.8-122	3.55	20	WG701664
Hexachloro-1,3-butadiene	mg/l	0.0237	0.0232	95.0	64.7-129	1.82	20	WG701664
Isopropylbenzene	mg/l	0.0274	0.0268	109.	78.6-132	2.13	20	WG701664
Methyl tert-butyl ether	mg/l	0.0230	0.0243	92.0	71.2-126	5.53	20	WG701664
Methylene Chloride	mg/l	0.0229	0.0227	92.0	70.3-120	1.06	20	WG701664
n-Butylbenzene	mg/l	0.0250	0.0247	100.	76.2-126	1.28	20	WG701664
n-Propylbenzene	mg/l	0.0257	0.0254	103.	78.2-122	1.23	20	WG701664
Naphthalene	mg/l	0.0219	0.0230	88.0	68.4-128	4.91	20	WG701664
p-Isopropyltoluene	mg/l	0.0254	0.0252	102.	74-131	0.740	20	WG701664
sec-Butylbenzene	mg/l	0.0251	0.0245	100.	74.4-127	2.33	20	WG701664
Styrene	mg/l	0.0266	0.0265	106.	80.4-126	0.120	20	WG701664
tert-Butylbenzene	mg/l	0.0257	0.0255	103.	75.3-126	0.870	20	WG701664
Tetrachloroethene	mg/l	0.0254	0.0255	102.	72.6-126	0.360	20	WG701664
Toluene	mg/l	0.0248	0.0240	99.0	79.7-116	3.28	20	WG701664
trans-1,2-Dichloroethene	mg/l	0.0234	0.0240	94.0	72.6-121	2.38	20	WG701664
trans-1,3-Dichloropropene	mg/l	0.0253	0.0248	101.	74.3-123	2.03	20	WG701664
Trichloroethene	mg/l	0.0248	0.0241	99.0	77.7-118	2.85	20	WG701664
Trichlorofluoromethane	mg/l	0.0291	0.0285	116.	63.5-135	1.86	20	WG701664
Vinyl chloride	mg/l	0.0251	0.0246	100.	65.9-128	1.77	20	WG701664
Xylenes, Total	mg/l	0.0749	0.0741	100.	78.7-121	1.10	20	WG701664
4-Bromofluorobenzene				101.0	71-126			WG701664
Dibromofluoromethane				104.0	78.3-121			WG701664
Toluene-d8				109.0	88.5-111			WG701664
a,a,a-Trifluorotoluene				106.0	85-114			WG701664
1,2,4-Trichlorobenzene	mg/l	0.0142	0.0146	57.0	22.9-96.1	2.87	27.5	WG701614

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
2,4,6-Trichlorophenol	mg/l	0.0143	0.0161	57.0	29.8-107	11.3	24.1	WG701614
2,4-Dichlorophenol	mg/l	0.0172	0.0182	69.0	31.4-103	5.39	24.9	WG701614
2,4-Dimethylphenol	mg/l	0.0182	0.0184	73.0	31.9-107	0.670	25.7	WG701614
2,4-Dinitrophenol	mg/l	0.0125	0.0134	50.0	24.2-128	6.63	20.5	WG701614
2,4-Dinitrotoluene	mg/l	0.0207	0.0200	83.0	31.2-105	3.38	22	WG701614
2,6-Dinitrotoluene	mg/l	0.0197	0.0194	79.0	30.6-106	1.79	23.1	WG701614
2-Chloronaphthalene	mg/l	0.0178	0.0189	71.0	33.6-105	6.19	23	WG701614
2-Chlorophenol	mg/l	0.0142	0.0145	57.0	26.2-91.5	2.17	26.5	WG701614
2-Nitrophenol	mg/l	0.0156	0.0154	62.0	25.9-106	1.57	26.9	WG701614
3,3-Dichlorobenzidine	mg/l	0.0202	0.0212	81.0	27.2-142	4.61	22.3	WG701614
4,6-Dinitro-2-methylphenol	mg/l	0.0157	0.0169	63.0	18.4-148	7.42	24.4	WG701614
4-Bromophenyl-phenylether	mg/l	0.0222	0.0216	89.0	40.7-116	2.84	21	WG701614
4-Chloro-3-methylphenol	mg/l	0.0193	0.0188	77.0	35.7-100	2.45	22.9	WG701614
4-Chlorophenyl-phenylether	mg/l	0.0201	0.0204	80.0	39-113	1.53	20.9	WG701614
4-Nitrophenol	mg/l	0.00957	0.00945	38.0	10-52.7	1.29	40	WG701614
Acenaphthene	mg/l	0.0183	0.0182	73.0	38.7-109	0.650	21.5	WG701614
Acenaphthylene	mg/l	0.0195	0.0194	78.0	36-106	0.710	21	WG701614
Anthracene	mg/l	0.0199	0.0191	80.0	43.6-113	4.17	18.8	WG701614
Benzidine	mg/l	0.0228	0.0240	91.0	10-165.2	4.98	40	WG701614
Benzo(a)anthracene	mg/l	0.0207	0.0216	83.0	51.2-112	3.90	20	WG701614
Benzo(a)pyrene	mg/l	0.0190	0.0190	76.0	45.6-106	0.270	20	WG701614
Benzo(b)fluoranthene	mg/l	0.0219	0.0221	87.0	47.6-111	1.11	20	WG701614
Benzo(g,h,i)perylene	mg/l	0.0225	0.0224	90.0	45.2-117	0.430	20	WG701614
Benzo(k)fluoranthene	mg/l	0.0207	0.0202	83.0	49.4-114	2.56	20	WG701614
Benzylbutyl phthalate	mg/l	0.0211	0.0214	84.0	31.8-123	1.42	20.7	WG701614
Bis(2-chlorethoxy)methane	mg/l	0.0174	0.0179	70.0	37.2-111	3.00	24.1	WG701614
Bis(2-chloroethyl)ether	mg/l	0.0158	0.0172	63.0	22.6-108	8.31	27.9	WG701614
Bis(2-chloroisopropyl)ether	mg/l	0.0166	0.0172	66.0	32.9-100	3.55	25.1	WG701614
Bis(2-ethylhexyl)phthalate	mg/l	0.0215	0.0216	86.0	36.9-134	0.840	23.6	WG701614
Chrysene	mg/l	0.0204	0.0211	82.0	54.6-120	3.38	20	WG701614
Di-n-butyl phthalate	mg/l	0.0218	0.0221	87.0	41.8-120	1.13	20.2	WG701614
Di-n-octyl phthalate	mg/l	0.0202	0.0210	81.0	39.7-112	3.72	21.1	WG701614
Dibenz(a,h)anthracene	mg/l	0.0220	0.0221	88.0	42.8-118	0.350	20	WG701614
Diethyl phthalate	mg/l	0.0227	0.0227	91.0	36.5-129	0.0500	20	WG701614
Dimethyl phthalate	mg/l	0.0215	0.0215	86.0	35.3-128	0.240	20.8	WG701614
Fluoranthene	mg/l	0.0217	0.0205	87.0	45.9-115	5.68	20	WG701614
Fluorene	mg/l	0.0197	0.0186	79.0	41-112	5.62	20.2	WG701614
Hexachloro-1,3-butadiene	mg/l	0.0146	0.0149	58.0	16.1-104	1.94	31.2	WG701614
Hexachlorobenzene	mg/l	0.0232	0.0215	93.0	38.5-116	7.59	20.1	WG701614
Hexachlorocyclopentadiene	mg/l	0.0117	0.0116	47.0	10-121	0.990	27.9	WG701614
Hexachloroethane	mg/l	0.0126	0.0134	50.0	16.5-89.8	6.31	30.7	WG701614
Indeno(1,2,3-cd)pyrene	mg/l	0.0230	0.0223	92.0	45-116	2.99	20	WG701614
Isophorone	mg/l	0.0211	0.0208	84.0	35.4-112	1.31	21.5	WG701614
n-Nitrosodi-n-propylamine	mg/l	0.0176	0.0182	70.0	33.2-106	3.53	23.7	WG701614
n-Nitrosodimethylamine	mg/l	0.00974	0.00988	39.0	10-80.1	1.35	37.5	WG701614
n-Nitrosodiphenylamine	mg/l	0.0192	0.0190	77.0	44.4-113	1.32	20	WG701614
Naphthalene	mg/l	0.0151	0.0154	60.0	32.2-101	1.99	23.8	WG701614
Nitrobenzene	mg/l	0.0173	0.0172	69.0	31.4-106	0.300	25.7	WG701614
Pentachlorophenol	mg/l	0.0112	0.0137	45.0	10-97.4	20.0	35.1	WG701614
Phenanthrene	mg/l	0.0195	0.0189	78.0	46.4-113	3.50	20	WG701614
Phenol	mg/l	0.00727	0.00755	29.0	10-57.9	3.80	35	WG701614
Pyrene	mg/l	0.0204	0.0205	82.0	46.3-117	0.190	20	WG701614
2,4,6-Tribromophenol				65.80	11.2-130			WG701614
2-Fluorobiphenyl				71.30	29.5-131			WG701614
2-Fluorophenol				36.10	10-77.9			WG701614
Nitrobenzene-d5				62.00	21.8-123			WG701614
Phenol-d5				25.30	5-70.1			WG701614
p-Terphenyl-d14				64.60	29.3-137			WG701614

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2,4-Trichlorobenzene	mg/kg	0.184	0.194	55.0	39.8-100	5.48	20	WG701973
2,4,6-Trichlorophenol	mg/kg	0.221	0.221	66.0	44.4-108	0.0200	20	WG701973
2,4-Dichlorophenol	mg/kg	0.210	0.216	63.0	46.2-109	2.74	20	WG701973
2,4-Dimethylphenol	mg/kg	0.206	0.199	62.0	42.2-110	3.26	20	WG701973
2,4-Dinitrophenol	mg/kg	0.190	0.223	57.0	10-105	16.1	36.5	WG701973
2,4-Dinitrotoluene	mg/kg	0.250	0.250	75.0	53-112	0.240	20	WG701973
2,6-Dinitrotoluene	mg/kg	0.247	0.252	74.0	51.6-110	2.22	20	WG701973
2-Chloronaphthalene	mg/kg	0.227	0.229	68.0	47.1-105	0.740	20	WG701973
2-Chlorophenol	mg/kg	0.214	0.218	64.0	40.8-103	1.78	20	WG701973
2-Nitrophenol	mg/kg	0.243	0.260	73.0	44.2-113	6.95	20.9	WG701973
3,3-Dichlorobenzidine	mg/kg	0.182	0.191	54.0	21-101	5.17	22	WG701973
4,6-Dinitro-2-methylphenol	mg/kg	0.242	0.254	72.0	23.1-119	4.81	23.7	WG701973
4-Bromophenyl-phenylether	mg/kg	0.196	0.201	59.0	51.4-110	2.29	20	WG701973
4-Chloro-3-methylphenol	mg/kg	0.243	0.247	73.0	51.1-113	1.59	20	WG701973
4-Chlorophenyl-phenylether	mg/kg	0.213	0.215	64.0	48.1-108	0.680	20	WG701973
4-Nitrophenol	mg/kg	0.266	0.272	80.0	34.8-109	2.54	20	WG701973
Acenaphthene	mg/kg	0.220	0.225	66.0	48.9-107	2.33	20	WG701973
Acenaphthylene	mg/kg	0.234	0.239	70.0	49.2-111	1.97	20	WG701973
Anthracene	mg/kg	0.221	0.221	66.0	52-112	0.0600	20	WG701973
Benzidine	mg/kg	0.0149	0.0144	4.00	0-48	3.47	40	WG701973
Benzo(a)anthracene	mg/kg	0.214	0.218	64.0	52.3-106	1.75	20	WG701973
Benzo(a)pyrene	mg/kg	0.205	0.221	62.0	51.9-106	7.62	20	WG701973
Benzo(b)fluoranthene	mg/kg	0.228	0.249	68.0	51.3-106	8.85	20	WG701973
Benzo(g,h,i)perylene	mg/kg	0.223	0.240	67.0	45.8-108	7.31	20	WG701973
Benzo(k)fluoranthene	mg/kg	0.232	0.232	70.0	52.9-107	0.0700	20	WG701973
Benzylbutyl phthalate	mg/kg	0.261	0.253	78.0	47.5-115	3.15	20	WG701973
Bis(2-chlorethoxy)methane	mg/kg	0.204	0.218	61.0	44.9-108	6.21	20	WG701973
Bis(2-chloroethyl)ether	mg/kg	0.203	0.206	61.0	32.5-112	1.18	26	WG701973
Bis(2-chloroisopropyl)ether	mg/kg	0.211	0.212	63.0	40.4-99	0.220	20.7	WG701973
Bis(2-ethylhexyl)phthalate	mg/kg	0.260	0.254	78.0	48.1-116	2.37	20.5	WG701973
Chrysene	mg/kg	0.219	0.220	66.0	54.4-110	0.460	20	WG701973
Di-n-butyl phthalate	mg/kg	0.223	0.216	67.0	49.7-113	3.36	20	WG701973
Di-n-octyl phthalate	mg/kg	0.274	0.268	82.0	49.6-112	2.22	22	WG701973
Dibenz(a,h)anthracene	mg/kg	0.222	0.236	67.0	45.7-111	6.10	20	WG701973
Diethyl phthalate	mg/kg	0.233	0.232	70.0	52-112	0.450	20	WG701973
Dimethyl phthalate	mg/kg	0.231	0.241	69.0	51.4-108	4.56	20	WG701973
Fluoranthene	mg/kg	0.198	0.197	59.0	53.7-110	0.250	20	WG701973
Fluorene	mg/kg	0.220	0.228	66.0	51.1-109	3.33	20	WG701973
Hexachloro-1,3-butadiene	mg/kg	0.172	0.179	52.0	41.5-112	4.38	20	WG701973
Hexachlorobenzene	mg/kg	0.187	0.193	56.0	43.2-104	3.24	20.1	WG701973
Hexachlorocyclopentadiene	mg/kg	0.138	0.133	41.0	13.5-123	4.01	20.7	WG701973
Hexachloroethane	mg/kg	0.199	0.208	60.0	36.2-103	4.72	22.7	WG701973
Indeno(1,2,3-cd)pyrene	mg/kg	0.222	0.240	66.0	47.5-109	7.91	20	WG701973
Isophorone	mg/kg	0.237	0.239	71.0	28.8-104	1.19	20	WG701973
n-Nitrosodi-n-propylamine	mg/kg	0.221	0.230	66.0	43.3-109	4.00	20	WG701973
n-Nitrosodimethylamine	mg/kg	0.178	0.185	53.0	18.1-122	3.95	23.5	WG701973
n-Nitrosodiphenylamine	mg/kg	0.215	0.219	65.0	48.8-107	1.78	20	WG701973
Naphthalene	mg/kg	0.197	0.202	59.0	43.4-103	2.66	20	WG701973
Nitrobenzene	mg/kg	0.230	0.235	69.0	40.7-109	2.48	21	WG701973
Pentachlorophenol	mg/kg	0.188	0.189	56.0	16.2-102	0.490	22.9	WG701973
Phenanthrene	mg/kg	0.219	0.228	66.0	51.6-107	4.01	20	WG701973
Phenol	mg/kg	0.222	0.230	67.0	41.5-106	3.24	20	WG701973
Pyrene	mg/kg	0.232	0.227	70.0	47.1-108	2.11	20	WG701973
2,4,6-Tribromophenol				57.60	21.6-142			WG701973
2-Fluorobiphenyl				60.50	34.9-129			WG701973
2-Fluorophenol				55.80	21.1-116			WG701973
Nitrobenzene-d5				59.30	21.9-129			WG701973
Phenol-d5				61.70	26.3-121			WG701973

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
p-Terphenyl-d14				53.40	21.5-128			
1,2,4-Trichlorobenzene	mg/kg	0.237	0.241	71.0	39.8-100	1.94	20	WG702393
2,4-Dichlorophenol	mg/kg	0.277	0.274	83.0	46.2-109	0.900	20	WG702393
2,4-Dimethylphenol	mg/kg	0.268	0.276	80.0	42.2-110	2.80	20	WG702393
2-Chlorophenol	mg/kg	0.240	0.267	72.0	40.8-103	10.7	20	WG702393
2-Nitrophenol	mg/kg	0.309	0.302	93.0	44.2-113	2.51	20.9	WG702393
4-Chloro-3-methylphenol	mg/kg	0.290	0.288	87.0	51.1-113	0.440	20	WG702393
Bis(2-chlorethoxy)methane	mg/kg	0.253	0.254	76.0	44.9-108	0.120	20	WG702393
Bis(2-chloroethyl)ether	mg/kg	0.226	0.243	68.0	32.5-112	7.02	26	WG702393
Bis(2-chloroisopropyl)ether	mg/kg	0.229	0.248	69.0	40.4-99	7.66	20.7	WG702393
Hexachloro-1,3-butadiene	mg/kg	0.231	0.241	69.0	41.5-112	4.25	20	WG702393
Hexachloroethane	mg/kg	0.226	0.246	68.0	36.2-103	8.73	22.7	WG702393
Isophorone	mg/kg	0.270	0.272	81.0	28.8-104	0.530	20	WG702393
n-Nitrosodi-n-propylamine	mg/kg	0.237	0.246	71.0	43.3-109	3.69	20	WG702393
n-Nitrosodimethylamine	mg/kg	0.191	0.214	57.0	18.1-122	11.6	23.5	WG702393
Naphthalene	mg/kg	0.251	0.245	75.0	43.4-103	2.56	20	WG702393
Nitrobenzene	mg/kg	0.279	0.279	84.0	40.7-109	0.0500	21	WG702393
Phenol	mg/kg	0.247	0.268	74.0	41.5-106	8.41	20	WG702393
2,4,6-Tribromophenol				90.00	21.6-142			WG702393
2-Fluorobiphenyl				75.30	34.9-129			WG702393
2-Fluorophenol				65.10	21.1-116			WG702393
Nitrobenzene-d5				75.70	21.9-129			WG702393
Phenol-d5				71.30	26.3-121			WG702393
p-Terphenyl-d14				65.40	21.5-128			WG702393

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/kg	0.0307	0.0425	.05	0.0*	80-120	L678121-01	WG701658
1,2,4-Trichlorobenzene	mg/kg	0.182	0.0	.333	55.0	36.5-114	L678057-07	WG701609
2,4,6-Trichlorophenol	mg/kg	0.224	0.0	.333	67.0	33.8-133	L678057-07	WG701609
2,4-Dichlorophenol	mg/kg	0.208	0.0	.333	63.0	34.8-134	L678057-07	WG701609
2,4-Dimethylphenol	mg/kg	0.221	0.00640	.333	64.0	12.3-149	L678057-07	WG701609
2,4-Dinitrophenol	mg/kg	0.213	0.0	.333	64.0	10-121	L678057-07	WG701609
2,4-Dinitrotoluene	mg/kg	0.238	0.0	.333	71.0	27.8-147	L678057-07	WG701609
2,6-Dinitrotoluene	mg/kg	0.244	0.0	.333	73.0	36.5-137	L678057-07	WG701609
2-Chloronaphthalene	mg/kg	0.223	0.0	.333	67.0	37.5-123	L678057-07	WG701609
2-Chlorophenol	mg/kg	0.209	0.0	.333	63.0	33.2-121	L678057-07	WG701609
2-Nitrophenol	mg/kg	0.253	0.0	.333	76.0	29.5-144	L678057-07	WG701609
3,3-Dichlorobenzidine	mg/kg	0.149	0.0	.333	45.0	10-129	L678057-07	WG701609
4,6-Dinitro-2-methylphenol	mg/kg	0.256	0.0	.333	77.0	10-144	L678057-07	WG701609
4-Bromophenyl-phenylether	mg/kg	0.194	0.0	.333	58.0	39-130	L678057-07	WG701609
4-Chloro-3-methylphenol	mg/kg	0.237	0.00724	.333	69.0	27-154	L678057-07	WG701609
4-Chlorophenyl-phenylether	mg/kg	0.203	0.0	.333	61.0	37.9-123	L678057-07	WG701609
4-Nitrophenol	mg/kg	0.269	0.0	.333	81.0	20-133	L678057-07	WG701609
Acenaphthene	mg/kg	0.218	0.0	.333	65.0	32.2-134	L678057-07	WG701609
Acenaphthylene	mg/kg	0.228	0.0	.333	68.0	38.7-129	L678057-07	WG701609
Anthracene	mg/kg	0.228	0.0	.333	68.0	32.3-137	L678057-07	WG701609
Benzidine	mg/kg	0.0	0.0	.333	0.0	0-49.9	L678057-07	WG701609
Benzo(a)anthracene	mg/kg	0.207	0.0	.333	62.0	33.3-124	L678057-07	WG701609
Benzo(a)pyrene	mg/kg	0.197	0.0	.333	59.0	28.2-128	L678057-07	WG701609
Benzo(b)fluoranthene	mg/kg	0.215	0.0	.333	65.0	23.3-133	L678057-07	WG701609
Benzo(g,h,i)perylene	mg/kg	0.206	0.0	.333	62.0	10-127	L678057-07	WG701609
Benzo(k)fluoranthene	mg/kg	0.217	0.0	.333	65.0	31-129	L678057-07	WG701609
Benzylbutyl phthalate	mg/kg	0.237	0.0	.333	71.0	33.4-128	L678057-07	WG701609
Bis(2-chlorethoxy)methane	mg/kg	0.211	0.0	.333	63.0	35-132	L678057-07	WG701609
Bis(2-chloroethyl)ether	mg/kg	0.203	0.0	.333	61.0	28.8-128	L678057-07	WG701609

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Bis(2-chloroisopropyl)ether	mg/kg	0.199	0.0	.333	60.0	31.8-118	L678057-07	WG701609
Bis(2-ethylhexyl)phthalate	mg/kg	0.224	0.00565	.333	66.0	21.8-141	L678057-07	WG701609
Chrysene	mg/kg	0.212	0.0	.333	64.0	36.3-129	L678057-07	WG701609
Di-n-butyl phthalate	mg/kg	0.216	0.0	.333	65.0	32.2-133	L678057-07	WG701609
Di-n-octyl phthalate	mg/kg	0.234	0.0	.333	70.0	28.5-128	L678057-07	WG701609
Dibenz(a,h)anthracene	mg/kg	0.206	0.0	.333	62.0	10.5-128	L678057-07	WG701609
Diethyl phthalate	mg/kg	0.233	0.0	.333	70.0	39.4-136	L678057-07	WG701609
Dimethyl phthalate	mg/kg	0.224	0.0	.333	67.0	35.8-137	L678057-07	WG701609
Fluoranthene	mg/kg	0.201	0.0	.333	60.0	27.9-138	L678057-07	WG701609
Fluorene	mg/kg	0.218	0.0	.333	65.0	34-133	L678057-07	WG701609
Hexachloro-1,3-butadiene	mg/kg	0.160	0.0	.333	48.0	36.5-125	L678057-07	WG701609
Hexachlorobenzene	mg/kg	0.182	0.0	.333	55.0	34.4-116	L678057-07	WG701609
Hexachlorocyclopentadiene	mg/kg	0.135	0.0	.333	40.0	10-124	L678057-07	WG701609
Hexachloroethane	mg/kg	0.192	0.0	.333	58.0	11.3-143	L678057-07	WG701609
Indeno(1,2,3-cd)pyrene	mg/kg	0.206	0.0	.333	62.0	10-128	L678057-07	WG701609
Isophorone	mg/kg	0.232	0.0	.333	70.0	25.7-116	L678057-07	WG701609
n-Nitrosodi-n-propylamine	mg/kg	0.203	0.0	.333	61.0	33-134	L678057-07	WG701609
n-Nitrosodimethylamine	mg/kg	0.174	0.0	.333	52.0	19.2-127	L678057-07	WG701609
n-Nitrosodiphenylamine	mg/kg	0.213	0.0	.333	64.0	26.8-133	L678057-07	WG701609
Naphthalene	mg/kg	0.197	0.0	.333	59.0	36.4-121	L678057-07	WG701609
Nitrobenzene	mg/kg	0.224	0.0	.333	67.0	30.9-134	L678057-07	WG701609
Pentachlorophenol	mg/kg	0.192	0.0	.333	58.0	10-139	L678057-07	WG701609
Phenanthrene	mg/kg	0.222	0.0	.333	67.0	30.8-137	L678057-07	WG701609
Phenol	mg/kg	0.215	0.0	.333	65.0	25.1-130	L678057-07	WG701609
Pyrene	mg/kg	0.228	0.0	.333	68.0	24.1-130	L678057-07	WG701609
2,4,6-Tribromophenol					63.50	21.6-142		WG701609
2-Fluorobiphenyl					61.50	34.9-129		WG701609
2-Fluorophenol					58.70	21.1-116		WG701609
Nitrobenzene-d5					61.60	21.9-129		WG701609
Phenol-d5					62.40	26.3-121		WG701609
p-Terphenyl-d14					53.90	21.5-128		WG701609
TPH (GC/FID) High Fraction	mg/kg	46.1	0.0	60	77.0	50-150	L678121-14	WG701546
o-Terphenyl					77.20	50-150		WG701546
1,1,1,2-Tetrachloroethane	mg/kg	0.100	0.0	.025	80.0	64-128	L678163-01	WG701669
1,1,1-Trichloroethane	mg/kg	0.107	0.0	.025	85.0	58.7-134	L678163-01	WG701669
1,1,2,2-Tetrachloroethane	mg/kg	0.0851	0.0	.025	68.0	56-132	L678163-01	WG701669
1,1,2-Trichloroethane	mg/kg	0.0928	0.0	.025	74.0	66.3-125	L678163-01	WG701669
1,1-Dichloroethane	mg/kg	0.0944	0.0	.025	76.0	58.5-132	L678163-01	WG701669
1,1-Dichloroethene	mg/kg	0.107	0.0	.025	86.0	51.1-140	L678163-01	WG701669
1,1-Dichloropropene	mg/kg	0.0876	0.0	.025	70.0	57.3-136	L678163-01	WG701669
1,2,3-Trichlorobenzene	mg/kg	0.0541	0.0	.025	43.0*	59.1-138	L678163-01	WG701669
1,2,3-Trichloropropane	mg/kg	0.0927	0.0	.025	74.0	61.4-128	L678163-01	WG701669
1,2,4-Trichlorobenzene	mg/kg	0.0559	0.000331	.025	44.0*	63.6-143	L678163-01	WG701669
1,2,4-Trimethylbenzene	mg/kg	0.0814	0.0	.025	65.0	57.4-137	L678163-01	WG701669
1,2-Dibromo-3-Chloropropane	mg/kg	0.0872	0.0	.025	70.0	57.3-136	L678163-01	WG701669
1,2-Dibromoethane	mg/kg	0.0895	0.0	.025	72.0	67.1-125	L678163-01	WG701669
1,2-Dichlorobenzene	mg/kg	0.0732	0.0	.025	58.0*	68.2-123	L678163-01	WG701669
1,2-Dichloroethane	mg/kg	0.0919	0.0	.025	74.0	60-126	L678163-01	WG701669
1,2-Dichloropropane	mg/kg	0.0893	0.0	.025	71.0	64.2-123	L678163-01	WG701669
1,3,5-Trimethylbenzene	mg/kg	0.0852	0.0	.025	68.0	63.6-132	L678163-01	WG701669
1,3-Dichlorobenzene	mg/kg	0.0714	0.0	.025	57.0*	63.1-131	L678163-01	WG701669
1,3-Dichloropropane	mg/kg	0.0888	0.0	.025	71.0	67.9-121	L678163-01	WG701669
1,4-Dichlorobenzene	mg/kg	0.0739	0.0	.025	59.0*	68.6-123	L678163-01	WG701669
2,2-Dichloropropane	mg/kg	0.114	0.0	.025	91.0	50.5-144	L678163-01	WG701669
2-Butanone (MEK)	mg/kg	0.359	0.000965	.125	57.0	22.4-138	L678163-01	WG701669

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
2-Chloroethyl vinyl ether	mg/kg	0.470	0.0	.125	75.0	10-155	L678163-01	WG701669
2-Chlorotoluene	mg/kg	0.0794	0.0	.025	64.0*	63.6-128	L678163-01	WG701669
4-Chlorotoluene	mg/kg	0.0781	0.0	.025	62.0*	65.7-127	L678163-01	WG701669
4-Methyl-2-pentanone (MIBK)	mg/kg	0.460	0.0	.125	74.0	60.8-140	L678163-01	WG701669
Acetone	mg/kg	0.375	0.00393	.125	59.0	10-130	L678163-01	WG701669
Acrylonitrile	mg/kg	0.387	0.0	.125	62.0	49.4-133	L678163-01	WG701669
Benzene	mg/kg	0.0886	0.000307	.025	71.0	54.3-133	L678163-01	WG701669
Bromobenzene	mg/kg	0.0771	0.0	.025	62.0*	63.9-124	L678163-01	WG701669
Bromodichloromethane	mg/kg	0.0940	0.0	.025	75.0	63.9-121	L678163-01	WG701669
Bromoform	mg/kg	0.107	0.0	.025	85.0	59.5-134	L678163-01	WG701669
Bromomethane	mg/kg	0.131	0.0	.025	100.	41.7-155	L678163-01	WG701669
Carbon tetrachloride	mg/kg	0.103	0.0	.025	83.0	55.7-134	L678163-01	WG701669
Chlorobenzene	mg/kg	0.0872	0.0	.025	70.0	67-125	L678163-01	WG701669
Chlorodibromomethane	mg/kg	0.0971	0.0	.025	78.0	64.3-125	L678163-01	WG701669
Chloroethane	mg/kg	0.118	0.0	.025	94.0	51.5-136	L678163-01	WG701669
Chloroform	mg/kg	0.0971	0.0	.025	78.0	63-129	L678163-01	WG701669
Chloromethane	mg/kg	0.0882	0.0	.025	71.0	42.4-135	L678163-01	WG701669
cis-1,2-Dichloroethene	mg/kg	0.0926	0.000687	.025	74.0	59.2-129	L678163-01	WG701669
cis-1,3-Dichloropropene	mg/kg	0.0924	0.0	.025	74.0	66.4-125	L678163-01	WG701669
Di-isopropyl ether	mg/kg	0.0781	0.0	.025	62.0	56.9-136	L678163-01	WG701669
Dibromomethane	mg/kg	0.0884	0.0	.025	71.0	68.2-124	L678163-01	WG701669
Dichlorodifluoromethane	mg/kg	0.119	0.0	.025	95.0	40.6-144	L678163-01	WG701669
Ethylbenzene	mg/kg	0.0905	0.0	.025	72.0	61.4-133	L678163-01	WG701669
Hexachloro-1,3-butadiene	mg/kg	0.0589	0.0	.025	47.0*	55.1-136	L678163-01	WG701669
Isopropylbenzene	mg/kg	0.0964	0.0	.025	77.0	66.8-141	L678163-01	WG701669
Methyl tert-butyl ether	mg/kg	0.0932	0.0	.025	74.0	57.7-134	L678163-01	WG701669
Methylene Chloride	mg/kg	0.0924	0.0	.025	74.0	58.1-122	L678163-01	WG701669
n-Butylbenzene	mg/kg	0.0720	0.0	.025	58.0*	62.7-140	L678163-01	WG701669
n-Propylbenzene	mg/kg	0.0804	0.0	.025	64.0	10-176	L678163-01	WG701669
Naphthalene	mg/kg	0.0581	0.000831	.025	46.0*	58-135	L678163-01	WG701669
p-Isopropyltoluene	mg/kg	0.0799	0.0	.025	64.0	63.2-139	L678163-01	WG701669
sec-Butylbenzene	mg/kg	0.0765	0.0	.025	61.0*	62.2-136	L678163-01	WG701669
Styrene	mg/kg	0.0925	0.000322	.025	74.0	66.8-133	L678163-01	WG701669
tert-Butylbenzene	mg/kg	0.0835	0.0	.025	67.0	63.3-134	L678163-01	WG701669
Tetrachloroethene	mg/kg	0.118	0.0223	.025	76.0	53-139	L678163-01	WG701669
Toluene	mg/kg	0.0893	0.000350	.025	71.0	61.4-130	L678163-01	WG701669
trans-1,2-Dichloroethene	mg/kg	0.0949	0.0	.025	76.0	56.5-129	L678163-01	WG701669
trans-1,3-Dichloropropene	mg/kg	0.0943	0.0	.025	76.0	64.1-128	L678163-01	WG701669
Trichloroethene	mg/kg	0.0966	0.00102	.025	76.0	44.1-149	L678163-01	WG701669
Trichlorofluoromethane	mg/kg	0.127	0.0	.025	100.	49.6-145	L678163-01	WG701669
Vinyl chloride	mg/kg	0.111	0.0	.025	89.0	47.8-137	L678163-01	WG701669
Xylenes, Total	mg/kg	0.272	0.000451	.075	72.0	63.3-131	L678163-01	WG701669
4-Bromofluorobenzene					98.20	71-126		WG701669
Dibromofluoromethane					92.20	78.3-121		WG701669
Toluene-d8					94.40	88.5-111		WG701669
a,a,a-Trifluorotoluene					97.00	85-114		WG701669
Mercury	mg/l	0.00346	0.0000221	.003	110.	80-120	L677771-01	WG701605
TPH (GC/FID) Low Fraction	mg/kg	21.1	0.0932	5.5	76.0	28.5-138	L678212-01	WG701663
a,a,a-Trifluorotoluene(FID)					101.0	59-128		WG701663
Beryllium	mg/l	1.04	-0.000034	1	100.	75-125	L678119-06	WG701682
Cadmium	mg/l	1.04	0.000433	1	100.	75-125	L678119-06	WG701682
Chromium	mg/l	1.04	0.00132	1	100.	75-125	L678119-06	WG701682
Copper	mg/l	1.05	0.000739	1	100.	75-125	L678119-06	WG701682

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Nickel	mg/l	0.938	-0.000697	1	94.0	75-125	L678119-06	WG701682
Selenium	mg/l	1.03	-0.00581	1	100.	75-125	L678119-06	WG701682
Silver	mg/l	0.105	-0.00313	1	11.0*	75-125	L678119-06	WG701682
Zinc	mg/l	1.04	0.00428	1	100.	75-125	L678119-06	WG701682
Antimony	mg/l	0.0522	0.000740	.01	100.	75-125	L678202-14	WG701699
Arsenic	mg/l	0.0576	0.00980	.01	96.0	75-125	L678202-14	WG701699
Lead	mg/l	0.0566	0.00817	.01	97.0	75-125	L678202-14	WG701699
Thallium	mg/l	0.0522	0.00522	.01	94.0	75-125	L678202-14	WG701699
1,1,1,2-Tetrachloroethane	mg/l	0.0246	0.0	.025	99.0	64-128	L678207-01	WG701664
1,1,1-Trichloroethane	mg/l	0.0248	0.0	.025	99.0	58.7-134	L678207-01	WG701664
1,1,2,2-Tetrachloroethane	mg/l	0.0228	0.0	.025	91.0	56-132	L678207-01	WG701664
1,1,2-Trichloroethane	mg/l	0.0239	0.0	.025	96.0	66.3-125	L678207-01	WG701664
1,1,2-Trichlorotrifluoroethane	mg/l	0.0260	0.0	.025	100.	54.8-154	L678207-01	WG701664
1,1-Dichloroethane	mg/l	0.0235	0.0	.025	94.0	58.5-132	L678207-01	WG701664
1,1-Dichloroethene	mg/l	0.0249	0.0	.025	100.	51.1-140	L678207-01	WG701664
1,1-Dichloropropene	mg/l	0.0232	0.0	.025	93.0	57.3-136	L678207-01	WG701664
1,2,3-Trichlorobenzene	mg/l	0.0229	0.0	.025	92.0	59.1-138	L678207-01	WG701664
1,2,3-Trichloropropane	mg/l	0.0229	0.0	.025	92.0	61.4-128	L678207-01	WG701664
1,2,3-Trimethylbenzene	mg/l	0.0204	0.0	.025	82.0	61.3-122	L678207-01	WG701664
1,2,4-Trichlorobenzene	mg/l	0.0244	0.0	.025	98.0	63.6-143	L678207-01	WG701664
1,2,4-Trimethylbenzene	mg/l	0.0243	0.0	.025	97.0	57.4-137	L678207-01	WG701664
1,2-Dibromo-3-Chloropropane	mg/l	0.0215	0.0	.025	86.0	57.3-136	L678207-01	WG701664
1,2-Dibromoethane	mg/l	0.0226	0.0	.025	90.0	67.1-125	L678207-01	WG701664
1,2-Dichlorobenzene	mg/l	0.0243	0.0	.025	97.0	68.2-123	L678207-01	WG701664
1,2-Dichloroethane	mg/l	0.0247	0.0	.025	99.0	60-126	L678207-01	WG701664
1,2-Dichloropropane	mg/l	0.0240	0.0	.025	96.0	64.2-123	L678207-01	WG701664
1,3,5-Trimethylbenzene	mg/l	0.0246	0.0	.025	98.0	63.6-132	L678207-01	WG701664
1,3-Dichlorobenzene	mg/l	0.0259	0.0	.025	100.	63.1-131	L678207-01	WG701664
1,3-Dichloropropane	mg/l	0.0230	0.0	.025	92.0	67.9-121	L678207-01	WG701664
1,4-Dichlorobenzene	mg/l	0.0246	0.0	.025	98.0	68.6-123	L678207-01	WG701664
2,2-Dichloropropane	mg/l	0.0241	0.0	.025	96.0	50.5-144	L678207-01	WG701664
2-Butanone (MEK)	mg/l	0.0778	0.0	.125	62.0	22.4-138	L678207-01	WG701664
2-Chloroethyl vinyl ether	mg/l	0.000624	0.0	.125	0.500*	10-155	L678207-01	WG701664
2-Chlorotoluene	mg/l	0.0248	0.0	.025	99.0	63.6-128	L678207-01	WG701664
4-Chlorotoluene	mg/l	0.0246	0.0	.025	98.0	65.7-127	L678207-01	WG701664
4-Methyl-2-pentanone (MIBK)	mg/l	0.108	0.0	.125	86.0	60.8-140	L678207-01	WG701664
Acetone	mg/l	0.0479	0.00126	.125	37.0	10-130	L678207-01	WG701664
Acrolein	mg/l	0.0941	0.000553	.125	75.0	10-200	L678207-01	WG701664
Acrylonitrile	mg/l	0.119	0.0	.125	95.0	49.4-133	L678207-01	WG701664
Benzene	mg/l	0.0234	0.0	.025	94.0	54.3-133	L678207-01	WG701664
Bromobenzene	mg/l	0.0246	0.0	.025	98.0	63.9-124	L678207-01	WG701664
Bromodichloromethane	mg/l	0.0241	0.0	.025	96.0	63.9-121	L678207-01	WG701664
Bromoform	mg/l	0.0250	0.0	.025	100.	59.5-134	L678207-01	WG701664
Bromomethane	mg/l	0.0313	0.0	.025	120.	41.7-155	L678207-01	WG701664
Carbon tetrachloride	mg/l	0.0249	0.0	.025	100.	55.7-134	L678207-01	WG701664
Chlorobenzene	mg/l	0.0249	0.0	.025	100.	67-125	L678207-01	WG701664
Chlorodibromomethane	mg/l	0.0241	0.0	.025	96.0	64.3-125	L678207-01	WG701664
Chloroethane	mg/l	0.0259	0.0	.025	100.	51.5-136	L678207-01	WG701664
Chloroform	mg/l	0.0241	0.0	.025	96.0	63-129	L678207-01	WG701664
Chloromethane	mg/l	0.0201	0.0	.025	80.0	42.4-135	L678207-01	WG701664
cis-1,2-Dichloroethene	mg/l	0.0242	0.0	.025	97.0	59.2-129	L678207-01	WG701664
cis-1,3-Dichloropropene	mg/l	0.0240	0.0	.025	96.0	66.4-125	L678207-01	WG701664
Di-isopropyl ether	mg/l	0.0231	0.0	.025	93.0	56.9-136	L678207-01	WG701664
Dibromomethane	mg/l	0.0237	0.0	.025	95.0	68.2-124	L678207-01	WG701664
Dichlorodifluoromethane	mg/l	0.0242	0.0	.025	97.0	40.6-144	L678207-01	WG701664

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Daphne Jones, Matt Flinchum
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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Ethylbenzene	mg/l	0.0244	0.0	.025	98.0	61.4-133	L678207-01	WG701664
Hexachloro-1,3-butadiene	mg/l	0.0215	0.0	.025	86.0	55.1-136	L678207-01	WG701664
Isopropylbenzene	mg/l	0.0269	0.0	.025	110.	66.8-141	L678207-01	WG701664
Methyl tert-butyl ether	mg/l	0.0233	0.0	.025	93.0	57.7-134	L678207-01	WG701664
Methylene Chloride	mg/l	0.0227	0.0	.025	91.0	58.1-122	L678207-01	WG701664
n-Butylbenzene	mg/l	0.0240	0.0	.025	96.0	62.7-140	L678207-01	WG701664
n-Propylbenzene	mg/l	0.0251	0.0	.025	100.	65.9-131	L678207-01	WG701664
Naphthalene	mg/l	0.0211	0.0	.025	84.0	58-135	L678207-01	WG701664
p-Isopropyltoluene	mg/l	0.0244	0.0	.025	97.0	63.2-139	L678207-01	WG701664
sec-Butylbenzene	mg/l	0.0242	0.0	.025	97.0	62.2-136	L678207-01	WG701664
Styrene	mg/l	0.0263	0.0	.025	100.	66.8-133	L678207-01	WG701664
tert-Butylbenzene	mg/l	0.0250	0.0	.025	100.	63.3-134	L678207-01	WG701664
Tetrachloroethene	mg/l	0.0251	0.0	.025	100.	53-139	L678207-01	WG701664
Toluene	mg/l	0.0233	0.0	.025	93.0	61.4-130	L678207-01	WG701664
trans-1,2-Dichloroethene	mg/l	0.0226	0.0	.025	90.0	56.5-129	L678207-01	WG701664
trans-1,3-Dichloropropene	mg/l	0.0243	0.0	.025	97.0	64.1-128	L678207-01	WG701664
Trichloroethene	mg/l	0.0238	0.0	.025	95.0	44.1-149	L678207-01	WG701664
Trichlorofluoromethane	mg/l	0.0288	0.0	.025	120.	49.6-145	L678207-01	WG701664
Vinyl chloride	mg/l	0.0239	0.0	.025	96.0	47.8-137	L678207-01	WG701664
Xylenes, Total	mg/l	0.0732	0.0	.075	98.0	63.3-131	L678207-01	WG701664
4-Bromofluorobenzene					102.0	71-126		WG701664
Dibromofluoromethane					106.0	78.3-121		WG701664
Toluene-d8					108.0	88.5-111		WG701664
a,a,a-Trifluorotoluene					105.0	85-114		WG701664
Arsenic	mg/l	0.0584	0.0100	.05	19.0*	75-125	L678202-33	WG701699
Lead	mg/l	0.0516	0.00539	.05	18.0*	75-125	L678202-33	WG701699
Thallium	mg/l	0.0536	0.00451	.05	20.0*	75-125	L678202-33	WG701699
Antimony	mg/kg	31.9	-0.216	50	64.0*	75-125	L678245-02	WG701697
Arsenic	mg/kg	58.7	2.42	50	110.	75-125	L678245-02	WG701697
Beryllium	mg/kg	55.8	0.354	50	110.	75-125	L678245-02	WG701697
Cadmium	mg/kg	57.1	0.256	50	110.	75-125	L678245-02	WG701697
Chromium	mg/kg	60.5	3.94	50	110.	75-125	L678245-02	WG701697
Lead	mg/kg	58.0	3.44	50	110.	75-125	L678245-02	WG701697
Nickel	mg/kg	57.1	2.77	50	110.	75-125	L678245-02	WG701697
Selenium	mg/kg	56.7	0.402	50	110.	75-125	L678245-02	WG701697
Silver	mg/kg	56.9	-0.408	50	110.	75-125	L678245-02	WG701697
Thallium	mg/kg	53.5	-0.980	50	110.	75-125	L678245-02	WG701697
Zinc	mg/kg	74.9	17.6	50	120.	75-125	L678245-02	WG701697
Copper	mg/kg	62.3	6.05	50	110.	75-125	L678245-02	WG701697
1,2,4-Trichlorobenzene	mg/kg	0.279	0.0	.333	84.0	36.5-114	L678943-03	WG702393
2,4-Dichlorophenol	mg/kg	0.329	0.0	.333	99.0	34.8-134	L678943-03	WG702393
2,4-Dimethylphenol	mg/kg	0.306	0.0	.333	92.0	12.3-149	L678943-03	WG702393
2-Chlorophenol	mg/kg	0.271	0.0	.333	81.0	33.2-121	L678943-03	WG702393
2-Nitrophenol	mg/kg	0.288	0.0	.333	86.0	29.5-144	L678943-03	WG702393
4-Chloro-3-methylphenol	mg/kg	0.310	0.0	.333	93.0	27-154	L678943-03	WG702393
Bis(2-chlorethoxy)methane	mg/kg	0.285	0.0	.333	86.0	35-132	L678943-03	WG702393
Bis(2-chloroethyl)ether	mg/kg	0.257	0.0	.333	77.0	28.8-128	L678943-03	WG702393
Bis(2-chloroisopropyl)ether	mg/kg	0.266	0.0	.333	80.0	31.8-118	L678943-03	WG702393
Hexachloro-1,3-butadiene	mg/kg	0.308	0.0	.333	92.0	36.5-125	L678943-03	WG702393
Hexachloroethane	mg/kg	0.275	0.0	.333	82.0	11.3-143	L678943-03	WG702393
Isophorone	mg/kg	0.313	0.0	.333	94.0	25.7-116	L678943-03	WG702393
n-Nitrosodi-n-propylamine	mg/kg	0.302	0.0	.333	91.0	33-134	L678943-03	WG702393
n-Nitrosodimethylamine	mg/kg	0.286	0.0	.333	86.0	19.2-127	L678943-03	WG702393

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Naphthalene	mg/kg	0.266	0.0	.333	80.0	36.4-121	L678943-03	WG702393
Nitrobenzene	mg/kg	0.299	0.0	.333	90.0	30.9-134	L678943-03	WG702393
Phenol	mg/kg	0.304	0.0	.333	91.0	25.1-130	L678943-03	WG702393
2,4,6-Tribromophenol					102.0	21.6-142		WG702393
2-Fluorobiphenyl					85.40	34.9-129		WG702393
2-Fluorophenol					80.20	21.1-116		WG702393
Nitrobenzene-d5					83.00	21.9-129		WG702393
Phenol-d5					80.70	26.3-121		WG702393
p-Terphenyl-d14					78.80	21.5-128		WG702393

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/kg	0.0335	0.0307	0*	80-120	9.00	20	L678121-01	WG701658
1,2,4-Trichlorobenzene	mg/kg	0.178	0.182	53.4	36.5-114	2.36	28.4	L678057-07	WG701609
2,4,6-Trichlorophenol	mg/kg	0.229	0.224	68.8	33.8-133	2.38	28.1	L678057-07	WG701609
2,4-Dichlorophenol	mg/kg	0.213	0.208	63.9	34.8-134	2.14	27.3	L678057-07	WG701609
2,4-Dimethylphenol	mg/kg	0.218	0.221	63.5	12.3-149	1.37	32.3	L678057-07	WG701609
2,4-Dinitrophenol	mg/kg	0.229	0.213	68.6	10-121	6.82	39.4	L678057-07	WG701609
2,4-Dinitrotoluene	mg/kg	0.251	0.238	75.5	27.8-147	5.72	29.7	L678057-07	WG701609
2,6-Dinitrotoluene	mg/kg	0.248	0.244	74.5	36.5-137	1.44	29.7	L678057-07	WG701609
2-Chloronaphthalene	mg/kg	0.230	0.223	69.2	37.5-123	3.12	26.5	L678057-07	WG701609
2-Chlorophenol	mg/kg	0.217	0.209	65.1	33.2-121	3.59	29.3	L678057-07	WG701609
2-Nitrophenol	mg/kg	0.253	0.253	75.8	29.5-144	0.120	29.9	L678057-07	WG701609
3,3-Dichlorobenzidine	mg/kg	0.158	0.149	47.3	10-129	5.48	40	L678057-07	WG701609
4,6-Dinitro-2-methylphenol	mg/kg	0.271	0.256	81.2	10-144	5.70	32.7	L678057-07	WG701609
4-Bromophenyl-phenylether	mg/kg	0.199	0.194	59.8	39-130	2.91	26	L678057-07	WG701609
4-Chloro-3-methylphenol	mg/kg	0.244	0.237	71.0	27-154	2.67	26.6	L678057-07	WG701609
4-Chlorophenyl-phenylether	mg/kg	0.209	0.203	62.7	37.9-123	2.86	25.9	L678057-07	WG701609
4-Nitrophenol	mg/kg	0.280	0.269	84.1	20-133	4.03	30.2	L678057-07	WG701609
Acenaphthene	mg/kg	0.225	0.218	67.6	32.2-134	3.32	27.3	L678057-07	WG701609
Acenaphthylene	mg/kg	0.234	0.228	70.4	38.7-129	2.63	25.9	L678057-07	WG701609
Anthracene	mg/kg	0.224	0.228	67.2	32.3-137	1.82	28.4	L678057-07	WG701609
Benzidine	mg/kg	0.0	0.0	0.00	0-49.9	0.0	40	L678057-07	WG701609
Benzo(a)anthracene	mg/kg	0.206	0.207	61.7	33.3-124	0.760	29	L678057-07	WG701609
Benzo(a)pyrene	mg/kg	0.195	0.197	58.5	28.2-128	0.870	28.4	L678057-07	WG701609
Benzo(b)fluoranthene	mg/kg	0.212	0.215	63.6	23.3-133	1.54	30.3	L678057-07	WG701609
Benzo(g,h,i)perylene	mg/kg	0.203	0.206	61.0	10-127	1.43	31.9	L678057-07	WG701609
Benzo(k)fluoranthene	mg/kg	0.214	0.217	64.2	31-129	1.34	26.7	L678057-07	WG701609
Benzylbutyl phthalate	mg/kg	0.239	0.237	71.7	33.4-128	0.660	28.5	L678057-07	WG701609
Bis(2-chlorethoxy)methane	mg/kg	0.214	0.211	64.3	35-132	1.48	26.1	L678057-07	WG701609
Bis(2-chloroethyl)ether	mg/kg	0.203	0.203	61.0	28.8-128	0.200	33.6	L678057-07	WG701609
Bis(2-chloroisopropyl)ether	mg/kg	0.212	0.199	63.5	31.8-118	5.97	31.7	L678057-07	WG701609
Bis(2-ethylhexyl)phthalate	mg/kg	0.218	0.224	63.8	21.8-141	2.48	35.2	L678057-07	WG701609
Chrysene	mg/kg	0.212	0.212	63.6	36.3-129	0.0500	28	L678057-07	WG701609
Di-n-butyl phthalate	mg/kg	0.213	0.216	63.9	32.2-133	1.36	25.9	L678057-07	WG701609
Di-n-octyl phthalate	mg/kg	0.229	0.234	68.7	28.5-128	2.26	32.5	L678057-07	WG701609
Dibenz(a,h)anthracene	mg/kg	0.202	0.206	60.6	10.5-128	2.10	29.5	L678057-07	WG701609
Diethyl phthalate	mg/kg	0.238	0.233	71.5	39.4-136	2.36	25.5	L678057-07	WG701609
Dimethyl phthalate	mg/kg	0.233	0.224	69.9	35.8-137	3.65	25.4	L678057-07	WG701609
Fluoranthene	mg/kg	0.204	0.201	61.4	27.9-138	1.50	26.9	L678057-07	WG701609
Fluorene	mg/kg	0.221	0.218	66.5	34-133	1.61	27.1	L678057-07	WG701609
Hexachloro-1,3-butadiene	mg/kg	0.164	0.160	49.3	36.5-125	2.53	29.7	L678057-07	WG701609
Hexachlorobenzene	mg/kg	0.182	0.182	54.7	34.4-116	0.0600	25.4	L678057-07	WG701609
Hexachlorocyclopentadiene	mg/kg	0.142	0.135	42.6	10-124	5.15	37.5	L678057-07	WG701609
Hexachloroethane	mg/kg	0.203	0.192	60.9	11.3-143	5.49	31.9	L678057-07	WG701609
Indeno(1,2,3-cd)pyrene	mg/kg	0.202	0.206	60.8	10-128	1.59	31.5	L678057-07	WG701609

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January 22, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Isophorone	mg/kg	0.232	0.232	69.7	25.7-116	0.110	27.7	L678057-07	WG701609
n-Nitrosodi-n-propylamine	mg/kg	0.218	0.203	65.3	33-134	6.75	28.2	L678057-07	WG701609
n-Nitrosodimethylamine	mg/kg	0.187	0.174	56.1	19.2-127	7.23	32	L678057-07	WG701609
n-Nitrosodiphenylamine	mg/kg	0.221	0.213	66.4	26.8-133	3.80	25.9	L678057-07	WG701609
Naphthalene	mg/kg	0.199	0.197	59.7	36.4-121	0.690	27.2	L678057-07	WG701609
Nitrobenzene	mg/kg	0.233	0.224	70.0	30.9-134	4.23	27.8	L678057-07	WG701609
Pentachlorophenol	mg/kg	0.200	0.192	60.2	10-139	4.12	28.3	L678057-07	WG701609
Phenanthrene	mg/kg	0.233	0.222	70.1	30.8-137	5.13	26.5	L678057-07	WG701609
Phenol	mg/kg	0.222	0.215	66.7	25.1-130	3.12	29.6	L678057-07	WG701609
Pyrene	mg/kg	0.233	0.228	69.9	24.1-130	2.06	29.9	L678057-07	WG701609
2,4,6-Tribromophenol				65.70	21.6-142				WG701609
2-Fluorobiphenyl				63.50	34.9-129				WG701609
2-Fluorophenol				63.10	21.1-116				WG701609
Nitrobenzene-d5				64.40	21.9-129				WG701609
Phenol-d5				64.40	26.3-121				WG701609
p-Terphenyl-d14				55.90	21.5-128				WG701609
TPH (GC/FID) High Fraction	mg/kg	47.0	46.1	78.3	50-150	1.97	20	L678121-14	WG701546
o-Terphenyl				76.30	50-150				WG701546
1,1,1,2-Tetrachloroethane	mg/kg	0.0915	0.100	73.2	64-128	8.90	20	L678163-01	WG701669
1,1,1-Trichloroethane	mg/kg	0.105	0.107	83.7	58.7-134	1.93	20	L678163-01	WG701669
1,1,2,2-Tetrachloroethane	mg/kg	0.0756	0.0851	60.4	56-132	11.9	22.2	L678163-01	WG701669
1,1,2-Trichloroethane	mg/kg	0.0819	0.0928	65.5*	66.3-125	12.5	20	L678163-01	WG701669
1,1-Dichloroethane	mg/kg	0.0907	0.0944	72.6	58.5-132	3.96	20	L678163-01	WG701669
1,1-Dichloroethene	mg/kg	0.101	0.107	81.0	51.1-140	5.82	20.2	L678163-01	WG701669
1,1-Dichloropropene	mg/kg	0.0870	0.0876	69.6	57.3-136	0.670	20	L678163-01	WG701669
1,2,3-Trichlorobenzene	mg/kg	0.0485	0.0541	38.8*	59.1-138	10.9	23.7	L678163-01	WG701669
1,2,3-Trichloropropane	mg/kg	0.0787	0.0927	62.9	61.4-128	16.4	22.4	L678163-01	WG701669
1,2,4-Trichlorobenzene	mg/kg	0.0500	0.0559	39.8*	63.6-143	11.1	21.9	L678163-01	WG701669
1,2,4-Trimethylbenzene	mg/kg	0.0732	0.0814	58.6	57.4-137	10.6	20	L678163-01	WG701669
1,2-Dibromo-3-Chloropropane	mg/kg	0.0728	0.0872	58.2	57.3-136	18.0	27	L678163-01	WG701669
1,2-Dibromoethane	mg/kg	0.0821	0.0895	65.7*	67.1-125	8.55	20	L678163-01	WG701669
1,2-Dichlorobenzene	mg/kg	0.0656	0.0732	52.4*	68.2-123	11.0	20	L678163-01	WG701669
1,2-Dichloroethane	mg/kg	0.0864	0.0919	69.1	60-126	6.19	20	L678163-01	WG701669
1,2-Dichloropropane	mg/kg	0.0806	0.0893	64.5	64.2-123	10.3	20	L678163-01	WG701669
1,3,5-Trimethylbenzene	mg/kg	0.0786	0.0852	62.8*	63.6-132	8.07	20.5	L678163-01	WG701669
1,3-Dichlorobenzene	mg/kg	0.0651	0.0714	52.1*	63.1-131	9.17	20	L678163-01	WG701669
1,3-Dichloropropane	mg/kg	0.0812	0.0888	65.0*	67.9-121	8.89	20	L678163-01	WG701669
1,4-Dichlorobenzene	mg/kg	0.0653	0.0739	52.2*	68.6-123	12.4	20	L678163-01	WG701669
2,2-Dichloropropane	mg/kg	0.108	0.114	86.5	50.5-144	5.46	21.9	L678163-01	WG701669
2-Butanone (MEK)	mg/kg	0.359	0.359	57.2	22.4-138	0.0300	27	L678163-01	WG701669
2-Chloroethyl vinyl ether	mg/kg	0.444	0.470	71.0	10-155	5.68	40	L678163-01	WG701669
2-Chlorotoluene	mg/kg	0.0717	0.0794	57.4*	63.6-128	10.2	20	L678163-01	WG701669
4-Chlorotoluene	mg/kg	0.0703	0.0781	56.2*	65.7-127	10.5	20	L678163-01	WG701669
4-Methyl-2-pentanone (MIBK)	mg/kg	0.437	0.460	70.0	60.8-140	5.15	25.1	L678163-01	WG701669
Acetone	mg/kg	0.372	0.375	58.9	10-130	0.780	27.9	L678163-01	WG701669
Acrylonitrile	mg/kg	0.379	0.387	60.6	49.4-133	2.23	25.3	L678163-01	WG701669
Benzene	mg/kg	0.0840	0.0886	66.9	54.3-133	5.35	20	L678163-01	WG701669
Bromobenzene	mg/kg	0.0665	0.0771	53.2*	63.9-124	14.8	20	L678163-01	WG701669
Bromodichloromethane	mg/kg	0.0884	0.0940	70.7	63.9-121	6.16	20	L678163-01	WG701669
Bromoform	mg/kg	0.0953	0.107	76.2	59.5-134	11.3	20.8	L678163-01	WG701669
Bromomethane	mg/kg	0.129	0.131	103.	41.7-155	2.05	20.5	L678163-01	WG701669
Carbon tetrachloride	mg/kg	0.100	0.103	80.2	55.7-134	3.04	20.3	L678163-01	WG701669
Chlorobenzene	mg/kg	0.0786	0.0872	62.9*	67-125	10.3	20	L678163-01	WG701669
Chlorodibromomethane	mg/kg	0.0867	0.0971	69.4	64.3-125	11.3	20	L678163-01	WG701669
Chloroethane	mg/kg	0.115	0.118	92.2	51.5-136	2.18	20.8	L678163-01	WG701669

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Quality Assurance Report
Level II

L678121

January 22, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Chloroform	mg/kg	0.0923	0.0971	73.9	63-129	4.98	20	L678163-01	WG701669
Chloromethane	mg/kg	0.0853	0.0882	68.3	42.4-135	3.34	20	L678163-01	WG701669
cis-1,2-Dichloroethene	mg/kg	0.0884	0.0926	70.1	59.2-129	4.66	20	L678163-01	WG701669
cis-1,3-Dichloropropene	mg/kg	0.0846	0.0924	67.7	66.4-125	8.77	20	L678163-01	WG701669
Di-isopropyl ether	mg/kg	0.0746	0.0781	59.7	56.9-136	4.62	20	L678163-01	WG701669
Dibromomethane	mg/kg	0.0882	0.0884	70.5	68.2-124	0.320	20	L678163-01	WG701669
Dichlorodifluoromethane	mg/kg	0.117	0.119	93.3	40.6-144	1.72	20.2	L678163-01	WG701669
Ethylbenzene	mg/kg	0.0840	0.0905	67.2	61.4-133	7.41	20	L678163-01	WG701669
Hexachloro-1,3-butadiene	mg/kg	0.0641	0.0589	51.3*	55.1-136	8.44	23.6	L678163-01	WG701669
Isopropylbenzene	mg/kg	0.0907	0.0964	72.5	66.8-141	6.15	20	L678163-01	WG701669
Methyl tert-butyl ether	mg/kg	0.0911	0.0932	72.9	57.7-134	2.24	20	L678163-01	WG701669
Methylene Chloride	mg/kg	0.0930	0.0924	74.4	58.1-122	0.640	20	L678163-01	WG701669
n-Butylbenzene	mg/kg	0.0683	0.0720	54.6*	62.7-140	5.18	20	L678163-01	WG701669
n-Propylbenzene	mg/kg	0.0750	0.0804	60.0	10-176	7.01	26.6	L678163-01	WG701669
Naphthalene	mg/kg	0.0516	0.0581	40.6*	58-135	11.8	25.5	L678163-01	WG701669
p-Isopropyltoluene	mg/kg	0.0743	0.0799	59.4*	63.2-139	7.27	20.4	L678163-01	WG701669
sec-Butylbenzene	mg/kg	0.0720	0.0765	57.6*	62.2-136	5.99	20.3	L678163-01	WG701669
Styrene	mg/kg	0.0792	0.0925	63.1*	66.8-133	15.5	20	L678163-01	WG701669
tert-Butylbenzene	mg/kg	0.0774	0.0835	61.9*	63.3-134	7.62	20.3	L678163-01	WG701669
Tetrachloroethene	mg/kg	0.105	0.118	65.8	53-139	11.7	20	L678163-01	WG701669
Toluene	mg/kg	0.0844	0.0893	67.2	61.4-130	5.58	20	L678163-01	WG701669
trans-1,2-Dichloroethene	mg/kg	0.0889	0.0949	71.1	56.5-129	6.61	20	L678163-01	WG701669
trans-1,3-Dichloropropene	mg/kg	0.0847	0.0943	67.8	64.1-128	10.8	20	L678163-01	WG701669
Trichloroethene	mg/kg	0.0893	0.0966	70.7	44.1-149	7.77	20	L678163-01	WG701669
Trichlorofluoromethane	mg/kg	0.126	0.127	101.	49.6-145	1.13	21.2	L678163-01	WG701669
Vinyl chloride	mg/kg	0.105	0.111	83.9	47.8-137	5.51	20	L678163-01	WG701669
Xylenes, Total	mg/kg	0.245	0.272	65.2	63.3-131	10.6	20	L678163-01	WG701669
4-Bromofluorobenzene				96.90	71-126				WG701669
Dibromofluoromethane				95.50	78.3-121				WG701669
Toluene-d8				97.70	88.5-111				WG701669
a,a,a-Trifluorotoluene				97.40	85-114				WG701669
Mercury	mg/l	0.00341	0.00346	113.	80-120	1.00	20	L677771-01	WG701605
TPH (GC/FID) Low Fraction	mg/kg	19.9	21.1	72.2	28.5-138	5.40	23.6	L678212-01	WG701663
a,a,a-Trifluorotoluene(FID)				99.10	59-128				WG701663
Beryllium	mg/l	0.998	1.04	99.8	75-125	4.00	20	L678119-06	WG701682
Cadmium	mg/l	1.01	1.04	101.	75-125	2.00	20	L678119-06	WG701682
Chromium	mg/l	1.02	1.04	102.	75-125	2.00	20	L678119-06	WG701682
Copper	mg/l	1.03	1.05	103.	75-125	3.00	20	L678119-06	WG701682
Nickel	mg/l	0.908	0.938	90.9	75-125	3.00	20	L678119-06	WG701682
Selenium	mg/l	0.994	1.03	100.	75-125	4.00	20	L678119-06	WG701682
Silver	mg/l	0.0994	0.105	10.2*	75-125	6.00	20	L678119-06	WG701682
Zinc	mg/l	1.01	1.04	101.	75-125	2.00	20	L678119-06	WG701682
Antimony	mg/l	0.0518	0.0522	102.	75-125	0.769	20	L678202-14	WG701699
Arsenic	mg/l	0.0603	0.0576	101.	75-125	4.58	20	L678202-14	WG701699
Lead	mg/l	0.0562	0.0566	96.1	75-125	0.709	20	L678202-14	WG701699
Thallium	mg/l	0.0522	0.0522	94.0	75-125	0.0	20	L678202-14	WG701699
1,1,1,2-Tetrachloroethane	mg/l	0.0247	0.0246	98.9	64-128	0.270	20	L678207-01	WG701664
1,1,1-Trichloroethane	mg/l	0.0236	0.0248	94.4	58.7-134	4.82	20	L678207-01	WG701664
1,1,2,2-Tetrachloroethane	mg/l	0.0241	0.0228	96.4	56-132	5.48	22.2	L678207-01	WG701664

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Level II

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January 22, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1,2-Trichloroethane	mg/l	0.0259	0.0239	104.	66.3-125	8.05	20	L678207-01	WG701664
1,1,2-Trichlorotrifluoroethane	mg/l	0.0224	0.0260	89.4	54.8-154	15.0	22.5	L678207-01	WG701664
1,1-Dichloroethane	mg/l	0.0226	0.0235	90.4	58.5-132	3.77	20	L678207-01	WG701664
1,1-Dichloroethene	mg/l	0.0229	0.0249	91.5	51.1-140	8.65	20.2	L678207-01	WG701664
1,1-Dichloropropene	mg/l	0.0228	0.0232	91.4	57.3-136	1.34	20	L678207-01	WG701664
1,2,3-Trichlorobenzene	mg/l	0.0237	0.0229	94.6	59.1-138	3.16	23.7	L678207-01	WG701664
1,2,3-Trichloropropane	mg/l	0.0241	0.0229	96.5	61.4-128	5.27	22.4	L678207-01	WG701664
1,2,3-Trimethylbenzene	mg/l	0.0208	0.0204	83.3	61.3-122	1.93	20	L678207-01	WG701664
1,2,4-Trichlorobenzene	mg/l	0.0245	0.0244	97.9	63.6-143	0.380	21.9	L678207-01	WG701664
1,2,4-Trimethylbenzene	mg/l	0.0245	0.0243	98.0	57.4-137	0.920	20	L678207-01	WG701664
1,2-Dibromo-3-Chloropropane	mg/l	0.0230	0.0215	92.1	57.3-136	7.02	27	L678207-01	WG701664
1,2-Dibromoethane	mg/l	0.0242	0.0226	96.8	67.1-125	6.76	20	L678207-01	WG701664
1,2-Dichlorobenzene	mg/l	0.0247	0.0243	98.9	68.2-123	1.70	20	L678207-01	WG701664
1,2-Dichloroethane	mg/l	0.0242	0.0247	96.8	60-126	1.92	20	L678207-01	WG701664
1,2-Dichloropropane	mg/l	0.0247	0.0240	98.8	64.2-123	2.72	20	L678207-01	WG701664
1,3,5-Trimethylbenzene	mg/l	0.0248	0.0246	99.2	63.6-132	0.850	20.5	L678207-01	WG701664
1,3-Dichlorobenzene	mg/l	0.0257	0.0259	103.	63.1-131	0.570	20	L678207-01	WG701664
1,3-Dichloropropane	mg/l	0.0248	0.0230	99.4	67.9-121	7.87	20	L678207-01	WG701664
1,4-Dichlorobenzene	mg/l	0.0251	0.0246	100.	68.6-123	1.69	20	L678207-01	WG701664
2,2-Dichloropropane	mg/l	0.0230	0.0241	92.1	50.5-144	4.57	21.9	L678207-01	WG701664
2-Butanone (MEK)	mg/l	0.0869	0.0778	69.5	22.4-138	11.1	27	L678207-01	WG701664
2-Chloroethyl vinyl ether	mg/l	0.000691	0.000624	0.553*	10-155	10.2	20	L678207-01	WG701664
2-Chlorotoluene	mg/l	0.0243	0.0248	97.3	63.6-128	1.76	20	L678207-01	WG701664
4-Chlorotoluene	mg/l	0.0251	0.0246	100.	65.7-127	1.91	20	L678207-01	WG701664
4-Methyl-2-pentanone (MIBK)	mg/l	0.122	0.108	97.3	60.8-140	11.7	25.1	L678207-01	WG701664
Acetone	mg/l	0.0525	0.0479	41.0	10-130	9.14	27.9	L678207-01	WG701664
Acrolein	mg/l	0.0948	0.0941	75.4	10-200	0.760	27.7	L678207-01	WG701664
Acrylonitrile	mg/l	0.121	0.119	96.6	49.4-133	1.36	25.3	L678207-01	WG701664
Benzene	mg/l	0.0232	0.0234	92.8	54.3-133	0.800	20	L678207-01	WG701664
Bromobenzene	mg/l	0.0245	0.0246	98.1	63.9-124	0.280	20	L678207-01	WG701664
Bromodichloromethane	mg/l	0.0244	0.0241	97.7	63.9-121	1.21	20	L678207-01	WG701664
Bromoform	mg/l	0.0278	0.0250	111.	59.5-134	10.6	20.5	L678207-01	WG701664
Bromomethane	mg/l	0.0277	0.0313	111.	41.7-155	12.4	21.9	L678207-01	WG701664
Carbon tetrachloride	mg/l	0.0213	0.0249	85.2	55.7-134	15.4	20	L678207-01	WG701664
Chlorobenzene	mg/l	0.0257	0.0249	103.	67-125	3.07	20	L678207-01	WG701664
Chlorodibromomethane	mg/l	0.0260	0.0241	104.	64.3-125	7.80	20.8	L678207-01	WG701664
Chloroethane	mg/l	0.0254	0.0259	102.	51.5-136	1.93	40	L678207-01	WG701664
Chloroform	mg/l	0.0232	0.0241	93.0	63-129	3.58	20	L678207-01	WG701664
Chloromethane	mg/l	0.0191	0.0201	76.5	42.4-135	4.87	20	L678207-01	WG701664
cis-1,2-Dichloroethene	mg/l	0.0234	0.0242	93.7	59.2-129	3.32	20	L678207-01	WG701664
cis-1,3-Dichloropropene	mg/l	0.0252	0.0240	101.	66.4-125	5.08	20	L678207-01	WG701664
Di-isopropyl ether	mg/l	0.0226	0.0231	90.6	56.9-136	2.19	20	L678207-01	WG701664
Dibromomethane	mg/l	0.0242	0.0237	97.0	68.2-124	2.11	20	L678207-01	WG701664
Dichlorodifluoromethane	mg/l	0.0234	0.0242	93.5	40.6-144	3.30	20.2	L678207-01	WG701664
Ethylbenzene	mg/l	0.0251	0.0244	100.	61.4-133	2.58	20	L678207-01	WG701664
Hexachloro-1,3-butadiene	mg/l	0.0222	0.0215	88.7	55.1-136	3.04	23.6	L678207-01	WG701664
Isopropylbenzene	mg/l	0.0270	0.0269	108.	66.8-141	0.500	20	L678207-01	WG701664
Methyl tert-butyl ether	mg/l	0.0232	0.0233	92.6	57.7-134	0.610	20	L678207-01	WG701664
Methylene Chloride	mg/l	0.0215	0.0227	85.8	58.1-122	5.56	20	L678207-01	WG701664
n-Butylbenzene	mg/l	0.0238	0.0240	95.3	62.7-140	0.670	20.3	L678207-01	WG701664
n-Propylbenzene	mg/l	0.0254	0.0251	101.	65.9-131	0.910	20	L678207-01	WG701664
Naphthalene	mg/l	0.0225	0.0211	90.0	58-135	6.65	25.5	L678207-01	WG701664
p-Isopropyltoluene	mg/l	0.0249	0.0244	99.4	63.2-139	2.06	20.4	L678207-01	WG701664
sec-Butylbenzene	mg/l	0.0247	0.0242	98.9	62.2-136	2.03	20.3	L678207-01	WG701664
Styrene	mg/l	0.0270	0.0263	108.	66.8-133	2.87	20	L678207-01	WG701664
tert-Butylbenzene	mg/l	0.0254	0.0250	102.	63.3-134	1.54	21	L678207-01	WG701664
Tetrachloroethene	mg/l	0.0251	0.0251	100.	53-139	0.210	20	L678207-01	WG701664
Toluene	mg/l	0.0243	0.0233	97.2	61.4-130	4.12	20	L678207-01	WG701664
trans-1,2-Dichloroethene	mg/l	0.0219	0.0226	87.4	56.5-129	3.26	20	L678207-01	WG701664

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Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
trans-1,3-Dichloropropene	mg/l	0.0260	0.0243	104.	64.1-128	6.79	20	L678207-01	WG701664
Trichloroethene	mg/l	0.0238	0.0238	95.4	44.1-149	0.180	20	L678207-01	WG701664
Trichlorofluoromethane	mg/l	0.0272	0.0288	109.	49.6-145	5.91	21.2	L678207-01	WG701664
Vinyl chloride	mg/l	0.0233	0.0239	93.2	47.8-137	2.66	20	L678207-01	WG701664
Xylenes, Total	mg/l	0.0742	0.0732	99.0	63.3-131	1.38	20	L678207-01	WG701664
4-Bromofluorobenzene				102.0	71-126				WG701664
Dibromofluoromethane				101.0	78.3-121				WG701664
Toluene-d8				109.0	88.5-111				WG701664
a,a,a-Trifluorotoluene				106.0	85-114				WG701664
Arsenic	mg/l	0.0551	0.0584	18.0*	75-125	5.81	20	L678202-33	WG701699
Lead	mg/l	0.0499	0.0516	17.8*	75-125	3.35	20	L678202-33	WG701699
Thallium	mg/l	0.0522	0.0536	19.1*	75-125	2.65	20	L678202-33	WG701699
Antimony	mg/kg	32.0	31.9	64.4*	75-125	0.0	20	L678245-02	WG701697
Arsenic	mg/kg	59.2	58.7	113.	75-125	1.00	20	L678245-02	WG701697
Beryllium	mg/kg	56.3	55.8	112.	75-125	1.00	20	L678245-02	WG701697
Cadmium	mg/kg	57.9	57.1	115.	75-125	1.00	20	L678245-02	WG701697
Chromium	mg/kg	60.1	60.5	112.	75-125	1.00	20	L678245-02	WG701697
Lead	mg/kg	59.4	58.0	112.	75-125	2.00	20	L678245-02	WG701697
Nickel	mg/kg	56.9	57.1	108.	75-125	0.0	20	L678245-02	WG701697
Selenium	mg/kg	58.2	56.7	116.	75-125	3.00	20	L678245-02	WG701697
Silver	mg/kg	56.6	56.9	114.	75-125	1.00	20	L678245-02	WG701697
Thallium	mg/kg	54.2	53.5	110.	75-125	1.00	20	L678245-02	WG701697
Zinc	mg/kg	71.6	74.9	108.	75-125	4.00	20	L678245-02	WG701697
Copper	mg/kg	60.9	62.3	110.	75-125	2.00	20	L678245-02	WG701697
1,2,4-Trichlorobenzene	mg/kg	0.293	0.279	87.9	36.5-114	4.89	28.4	L678943-03	WG702393
2,4-Dichlorophenol	mg/kg	0.333	0.329	100.	34.8-134	1.16	27.3	L678943-03	WG702393
2,4-Dimethylphenol	mg/kg	0.316	0.306	94.9	12.3-149	3.41	32.3	L678943-03	WG702393
2-Chlorophenol	mg/kg	0.279	0.271	83.9	33.2-121	3.12	29.3	L678943-03	WG702393
2-Nitrophenol	mg/kg	0.297	0.288	89.3	29.5-144	3.35	29.9	L678943-03	WG702393
4-Chloro-3-methylphenol	mg/kg	0.319	0.310	95.6	27-154	2.62	26.6	L678943-03	WG702393
Bis(2-chlorethoxy)methane	mg/kg	0.291	0.285	87.3	35-132	1.92	26.1	L678943-03	WG702393
Bis(2-chloroethyl)ether	mg/kg	0.264	0.257	79.3	28.8-128	2.65	33.6	L678943-03	WG702393
Bis(2-chloroisopropyl)ether	mg/kg	0.277	0.266	83.3	31.8-118	4.19	31.7	L678943-03	WG702393
Hexachloro-1,3-butadiene	mg/kg	0.320	0.308	96.0	36.5-125	3.81	29.7	L678943-03	WG702393
Hexachloroethane	mg/kg	0.277	0.275	83.2	11.3-143	0.910	31.9	L678943-03	WG702393
Isophorone	mg/kg	0.323	0.313	96.9	25.7-116	2.95	27.7	L678943-03	WG702393
n-Nitrosodi-n-propylamine	mg/kg	0.310	0.302	93.2	33-134	2.81	28.2	L678943-03	WG702393
n-Nitrosodimethylamine	mg/kg	0.306	0.286	92.0	19.2-127	6.90	32	L678943-03	WG702393
Naphthalene	mg/kg	0.274	0.266	82.1	36.4-121	2.86	27.2	L678943-03	WG702393
Nitrobenzene	mg/kg	0.309	0.299	92.8	30.9-134	3.44	27.8	L678943-03	WG702393
Phenol	mg/kg	0.314	0.304	94.2	25.1-130	3.24	29.6	L678943-03	WG702393
2,4,6-Tribromophenol				94.90	21.6-142				WG702393
2-Fluorobiphenyl				87.10	34.9-129				WG702393
2-Fluorophenol				83.80	21.1-116				WG702393
Nitrobenzene-d5				87.30	21.9-129				WG702393
Phenol-d5				83.40	26.3-121				WG702393
p-Terphenyl-d14				75.10	21.5-128				WG702393

Post Spike

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678121

January 22, 2014

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678121

January 22, 2014

WG701619: R2876665: L678121-01 02 03 04 05 06 07 08
WG701658: R2876801: L678121-01 02 03 04
WG701609: R2876842: L678121-01
WG701546: R2876887: L678121-05 06 07 08 10 11 12 13 14
WG701669: R2876961: L678121-01 02 03 04
WG701605: R2876963: L678121-09
WG701663: R2876983: L678121-05 06 07 08 10 11 12 13 14
WG701682: R2876990 R2877221: L678121-09
WG701688: R2877024: L678121-14
WG701687: R2877026: L678121-10 11 13
WG701699: R2877237: L678121-09
WG701664: R2877348: L678121-09 15
WG701614: R2877620 R2878363: L678121-09
WG701973: R2877683: L678121-02 03 04
WG701697: R2878110 R2878115 R2878340: L678121-01 02 03 04
WG702393: R2878289 R2878422: L678121-02 04

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678121

January 22, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project # 201336

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID # Dorothea Dix

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ... 200%
___ Next Day ... 100%
___ Two Day ... 50%
___ Three Day ... 25%

Date Results Needed: 5 day max

Email? ✓ No ___ Yes
Any FAX? ✓ No ___ Yes

Chain of Custody Page ___ of ___

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YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L678121
Table # H074
Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH	Rem./Contaminant	Sample # (lab only)
11-SB-A (2')	G	SS	2'	1/14/14	0910	96	X	X	X								01
11-SB-B (2')	↓	↓	2'	↓	0935	6	↓	↓	↓								02
11-SB-C (2')	↓	↓	2'	↓	1015	6	↓	↓	↓								03
DUP 1 (2')	↓	↓	2'	↓	1020	6	↓	↓	↓								04
13-SB-A (5-6')	↓	↓	5-6'	↓	1125	9	X	X				X	X	X	X		05
13-SB-B (5-6')	↓	↓	↓	↓	1145	↓	↓	↓	↓			↓	↓	↓	↓		06
13-SB-C (5-6')	↓	↓	↓	↓	1330	↓	↓	↓	↓			↓	↓	↓	↓		07
13-SB-D (5-6')	↓	↓	↓	↓	1345	↓	↓	↓	↓			↓	↓	↓	↓		08
EB-1	↓	W	N/A	↓	1305	5	↓	↓	X		no dmg	↓	↓	↓	↓		09
13-SB-E (5-6')	↓	S	5-6'	↓	1430	9	↓	↓	↓			↓	↓	↓	↓		10

Analysis / Container / Preservative

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

NO TICs on EB/TB

pH _____ Temp _____ Flow _____ Other _____

Page 1 of 2

Remarks: If TPH ≥ 10mg/kg, run ~~additional~~ rest of (10) samples

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ___	Condition: (lab use only)
[signature]	1/14/2014	1720	[signature]		✓ TD
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.4°C Bottles Received: 9+1/10	COC Seal Intact: ✓ Y ___ N ___ NA
Relinquished by : (Signature)	Date: 1/14/14	Time: 18:00	Received for lab by: (Signature) [signature]	Date: 1/15/14 Time: 0930	pH Checked: NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No ✓Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L678121

Table #

Acctnum: **DUNDUNNC**

Template:

Prelogin:

TSR: **Hunt**

Cooler:

Shipped Via: **Raleigh Serv**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
13-SB-F (5-6')	G	SS	5-6'	1/14/14	1445	9	X	X				X	X	X	X			11
13-SB-G (1-2')	↓	↓	1-2'	↓	1550	3						X	X					12
13-SB-H (7-8')	↓	↓	7-8'	↓	1630	9	X	X				X	X	X	X			13
13-SB I (7-8')	↓	↓		↓	1645	9	X	X				X	X	X	X			14
TB-1	N/A	W	N/A	↓	N/A	1	X											15

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other ___

Remarks: if TPH ≥ 10mg/kg, go ahead & run rest of 260 samples

pH ___ Temp ___
Flow ___ Other ___

Page 2 of 2

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/14/2014	1720	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/14/14	18:00	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ___

Temp: 3.4 °C Bottles Received: 100

Date: 1/15/14 Time: 0930

Condition: (lab use only)

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 11-SB-A 2 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-01

Date Collected: 1/14/2014

Lab File ID: 0116_12

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 11-SB-A 2 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-01

Date Collected: 1/14/2014

Lab File ID: 0116_11

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 2

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.774	72.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.37	0.053	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 11-SB-B 2 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-02

Date Collected: 1/14/2014

Lab File ID: 0116_13

Date Analyzed: 1/16/2014

Dilution Factor: 1.09

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 11-SB-B 2 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-02

Date Collected: 1/14/2014

Lab File ID: 0122_28

Date Analyzed: 1/22/2014

Dilution Factor: 10.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 11-SB-B 2 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-02

Date Collected: 1/14/2014

Lab File ID: 0119_40

Date Analyzed: 1/19/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 11-SB-C 2 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-03

Date Collected: 1/14/2014

Lab File ID: 0116_14

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 11-SB-C 2 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-03

Date Collected: 1/14/2014

Lab File ID: 0119_38

Date Analyzed: 1/19/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 5

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000541-05-9	Cyclotrisiloxane, hexamethyl-	4.09	0.134	91.00	J
000541-02-6	Cyclopentasiloxane, decamethyl-	5.66	0.069	90.00	J
004630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octa	14.28	0.039	90.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	2.90	0.284	72.00	J
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.29	0.089	59.00	J

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID:

Client Name:	Duncklee and Dunham	DUP 1 2 FT
Project Desc.	Dorothea Dix Campus	

Matrix:	SOIL	**ESC Sample No:**	L678121-04
Date Collected:	1/14/2014	**Lab File ID:**	0122_27
Date Analyzed:	1/22/2014	**Dilution Factor:**	5.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: DUP 1 2 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-04

Date Collected: 1/14/2014

Lab File ID: 0119_39

Date Analyzed: 1/19/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-A 5-6 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-05

Date Collected: 1/14/2014

Lab File ID: 0116_30

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-B 5-6 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-06

Date Collected: 1/14/2014

Lab File ID: 0116_45

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-C 5-6 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-07

Date Collected: 1/14/2014

Lab File ID: 0116_25

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-D 5-6 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-08

Date Collected: 1/14/2014

Lab File ID: 0116_20

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-E 5-6 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-10

Date Collected: 1/14/2014

Lab File ID: 0116_33

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-F 5-6 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-11

Date Collected: 1/14/2014

Lab File ID: 0116_21

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-G 1-2 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-12

Date Collected: 1/14/2014

Lab File ID: 0116_44

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-H 7-8 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-13

Date Collected: 1/14/2014

Lab File ID: 0116_31

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 13-SB-I 7-8 FT

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678121-14

Date Collected: 1/14/2014

Lab File ID: 0116_22

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Thursday January 23, 2014

Report Number: L678894
Samples Received: 01/18/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678894-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-A 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 10:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	89.5	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.031	0.0014	0.022	mg/kg		7471	01/21/14	1
Antimony	U	0.38	1.1	mg/kg	J6	6010C	01/22/14	1
Arsenic	3.2	0.32	1.1	mg/kg	O1	6010C	01/22/14	1
Beryllium	0.48	0.035	0.11	mg/kg	O1	6010C	01/22/14	1
Cadmium	0.26	0.035	0.28	mg/kg	J	6010C	01/22/14	1
Chromium	13.	0.070	0.56	mg/kg	J3	6010C	01/22/14	1
Copper	17.	0.26	1.1	mg/kg	O1	6010C	01/22/14	1
Lead	34.	0.095	0.28	mg/kg		6010C	01/22/14	1
Nickel	6.6	0.24	1.1	mg/kg		6010C	01/22/14	1
Selenium	0.65	0.37	1.1	mg/kg	JO1	6010C	01/22/14	1
Silver	U	0.14	0.56	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.1	mg/kg		6010C	01/22/14	1
Zinc	36.	0.30	1.7	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678894-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-A 24-30IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 10:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	76.2	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.075	0.0014	0.026	mg/kg		7471	01/21/14	1
Antimony	U	0.38	1.3	mg/kg		6010C	01/22/14	1
Arsenic	6.3	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	1.1	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.39	0.035	0.33	mg/kg		6010C	01/22/14	1
Chromium	52.	0.070	0.66	mg/kg		6010C	01/22/14	1
Copper	54.	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	16.	0.095	0.33	mg/kg		6010C	01/22/14	1
Nickel	21.	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.3	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.3	mg/kg	O	6010C	01/22/14	5
Thallium	1.2	0.32	1.3	mg/kg	J	6010C	01/22/14	1
Zinc	26.	0.30	2.0	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678894-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-B 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 11:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	85.6	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.016	0.0014	0.023	mg/kg	J	7471	01/21/14	1
Antimony	0.52	0.38	1.2	mg/kg	J	6010C	01/22/14	1
Arsenic	2.8	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.4	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.20	0.035	0.29	mg/kg	J	6010C	01/22/14	1
Chromium	6.2	0.070	0.58	mg/kg		6010C	01/22/14	1
Copper	21.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	9.5	0.095	0.29	mg/kg		6010C	01/22/14	1
Nickel	3.5	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.2	mg/kg		6010C	01/22/14	1
Silver	U	0.14	0.58	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	37.	0.30	1.8	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

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January 23,2014

ESC Sample # : L678894-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-B 24-30IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 11:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	87.3	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.016	0.0014	0.023	mg/kg	J	7471	01/21/14	1
Antimony	0.55	0.38	1.1	mg/kg	J	6010C	01/22/14	1
Arsenic	2.7	0.32	1.1	mg/kg		6010C	01/22/14	1
Beryllium	1.1	0.035	0.11	mg/kg		6010C	01/22/14	1
Cadmium	0.21	0.035	0.29	mg/kg	J	6010C	01/22/14	1
Chromium	5.7	0.070	0.57	mg/kg		6010C	01/22/14	1
Copper	16.	0.26	1.1	mg/kg		6010C	01/22/14	1
Lead	30.	0.095	0.29	mg/kg		6010C	01/22/14	1
Nickel	2.7	0.24	1.1	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.1	mg/kg		6010C	01/22/14	1
Silver	U	0.14	0.57	mg/kg		6010C	01/22/14	1
Thallium	U	1.6	5.7	mg/kg	O	6010C	01/22/14	5
Zinc	34.	0.30	1.7	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678894-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-C 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 11:53

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	73.7	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.032	0.0014	0.027	mg/kg		7471	01/21/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/22/14	1
Arsenic	3.0	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	1.1	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	0.26	0.035	0.34	mg/kg	J	6010C	01/22/14	1
Chromium	13.	0.070	0.68	mg/kg		6010C	01/22/14	1
Copper	20.	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	7.9	0.095	0.34	mg/kg		6010C	01/22/14	1
Nickel	4.6	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	1.0	0.37	1.4	mg/kg	J	6010C	01/22/14	1
Silver	U	0.14	0.68	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.4	mg/kg		6010C	01/22/14	1
Zinc	28.	0.30	2.0	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
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Cary, NC 27512

January 23,2014

ESC Sample # : L678894-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-C 24-30IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 11:57

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	78.8	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.024	0.0014	0.025	mg/kg	J	7471	01/21/14	1
Antimony	1.1	0.38	1.3	mg/kg	J	6010C	01/22/14	1
Arsenic	2.5	0.32	1.3	mg/kg		6010C	01/22/14	1
Beryllium	1.0	0.035	0.13	mg/kg		6010C	01/22/14	1
Cadmium	0.34	0.035	0.32	mg/kg		6010C	01/22/14	1
Chromium	9.6	0.070	0.63	mg/kg		6010C	01/22/14	1
Copper	18.	0.26	1.3	mg/kg		6010C	01/22/14	1
Lead	9.6	0.095	0.32	mg/kg		6010C	01/22/14	1
Nickel	4.4	0.24	1.3	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.3	mg/kg		6010C	01/22/14	1
Silver	U	0.14	0.63	mg/kg		6010C	01/22/14	1
Thallium	U	0.32	1.3	mg/kg		6010C	01/22/14	1
Zinc	33.	0.30	1.9	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
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MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678894-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-D 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 13:05

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	86.3	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.029	0.0014	0.023	mg/kg		7471	01/21/14	1
Antimony	U	1.9	5.8	mg/kg	O	6010C	01/22/14	5
Arsenic	6.8	1.6	5.8	mg/kg		6010C	01/22/14	5
Beryllium	0.23	0.18	0.58	mg/kg	J	6010C	01/22/14	5
Cadmium	U	0.18	1.4	mg/kg	O	6010C	01/22/14	5
Chromium	15.	0.35	2.9	mg/kg		6010C	01/22/14	5
Copper	17.	1.3	5.8	mg/kg		6010C	01/22/14	5
Lead	15.	0.48	1.4	mg/kg		6010C	01/22/14	5
Nickel	5.3	1.2	5.8	mg/kg	J	6010C	01/22/14	5
Selenium	U	1.8	5.8	mg/kg	O	6010C	01/22/14	5
Silver	1.5	0.70	2.9	mg/kg	J	6010C	01/22/14	5
Thallium	U	1.6	5.8	mg/kg	O	6010C	01/22/14	5
Zinc	23.	1.5	8.7	mg/kg		6010C	01/22/14	5

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678894-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-D 24-30IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 13:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	85.8	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.021	0.0014	0.023	mg/kg	J	7471	01/21/14	1
Antimony	U	1.9	5.8	mg/kg	O	6010C	01/22/14	5
Arsenic	7.2	1.6	5.8	mg/kg		6010C	01/22/14	5
Beryllium	0.77	0.18	0.58	mg/kg		6010C	01/22/14	5
Cadmium	U	0.18	1.4	mg/kg	O	6010C	01/22/14	5
Chromium	21.	0.35	2.9	mg/kg		6010C	01/22/14	5
Copper	17.	1.3	5.8	mg/kg		6010C	01/22/14	5
Lead	17.	0.48	1.4	mg/kg		6010C	01/22/14	5
Nickel	6.5	1.2	5.8	mg/kg		6010C	01/22/14	5
Selenium	U	1.8	5.8	mg/kg	O	6010C	01/22/14	5
Silver	1.2	0.70	2.9	mg/kg	J	6010C	01/22/14	5
Thallium	U	3.2	12.	mg/kg	O	6010C	01/22/14	10
Zinc	15.	1.5	8.7	mg/kg		6010C	01/22/14	5

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 23,2014

ESC Sample # : L678894-09

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-E 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 13:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	80.0	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.045	0.0014	0.025	mg/kg		7471	01/21/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/22/14	1
Arsenic	5.5	0.32	1.2	mg/kg		6010C	01/22/14	1
Beryllium	1.8	0.035	0.12	mg/kg		6010C	01/22/14	1
Cadmium	0.44	0.035	0.31	mg/kg		6010C	01/22/14	1
Chromium	40.	0.070	0.62	mg/kg		6010C	01/22/14	1
Copper	39.	0.26	1.2	mg/kg		6010C	01/22/14	1
Lead	16.	0.095	0.31	mg/kg		6010C	01/22/14	1
Nickel	10.	0.24	1.2	mg/kg		6010C	01/22/14	1
Selenium	1.1	0.37	1.2	mg/kg	J	6010C	01/22/14	1
Silver	U	0.70	3.1	mg/kg	O	6010C	01/22/14	5
Thallium	U	0.32	1.2	mg/kg		6010C	01/22/14	1
Zinc	39.	0.30	1.9	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

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January 23,2014

ESC Sample # : L678894-10

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-E 24-30IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 13:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	73.3	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.061	0.0014	0.027	mg/kg		7471	01/21/14	1
Antimony	U	0.38	1.4	mg/kg		6010C	01/22/14	1
Arsenic	7.6	0.32	1.4	mg/kg		6010C	01/22/14	1
Beryllium	2.2	0.035	0.14	mg/kg		6010C	01/22/14	1
Cadmium	0.49	0.035	0.34	mg/kg		6010C	01/22/14	1
Chromium	37.	0.070	0.68	mg/kg		6010C	01/22/14	1
Copper	48.	0.26	1.4	mg/kg		6010C	01/22/14	1
Lead	14.	0.095	0.34	mg/kg		6010C	01/22/14	1
Nickel	8.9	0.24	1.4	mg/kg		6010C	01/22/14	1
Selenium	U	0.37	1.4	mg/kg		6010C	01/22/14	1
Silver	U	0.70	3.4	mg/kg	O	6010C	01/22/14	5
Thallium	U	1.6	6.8	mg/kg	O	6010C	01/22/14	5
Zinc	40.	0.30	2.0	mg/kg		6010C	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678894-01	WG702285	SAMP	Antimony	R2878638	J6
	WG702285	SAMP	Arsenic	R2878638	O1
	WG702285	SAMP	Beryllium	R2878638	O1
	WG702285	SAMP	Cadmium	R2878638	J
	WG702285	SAMP	Chromium	R2878638	J3
	WG702285	SAMP	Copper	R2878638	O1
	WG702285	SAMP	Selenium	R2878638	JO1
L678894-02	WG702285	SAMP	Silver	R2878638	O
	WG702285	SAMP	Thallium	R2878638	J
L678894-03	WG702214	SAMP	Mercury	R2878101	J
	WG702285	SAMP	Antimony	R2878638	J
	WG702285	SAMP	Cadmium	R2878638	J
L678894-04	WG702214	SAMP	Mercury	R2878101	J
	WG702285	SAMP	Antimony	R2878638	J
	WG702285	SAMP	Cadmium	R2878638	J
	WG702285	SAMP	Thallium	R2878638	O
L678894-05	WG702285	SAMP	Cadmium	R2878638	J
	WG702285	SAMP	Selenium	R2878638	J
L678894-06	WG702214	SAMP	Mercury	R2878101	J
	WG702285	SAMP	Antimony	R2878638	J
L678894-07	WG702285	SAMP	Antimony	R2878638	O
	WG702285	SAMP	Beryllium	R2878638	J
	WG702285	SAMP	Cadmium	R2878638	O
	WG702285	SAMP	Nickel	R2878638	J
	WG702285	SAMP	Selenium	R2878638	O
	WG702285	SAMP	Silver	R2878638	J
	WG702285	SAMP	Thallium	R2878638	O
L678894-08	WG702214	SAMP	Mercury	R2878101	J
	WG702285	SAMP	Antimony	R2878638	O
	WG702285	SAMP	Cadmium	R2878638	O
	WG702285	SAMP	Selenium	R2878638	O
	WG702285	SAMP	Silver	R2878638	J
	WG702285	SAMP	Thallium	R2878638	O
L678894-09	WG702285	SAMP	Selenium	R2878638	J
	WG702285	SAMP	Silver	R2878638	O
L678894-10	WG702285	SAMP	Silver	R2878638	O
	WG702285	SAMP	Thallium	R2878638	O

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/23/14 at 09:11:28

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678894-01 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

Sample: L678894-02 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

Sample: L678894-03 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

Sample: L678894-04 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

Sample: L678894-05 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

Sample: L678894-06 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

Sample: L678894-07 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

Sample: L678894-08 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

Sample: L678894-09 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

Sample: L678894-10 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/23/14 09:10

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PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678894

January 23, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Mercury	< .02	mg/kg			WG702214	01/21/14 12:46
Total Solids	< .1	%			WG702526	01/22/14 08:47
Antimony	< 1	mg/kg			WG702285	01/22/14 16:04
Arsenic	< 1	mg/kg			WG702285	01/22/14 16:04
Beryllium	< .1	mg/kg			WG702285	01/22/14 16:04
Cadmium	< .25	mg/kg			WG702285	01/22/14 16:04
Chromium	< .5	mg/kg			WG702285	01/22/14 16:04
Copper	< 1	mg/kg			WG702285	01/22/14 16:04
Lead	< .25	mg/kg			WG702285	01/22/14 16:04
Nickel	< 1	mg/kg			WG702285	01/22/14 16:04
Selenium	< 1	mg/kg			WG702285	01/22/14 16:04
Silver	< .5	mg/kg			WG702285	01/22/14 16:04
Thallium	< 1	mg/kg			WG702285	01/22/14 16:04
Zinc	< 1.5	mg/kg			WG702285	01/22/14 16:04

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Mercury	mg/kg	0.0	0.00142	8.00	20	L678874-10	WG702214
Total Solids	%	73.7	73.3	0.459	5	L678894-10	WG702526
Antimony	mg/kg	0.0	0.0762	48.0*	20	L678894-01	WG702285
Arsenic	mg/kg	2.80	2.89	3.00	20	L678894-01	WG702285
Beryllium	mg/kg	0.390	0.432	11.0	20	L678894-01	WG702285
Cadmium	mg/kg	0.0	0.235	16.0	20	L678894-01	WG702285
Chromium	mg/kg	9.70	12.2	23.0*	20	L678894-01	WG702285
Copper	mg/kg	13.0	15.1	16.0	20	L678894-01	WG702285
Lead	mg/kg	35.0	29.6	17.0	20	L678894-01	WG702285
Nickel	mg/kg	4.90	5.88	19.0	20	L678894-01	WG702285
Selenium	mg/kg	0.0	0.583	10.0	20	L678894-01	WG702285
Silver	mg/kg	0.0	-0.439	28.0*	20	L678894-01	WG702285
Thallium	mg/kg	0.0	0.316	682.*	20	L678894-01	WG702285
Zinc	mg/kg	37.0	32.0	14.0	20	L678894-01	WG702285

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Mercury	mg/kg	12.4	14.5	117.	71.6-128	WG702214
Total Solids	%	50	50.1	100.	85-115	WG702526
Antimony	mg/kg	113	61.9	55.0	0.88-223	WG702285
Arsenic	mg/kg	237	241.	102.	83.1-117	WG702285
Beryllium	mg/kg	93.3	88.3	95.0	83.3-117	WG702285
Cadmium	mg/kg	191	177.	93.0	83.2-117	WG702285
Chromium	mg/kg	128	125.	98.0	81.3-118	WG702285
Copper	mg/kg	123	123.	100.	83.7-116	WG702285
Lead	mg/kg	103	99.1	96.0	83.1-117	WG702285
Nickel	mg/kg	118	113.	96.0	82-118	WG702285
Selenium	mg/kg	110	113.	102.	78.7-122	WG702285

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678894

January 23, 2014

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Silver	mg/kg	47.3	47.1	100.	66.2-134	WG702285
Thallium	mg/kg	158	155.	98.0	81-119	WG702285
Zinc	mg/kg	183	172.	94.0	82-118	WG702285

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/kg	0.241	0.00142	.25	96.0	80-120	L678874-10	WG702214
Antimony	mg/kg	20.5	0.0762	50	41.0*	75-125	L678894-01	WG702285
Arsenic	mg/kg	53.8	2.89	50	100.	75-125	L678894-01	WG702285
Beryllium	mg/kg	51.7	0.432	50	100.	75-125	L678894-01	WG702285
Cadmium	mg/kg	50.2	0.235	50	100.	75-125	L678894-01	WG702285
Chromium	mg/kg	71.5	12.2	50	120.	75-125	L678894-01	WG702285
Copper	mg/kg	68.4	15.1	50	110.	75-125	L678894-01	WG702285
Lead	mg/kg	79.9	29.6	50	100.	75-125	L678894-01	WG702285
Nickel	mg/kg	54.9	5.88	50	98.0	75-125	L678894-01	WG702285
Selenium	mg/kg	52.3	0.583	50	100.	75-125	L678894-01	WG702285
Silver	mg/kg	51.9	-0.439	50	100.	75-125	L678894-01	WG702285
Thallium	mg/kg	50.6	0.316	50	100.	75-125	L678894-01	WG702285
Zinc	mg/kg	82.4	32.0	50	100.	75-125	L678894-01	WG702285

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/kg	0.255	0.241	101.	80-120	5.00	20	L678874-10	WG702214
Antimony	mg/kg	23.0	20.5	45.8*	75-125	11.0	20	L678894-01	WG702285
Arsenic	mg/kg	49.6	53.8	93.3	75-125	8.00	20	L678894-01	WG702285
Beryllium	mg/kg	46.9	51.7	92.9	75-125	10.0	20	L678894-01	WG702285
Cadmium	mg/kg	46.8	50.2	93.1	75-125	7.00	20	L678894-01	WG702285
Chromium	mg/kg	59.5	71.5	94.7	75-125	18.0	20	L678894-01	WG702285
Copper	mg/kg	61.7	68.4	93.2	75-125	10.0	20	L678894-01	WG702285
Lead	mg/kg	71.3	79.9	83.3	75-125	11.0	20	L678894-01	WG702285
Nickel	mg/kg	51.2	54.9	90.7	75-125	7.00	20	L678894-01	WG702285
Selenium	mg/kg	48.8	52.3	96.5	75-125	7.00	20	L678894-01	WG702285
Silver	mg/kg	48.2	51.9	97.2	75-125	7.00	20	L678894-01	WG702285
Thallium	mg/kg	46.4	50.6	92.1	75-125	9.00	20	L678894-01	WG702285
Zinc	mg/kg	71.4	82.4	78.8	75-125	14.0	20	L678894-01	WG702285

Post Spike

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678894

January 23, 2014

Serial Dilution

Batch number /Run number / Sample number cross reference

WG702214: R2878101: L678894-01 02 03 04 05 06 07 08 09 10
WG702526: R2878261: L678894-01 02 03 04 05 06 07 08 09 10
WG702285: R2878638: L678894-01 02 03 04 05 06 07 08 09 10

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L678894

January 23, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): David Jones

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 678894

D001

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Ctrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Contaminant	Sample # (lab only)
1SHA-A(6-12")	G	SS		1/17/14	1045	1			X									-01
1SHA-A (24-30")					1050				X									-02
1SHA-B(6-12")					1125				X									-03
1SHA-B(24-30")					1130				X									-04
1SHA-C (6-12")					1153				X									-05
1SHA-C (24-30)					1157				X									-06
1SHA-D (6-12")					1305				X									-07
1SHA-D (24-30")					1310				X									-08
1SHA-E (6-12")					1330				X									-09
1SHA-E (24-30")					1335				X									-10

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other _____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/17/14	17:15	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/17/14	17:55	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SW

Temp: 3.6 °C Bottles Received: 10 + TB

Date: 1-18-14 Time: 1430

Condition: OK (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Divider
Page

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Wednesday February 12, 2014

Report Number: L681666
Samples Received: 02/06/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681666-01

Date Received : February 06, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-D-R (6-12IN)

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/05/14 14:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	0.75	0.26	1.1	mg/kg		7199	02/11/14	1
ORP	150			mV		2580 B-2	02/12/14	1
pH	6.9			su		9045D	02/08/14	1
Total Solids	89.5	0.0333	0.100	%		2540 G-2	02/10/14	1
Chromium	7.4	0.35	2.8	mg/kg	O1	6010C	02/11/14	5

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681666-01 (PH) - 6.9@20.5c

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681666-02

Date Received : February 06, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15HA-D-R (24-30IN)

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/05/14 14:42

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	2.0	0.26	1.2	mg/kg		7199	02/11/14	1
ORP	170			mV		2580 B-2	02/12/14	1
pH	5.4			su		9045D	02/08/14	1
Total Solids	86.0	0.0333	0.100	%		2540 G-2	02/10/14	1
Chromium	8.5	0.35	2.9	mg/kg	P1	6010C	02/11/14	5

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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The reported analytical results relate only to the sample submitted
Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681666-02 (PH) - 5.4@20.4c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L681666-01	WG705352	SAMP	Chromium	R2883819	O1
L681666-02	WG705352	SAMP	Chromium	R2883819	P1

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/12/14 at 17:22:30

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L681666-01 Account: DUNDUNNC Received: 02/06/14 09:00 Due Date: 02/13/14 00:00 RPT Date: 02/12/14 17:22

Sample: L681666-02 Account: DUNDUNNC Received: 02/06/14 09:00 Due Date: 02/13/14 00:00 RPT Date: 02/12/14 17:22

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L681666

February 12, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG705239	02/10/14 08:51
Chromium	< .5	mg/kg			WG705352	02/11/14 13:02
Hexavalent Chromium	< 1	mg/kg			WG705610	02/11/14 13:16

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	90.7	91.3	0.566	5	L681694-03	WG705239
pH	su	12.0	12.0	2.47*	1	L681215-01	WG705399
pH	su	7.00	7.00	0.573	1	L681920-01	WG705399
Chromium	mg/kg	9.10	7.34	22.0*	20	L681666-02	WG705352
Hexavalent Chromium	mg/kg	2.20	2.20	0.905	20	L681427-01	WG705610
Hexavalent Chromium	mg/kg	1.70	1.70	0.590	20	L681666-02	WG705610
ORP	mV	120.	120.	1.65	20	L681427-01	WG705707
ORP	mV	130.	130.	0.0	20	L682047-01	WG705707

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	50.1	100.	85-115	WG705239
pH	su	5.93	5.90	99.5	98.3-101.7	WG705399
Chromium	mg/kg	128	117.	91.0	81.3-118	WG705352
Hexavalent Chromium	mg/kg	125	130.	104.	90-110	WG705610
ORP	mV	100	110.	110.	90-110	WG705707

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
pH	su	5.90	5.90	99.0	98.3-101.7	0.0	20	WG705399
Hexavalent Chromium	mg/kg	130.	130.	104.	90-110	0.0	20	WG705610
ORP	mV	110.	110.	110.	90-110	0.0	20	WG705707

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L681666

February 12, 2014

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Chromium	mg/kg	53.1	7.34	10	91.0	75-125	L681666-02	WG705352
Hexavalent Chromium	mg/kg	22.0	0.830	20	100.	75-125	L681427-02	WG705610

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Chromium	mg/kg	55.7	53.1	96.8	75-125	5.00	20	L681666-02	WG705352
Hexavalent Chromium	mg/kg	22.0	22.0	106.	75-125	0.0	20	L681427-02	WG705610

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

WG705239: R2883383: L681666-01 02
WG705399: R2883403: L681666-01 02
WG705352: R2883819: L681666-01 02
WG705610: R2884007: L681666-01 02
WG705707: R2884087: L681666-01 02

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L681666

February 12, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Phillip Jones

Site/Facility ID #

P.O. #

Collected by (signature): [signature]
Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
____ Same Day 200%
____ Next Day 100%
____ Two Day 50%
____ Three Day 25%

Date Results Needed: 5 days max
Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Total Chromium	Hex Chrome method 7199	Rem./Contaminant	Sample # (lab only)
15HA-D-R (6-12")	G	SS		2/5/14	1440	1	X	X		-01
15HA-D-R (24-30")	↓	↓		↓	1442	1	X	X		-02

Chain of Custody Page 1 of 1

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L# L681666
B052

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____
Flow _____ Other _____

54134 22 74394

Remarks:

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	2/5/14	15:45	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	2/5/14	17:00	[signature]

Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ ____
Temp: 3.8 °C Bottles Received: 2 4oz + 1 1L
Date: 2-6-14 Time: 0900

Condition: (lab use only)
COC Seal intact: ___Y ___N ___NA
pH Checked:
NCF:

Divider
Page

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Tuesday February 04, 2014

Report Number: L680039
Samples Received: 01/18/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Case Narrative

Tuesday February 04, 2014

Report Number: L680039
Samples Received: 01/18/14
Client Project: 201336

Description: Dorothea Dix Campus

Other Comments

The pH for L680039-08 was taken using 2 times the normal amount of water to suspend the sample due to hydroscopic nature of the field sample.

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 04,2014

ESC Sample # : L680039-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15-HA-A (6-12")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 10:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.1	mg/kg		7199	01/30/14	1
ORP	250			mV		2580 B-2	01/29/14	1
pH	6.3			su		9045D	01/29/14	1
Total Solids	89.5	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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L680039-01 (PH) - 6.3@22.3c

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 04,2014

ESC Sample # : L680039-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15-HA-A (24-30")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 10:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.3	mg/kg		7199	01/30/14	1
ORP	140			mV		2580 B-2	01/29/14	1
pH	6.0			su		9045D	01/29/14	1
Total Solids	76.2	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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L680039-02 (PH) - 6.0@21.0c

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 04,2014

ESC Sample # : L680039-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15-HA-D (6-12")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 13:05

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	1.4	0.26	1.2	mg/kg		7199	01/30/14	1
ORP	220			mV		2580 B-2	01/29/14	1
pH	5.1			su		9045D	01/29/14	1
Total Solids	86.3	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 04,2014

ESC Sample # : L680039-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15-HA-D (24-30")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 13:10

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	2.0	0.26	1.2	mg/kg		7199	01/30/14	1
ORP	220			mV		2580 B-2	01/29/14	1
pH	5.3			su		9045D	01/29/14	1
Total Solids	85.8	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Daphne Jones; Matt Flinchum
Duncklee and Dunham
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February 04,2014

ESC Sample # : L680039-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15-HA-E (6-12")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 13:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.2	mg/kg		7199	01/30/14	1
ORP	210			mV		2580 B-2	01/29/14	1
pH	6.0			su		9045D	01/29/14	1
Total Solids	80.0	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Daphne Jones; Matt Flinchum
Duncklee and Dunham
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February 04,2014

ESC Sample # : L680039-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 15-HA-E (24-30")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 13:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.4	mg/kg		7199	01/30/14	1
ORP	210			mV		2580 B-2	01/29/14	1
pH	6.2			su		9045D	01/29/14	1
Total Solids	73.3	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Daphne Jones; Matt Flinchum
Duncklee and Dunham
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Cary, NC 27512

February 04,2014

ESC Sample # : L680039-07

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 11-SB-B (2')

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/14/14 09:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	1.7	0.26	1.4	mg/kg	P1	7199	02/04/14	1
ORP	230			mV		2580 B-2	01/29/14	1
pH	5.9			su		9045D	01/29/14	1
Total Solids	71.9	0.0333	0.100	%		2540 G-2	01/16/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Cary, NC 27512

February 04,2014

ESC Sample # : L680039-08

Date Received : January 15, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 11-SB-C (2')

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/14/14 10:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.4	mg/kg		7199	02/04/14	1
ORP	190			mV		2580 B-2	01/29/14	1
pH	6.6			su		9045D	01/29/14	2
Total Solids	72.0	0.0333	0.100	%		2540 G-2	01/16/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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L680039-08 (PH) - 6.6@21.6c

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REPORT OF ANALYSIS

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February 04,2014

ESC Sample # : L680039-09

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 9-HA-B (6-12")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 08:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.2	mg/kg		7199	02/04/14	1
ORP	190			mV		2580 B-2	01/29/14	1
pH	7.3			su		9045D	01/29/14	1
Total Solids	83.3	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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L680039-09 (PH) - 7.3@21.3c

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February 04,2014

ESC Sample # : L680039-10

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3-HA-G (6-12")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 14:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.2	mg/kg		7199	02/04/14	1
ORP	200			mV		2580 B-2	01/29/14	1
pH	6.7			su		9045D	01/29/14	1
Total Solids	79.6	0.0333	0.100	%		2540 G-2	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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L680039-10 (PH) - 6.7@21.6c

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
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February 04,2014

ESC Sample # : L680039-11

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 3-HA-I (6-12")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 15:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.2	mg/kg		7199	02/04/14	1
ORP	210			mV		2580 B-2	01/29/14	1
pH	6.1			su		9045D	01/29/14	1
Total Solids	83.4	0.0333	0.100	%		2540 G-2	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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L680039-11 (PH) - 6.1@21.3c

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Daphne Jones; Matt Flinchum
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February 04,2014

ESC Sample # : L680039-12

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-A (1-2')

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 15:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.4	mg/kg		7199	02/04/14	1
ORP	220			mV		2580 B-2	01/29/14	1
pH	6.5			su		9045D	01/29/14	1
Total Solids	71.6	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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L680039-12 (PH) - 6.5@21.2c

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February 04,2014

ESC Sample # : L680039-13

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 8-SB-C (1-2')

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 15:55

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.4	mg/kg		7199	02/04/14	1
ORP	220			mV		2580 B-2	01/29/14	1
pH	6.4			su		9045D	01/29/14	1
Total Solids	70.6	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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February 04,2014

ESC Sample # : L680039-14

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-B (1-2')

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 14:30

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.3	mg/kg		7199	02/04/14	1
ORP	220			mV		2580 B-2	01/29/14	1
pH	6.8			su		9045D	01/29/14	1
Total Solids	78.8	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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L680039-14 (PH) - 6.8@21.2c

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Daphne Jones; Matt Flinchum
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February 04,2014

ESC Sample # : L680039-15

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 10-SB-D (2-3')

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 14:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.4	mg/kg		7199	02/04/14	1
ORP	220			mV		2580 B-2	01/29/14	1
pH	7.0			su		9045D	01/29/14	1
Total Solids	73.7	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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February 04,2014

ESC Sample # : L680039-16

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 4-SB-A (3.5-4.5')

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/17/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.3	mg/kg		7199	02/04/14	1
ORP	230			mV		2580 B-2	01/29/14	1
pH	6.8			su		9045D	01/29/14	1
Total Solids	78.9	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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February 04,2014

ESC Sample # : L680039-17

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 2-HA-B (6-12")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/16/14 08:21

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.1	mg/kg		7199	02/04/14	1
ORP	240			mV		2580 B-2	01/29/14	1
pH	6.2			su		9045D	01/29/14	1
Total Solids	87.9	0.0333	0.100	%		2540 G-2	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

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February 04,2014

ESC Sample # : L680039-18

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7-HA-B (6-12")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 14:35

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.2	mg/kg		7199	02/04/14	1
ORP	240			mV		2580 B-2	01/29/14	1
pH	6.4			su		9045D	01/29/14	1
Total Solids	82.6	0.0333	0.100	%		2540 G-2	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

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Cary, NC 27512

February 04,2014

ESC Sample # : L680039-19

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 7-HA-C (6-12")

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/15/14 15:27

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	U	0.26	1.3	mg/kg		7199	02/04/14	1
ORP	280			mV		2580 B-2	01/29/14	1
pH	5.7			su		9045D	01/29/14	1
Total Solids	79.0	0.0333	0.100	%		2540 G-2	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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L680039-19 (PH) - 5.7@21.2c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L680039-07	WG704231	SAMP	Hexavalent Chromium	R2882092	P1

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/04/14 at 16:45:10

TSR Signing Reports: 350
R5 - Desired TAT

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L680039-01 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678894-01
Sample: L680039-02 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678894-02
Sample: L680039-03 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678894-07
Sample: L680039-04 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678894-08
Sample: L680039-05 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678894-09
Sample: L680039-06 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678894-10
Sample: L680039-07 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678121-02
Sample: L680039-08 Account: DUNDUNNC Received: 01/15/14 09:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678121-03
Sample: L680039-09 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678897-02
Sample: L680039-10 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678607-07
Sample: L680039-11 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678607-09
Sample: L680039-12 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678902-05
Sample: L680039-13 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678902-07
Sample: L680039-14 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678902-02
Sample: L680039-15 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678902-04
Sample: L680039-16 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678922-01
Sample: L680039-17 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678615-02
Sample: L680039-18 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678495-02
Sample: L680039-19 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 02/03/14 00:00 RPT Date: 02/04/14 16:44
Relogged from L678495-03

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L680039

February 04, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG701619	01/16/14 08:58
Total Solids	< .1	%			WG701950	01/18/14 07:35
Total Solids	< .1	%			WG702085	01/18/14 08:54
Total Solids	< .1	%			WG702083	01/18/14 09:03
Total Solids	< .1	%			WG702527	01/22/14 08:42
Total Solids	< .1	%			WG702526	01/22/14 08:47
Total Solids	< .1	%			WG702528	01/22/14 08:47
Hexavalent Chromium	< 1	mg/kg			WG703751	01/30/14 13:59
Hexavalent Chromium	< 1	mg/kg			WG704231	02/04/14 10:02

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	85.0	85.1	0.114	5	L678122-01	WG701619
Total Solids	%	80.1	79.6	0.529	5	L678495-05	WG701950
Total Solids	%	83.7	87.9	4.95	5	L678615-02	WG702085
Total Solids	%	75.0	73.7	1.66	5	L678607-10	WG702083
Total Solids	%	76.9	76.6	0.331	5	L678902-01	WG702527
Total Solids	%	73.7	73.3	0.459	5	L678894-10	WG702526
Total Solids	%	81.8	78.9	3.64	5	L678922-01	WG702528
ORP	mV	250.	250.	0.0	20	L680039-01	WG703587
ORP	mV	280.	280.	0.0	20	L680039-19	WG703587
pH	su	6.30	6.30	0.317	1	L680039-01	WG703634
pH	su	5.60	5.65	0.710	1	L680039-19	WG703634
Hexavalent Chromium	mg/kg	0.0	0.0	0.0	20	L679552-01	WG703751

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L680039

February 04, 2014

Analyte	Units	Duplicate Result	Duplicate	RPD	Limit	Ref Samp	Batch
Hexavalent Chromium	mg/kg	0.0	0.0	0.0	20	L680039-06	WG703751
Hexavalent Chromium	mg/kg	0.940	1.20	23.8*	20	L680039-07	WG704231
Hexavalent Chromium	mg/kg	46.0	51.0	10.1	20	L680715-14	WG704231

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	50.1	100.	85-115	WG701619
Total Solids	%	50	49.5	99.0	85-115	WG701950
Total Solids	%	50	49.9	99.8	85-115	WG702085
Total Solids	%	50	50.1	100.	85-115	WG702083
Total Solids	%	50	50.0	100.	85-115	WG702527
Total Solids	%	50	50.1	100.	85-115	WG702526
Total Solids	%	50	50.2	100.	85-115	WG702528
ORP	mV	100	100.	100.	90-110	WG703587
pH	su	5.93	6.00	101.	98.3-101.7	WG703634
Hexavalent Chromium	mg/kg	125	120.	96.0	90-110	WG703751
Hexavalent Chromium	mg/kg	125	120.	96.0	90-110	WG704231

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
ORP	mV	100.	100.	100.	90-110	0.0	20	WG703587
pH	su	5.90	6.00	99.0	98.3-101.7	1.68	20	WG703634
Hexavalent Chromium	mg/kg	120.	120.	96.0	90-110	0.0	20	WG703751
Hexavalent Chromium	mg/kg	140.	120.	112*	90-110	15.4	20	WG704231

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Hexavalent Chromium	mg/kg	0.0	0.0	20	0.0*	75-125	L679552-02	WG703751

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L680039

February 04, 2014

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
		Matrix Spike						
Hexavalent Chromium	mg/kg	22.0	2.60	20	97.0	75-125	L679507-02	WG704231

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
		Matrix Spike Duplicate							
Hexavalent Chromium	mg/kg	0.0	0.0	0*	75-125	0.0	20	L679552-02	WG703751
Hexavalent Chromium	mg/kg	20.0	22.0	87.0	75-125	9.52	20	L679507-02	WG704231
		Post Spike							

Batch number /Run number / Sample number cross reference

WG701619: R2876665: L680039-07 08
WG701950: R2877360: L680039-18 19
WG702085: R2877378: L680039-17
WG702083: R2877380: L680039-10 11
WG702527: R2878260: L680039-09
WG702526: R2878261: L680039-01 02 03 04 05 06
WG702528: R2878262: L680039-12 13 14 15 16
WG703587: R2880460: L680039-01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19
WG703634: R2880594: L680039-01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19
WG703751: R2881422: L680039-01 02 03 04 05 06
WG704231: R2882092: L680039-07 08 09 10 11 12 13 14 15 16 17 18 19

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L680039

February 04, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): **David Jones**

Site/Facility ID #

P.O. #

Collected by (signature): **[signature]**

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: **5 days max**

Email? ___No X Yes
FAX? ___No ___Yes

Chain of Custody Page 1 of 1

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# ~~675594~~ N

D001
L680039

Acctnum: **DUNDUNNC**
Template:
Prelogin:
TSR: **Hunt**
Cooler:
Shipped Via: **Raleigh Serv**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals: (6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Container	Sample # (lab only)
ISHA-A (6-12")	G	SS		1/17/14	1045	1			X								-01	~~-01~~ N
ISHA-A (24-30")					1050				X								02	~~-02~~
ISHA-B (6-12")					1125				X									~~-03~~
ISHA-B (24-30")					1130				X									~~-04~~
ISHA-C (6-12")					1153				X									~~-05~~
ISHA-C (24-30")					1157				X									~~-06~~
ISHA-D (6-12")					1305				X								03	~~-07~~
ISHA-D (24-30")					1310				X								04	~~-08~~
ISHA-E (6-12")					1330				X								05	~~-09~~
ISHA-E (24-30")					1335				X								06	~~-10~~

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

pH ___ Temp ___
Flow ___ Other ___

Remarks:

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/17/14	17:15	[signature]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/17/14	17:55	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ Hand

Temp: 3.6 °C Bottles Received: 10 + TB

Date: 1-18-14 Time: 1430

Condition: OK (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID # Dorothea Dix

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 day max

Email? ✓ No ___ Yes
FAX? ✓ No ___ Yes

Chain of Custody Page ___ of ___

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1679141
Table: H074
1680039
Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC)	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH	Rem./Contaminant	Sample # (lab only)
11-SB-A (2')	G	SS	2'	1/14/14	0910	96	X	X	X								01
11-SB-B (2')	↓	↓	2'	↓	0935	6	↓	↓	↓							07	02
11-SB-C (2')	↓	↓	2'	↓	1015	6	↓	↓	↓							08	03
DUP 1 (2')	↓	↓	2'	↓	1020	6	↓	↓	↓								04
13-SB-A (5-6')	↓	↓	5-6'	↓	1125	9	X	X				X	X	X	X		05
13-SB-B (5-6')	↓	↓	↓	↓	1145	↓	↓	↓	↓			↓	↓	↓	↓		06
13-SB-C (5-6')	↓	↓	↓	↓	1330	↓	↓	↓	↓			↓	↓	↓	↓		07
13-SB-D (5-6')	↓	↓	↓	↓	1345	↓	↓	↓	↓			↓	↓	↓	↓		08
EB-1	↓	W	N/A	↓	1305	5			X		no analysis						09
13-SB-E (5-6')	↓	S	5-6'	↓	1430	9	↓	↓	↓			↓	↓	↓	↓		10

Analysis / Container / Preservative

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

NO TICs on EB/TB

pH ___ Temp ___

Page 1 of 2

Remarks: If TPH ≥ 10mg/kg, run ~~additional~~ rest of (10) samples

Flow ___ Other ___

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/14/2014	1730	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/14/14	18:00	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ___

Temp: 3.4°C Bottles Received: 99 + 10

Date: 1/15/14 Time: 0930

Condition: (lab use only) OK TD

COC Seal Intact: ✓ Y ___ N ___ NA

pH Checked: NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Phillip Jones

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LAB SCIENCES
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13265 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

LIMS # 675652

C163
L680039

Accounting: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC)	Total RP Metals (6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B			Rem/Contaminant	Sample # (lab only)
9HA-A (6-12")	G	SS	6-12"	1/17/14	0815	2			X		X						-01
9HA-B (6-12")					0840				X	X	X					09	-02
9HA-C (6-12")					0905				X	X	X						-03
9HA-D (6-9")			G-8"		0940				X	X	X						-04
9HA-E (6-8")					0955				X	X	X						-05
EB-3		OT			1010	3			X	X	X						-06
DUP-3 (6-12")		SS	G-12"		0915	2			X	X	X						-07
~~TRIP Blank~~		~~OT~~				~~1~~	X									No TICs	

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other DI water (Lab)

Remarks: NO TICs on duplicates

pH ___ Temp ___
Flow ___ Other ___

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/17/14	17:15	[signature]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/17/14	17:55	[signature]

Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☒ Swift

Temp: 3.1 °C Bottles Received: 15

Date: 1-18-14 Time: @1430

Hold #

Condition: OK (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: <2 NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project # 201336

Lab Project #

Collected by (print): Phil P Jones

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Contaminant	Sample # (lab only)
3HA-A (6-12")	G	SS	6-12"	1/16/14	0911	3			X	X		X						~~01~~
3HA-B (6-12")					0948				X	X		X						~~02~~
3HA-C (6-12")					1040				X	X		X						~~03~~
3HA-D (6-12")					1115				X	X		X						~~04~~
3HA-E (6-12")					1253				X	X		X						~~05~~
3HA-F (6-12")					1341				X	X		X						~~06~~
3HA-G (6-12")					1415				X	X		X					10	~~07~~
3HA-H (6-12")					1452				X	X		X						~~08~~
3HA-I (6-12")					1525				X	X		X					11	~~09~~
3HA-J (6-12")					1600				X	X		X						~~10~~

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	1/16/14	17:20	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
	1/16/14	18:00	

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☒ SVA

Temp: 3.1°C °C Bottles Received: 37 4oz

Date: 1/17/14 Time: 0930

Condition: (lab use only) JD OK

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Chain of Custody Page 1 of 2

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# ~~L678607~~ D031 L680039

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project #: **201336**

Lab Project #:

Collected by (print): Matt Flinchum

Site/Facility ID #:

P.O. #:

Collected by (signature): [signature]
Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 day max
Email? ___ No ___ Yes
FAX? ✓ No ___ Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 676902 N
C165
L680039

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
10-SB-A (4-5')	G	SS	4-5'	1/17/14	1420	[illegible]	X	X	X									~~-04~~
10-SB-B (1-2')	|	|	1-2'	|	1430	|	|	|	|							14	~~-07~~
10-SB-C (1-2')	|	|	1-2'	|	1435	|	|	|	|								~~-03~~
10-SB-D (2-3')	|	|	2-3'	|	1445	|	|	|	|							16	~~-04~~
8-SB-A (1-2')	|	|	1-2'	|	1535	|	|	|	|							12	~~-05~~
8-SB-B (1-2')	|	|	|	|	1545	|	|	|	|								~~-06~~
8-SB-C (1-2')	|	|	|	|	1555	|	|	|	|							13	~~-01~~
8-SB-D (1-2')	|	|	|	|	1600	|	|	|	|								~~-09~~
8-SB-E (1-2')	✓	✓	✓	✓	1610	✓	✓	✓	✓									~~-08~~
Trip Blank	N/A	W	N/A	→	→		X										NoTICs	~~-11~~

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/17/14	17:25	[signature]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/17/14	17:55	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ [illegible]
Temp: 3.1 °C Bottles Received: 60
Date: 1-18-14 Time: 0 1430

Hold #:
Condition: (lab use only) (ok)
COC Seal Intact: ___ Y ___ N ___ NA
pH Checked: NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Daphne Jones

Site/Facility ID #

P.O. #

Collected by (signature): Daphne M Jones
Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? X No ___Yes

Chain of Custody Page 1 of 1

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Phone: 800-767-5859
Fax: 615-758-5859

LQ 675932 N

D002
L680039

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hurst
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Ctnrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC)	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH	Herbicides 8157B	Rem/Contamination	Sample # (lab only)
4-SB-A(3.5-4.5)	G	SS	3.5-4.5'	1/17/14	0900	10	X	X	X	X		X	X			X	16	~~01~~
12-SB-A(2-2.5')	|	|	2-2.5	|	1055	3		X				X			X			~~02~~
12-SB-B(6-6.5)	|	|	6-6.5'	|	1125	3		X				X			X			~~03~~
13-HAC(2')	|	|	2'	|	1500	3						X	X					~~04~~
13-SB-P(2.5')	|	|	2.5'	|	1520	3						X	X					~~05~~
Trip Blank	N/A	Lab water		→	→	1	X											
						MT												

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks: On sample 4 run all at same time (no TPH holds)
On sample 12 hold EPH, SVOCs until DRO results (10 days)

pH ___ Temp ___
Flow ___ Other ___

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Daphne M Jones	1/17/14	17:6	[illegible]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[illegible]	1/17/14	17:55	[illegible]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SW

Temp: 2.4 °C Bottles Received: 22

Date: 1-18-14 Time: 1430

Hold #:

Condition: (lab use only) Ok

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Phillip Jones

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# ~~1678615~~ 1680039
D038

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Contaminant	Sample # (lab only)
2HA-A(6-12")	G	SS	6-12"	1/16/14	0755	8	X	X	X	X			X					-01
2HA-B(6-12")	↓	↓	↓	↓	0821	8	X	X	X	X			X				17	-02
TRIP Blank		OT				1	X										NoTICs	-03

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/16/14	17:20	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/16/14	18:00	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☒ GW

Temp: 3.9°C Bottles Received: 17

Date: 1/17/14 Time: 0930

Condition: (lab use only) TD

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Phillip Jones

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem./Contaminant	Sample # (lab only)
7HA-A (6-12")	G	SS	6-12"	1/15/14	1350	3			X	X		X						~~01~~
7HA-B (6-12")					1435				X	X		X					18	~~02~~
7HA-C (6-12")					1527				X	X		X					19	~~03~~
7HA-D (6-12")					1600				X	X		X						~~04~~
DUP-2 (6-12")					1442				X	X		X						~~05~~
EB-2		OT			1620				X	X								~~06~~
TRIP Blank						1	X										No TICs	~~07~~
EB-4 (SW)				1/15/14 (SW)	1530 (SW)				X									~~08~~

Chain of Custody Page 1 of 1

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Phone: 800-767-5859
Fax: 615-758-5859

L# ~~675445~~ N
C125
L680039

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ~~distill~~ DI water

Remarks:

pH ___ Temp ___
Flow ___ Other ___

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/15/14	17:30	[signature]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/15/14	18:11	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SW-1

Temp: 3.1 °C Bottles Received: 19

Date: 1-16-14 Time: 1445

Condition: OK (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: <2 NCF: YES

Andy Vann

From: Jimmy Hunt
Sent: Monday, January 27, 2014 2:33 PM
To: Login
Subject: FW: Hexavalent Chromium Analyses

Please relog the 19 SS listed below from DUNDUNNC for CR6IC and TS. They can all be placed on one login number per our client. Move the TS data from the original login numbers to the new number. Make these R5 due 2/3.

Thanks,
Jimmy

From: Daphne Jones [mailto:daphne@dunckleedunham.com]
Sent: Monday, January 27, 2014 11:02 AM
To: Jimmy Hunt
Subject: Hexavalent Chromium Analyses

Jimmy: Here are the samples we want tested for hex chrome based on the results we have to date. I will have more coming once I get all the data in for the different areas. What is the hold time for hex chrome in soil? We need to hold onto all the samples that had metal analyses until we are sure we don't need additional ones tested for hex chrome.

Area No.	ESC lab number	Our sample number (to double check)
15	L678894-01	15-HA-A (6-12")
	L678894-02	15-HA-A (24-30")
	L678894-07	15-HA-D (6-12")
	L678894-08	15-HA-D (24-30")
	L678894-09	15-HA-E (6-12")
	L678894-10	15-HA-E (24-30")
11	L678121-02	11-SB-B (2')
	L678121-03	11-SB-C (2')
9	L678897-02	9-HA-B (6-12")
3	L678607-07	3-HA-G (6-12")
	L678607-09	3-HA-I (6-12")
8	L678902-05	8-SB-A (1-2')
	L678902-07	8-SB-C (1-2')
10	L678902-02	10-SB-B (1-2')
	L678902-04	10-SB-D (2-3')
4	L678922-01	4-SB-A (3.5-4.5')
2	L678615-02	2-HA-B (6-12")
7	L678495-02	7-HA-B (6-12")
	L678495-03	7-HA-C (6-12")
		19 total

Daphne M. Jones, P.G., R.S.M.
Senior Geologist
511 Keisler Drive, Suite 102
Cary, North Carolina 27518

Divider
Page

12065 Lebanon Rd.
Mt. Juliet, TN 37122
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1-800-767-5859
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Tax I.D. 62-0814289

Est. 1970

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Wednesday February 12, 2014

Report Number: L681427
Samples Received: 01/22/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681427-01

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-A 9.5 - 10.5FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	3.2	0.26	1.4	mg/kg		7199	02/11/14	1
ORP	120			mV		2580 B-2	02/12/14	1
pH	6.6			su		9045D	02/06/14	1
Total Solids	69.6	0.0333	0.100	%		2540 G-2	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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The reported analytical results relate only to the sample submitted
Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681427-01 (PH) - 6.6@19.6c

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Fax (615) 758-5859

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681427-02

Date Received : January 22, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 1-SB-B 4-5FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/20/14 10:45

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	0.91	0.26	1.1	mg/kg		7199	02/11/14	1
ORP	130			mV		2580 B-2	02/12/14	1
pH	8.4			su		9045D	02/06/14	1
Total Solids	91.0	0.0333	0.100	%		2540 G-2	01/23/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681427-02 (PH) - 8.4@19.2c

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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681427-03

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-B 6-7FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/16/14 09:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	1.2	0.26	1.4	mg/kg		7199	02/11/14	1
ORP	110			mV		2580 B-2	02/12/14	1
pH	7.3			su		9045D	02/06/14	1
Total Solids	72.6	0.0333	0.100	%		2540 G-2	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681427-03 (PH) - 7.3@19.8c

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681427-04

Date Received : January 17, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-SB-C 6-7FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/16/14 09:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	2.0	0.26	1.8	mg/kg		7199	02/11/14	1
ORP	120			mV		2580 B-2	02/12/14	1
pH	6.9			su		9045D	02/06/14	1
Total Solids	54.8	0.0333	0.100	%		2540 G-2	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681427-04 (PH) - 6.9@18.5c

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681427-05

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 6-SB-B 1FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 14:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	1.2	0.26	1.2	mg/kg	J	7199	02/11/14	1
ORP	170			mV		2580 B-2	02/12/14	1
pH	4.6			su		9045D	02/06/14	1
Total Solids	80.6	0.0333	0.100	%		2540 G-2	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681427-05 (PH) - 4.6@18.3c

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Fax (615) 758-5859

Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681427-06

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-4 1FT

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 15:15

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	1.4	0.26	1.2	mg/kg		7199	02/11/14	1
ORP	190			mV		2580 B-2	02/12/14	1
pH	4.9			su	J3	9045D	02/06/14	1
Total Solids	80.6	0.0333	0.100	%		2540 G-2	01/18/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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The reported analytical results relate only to the sample submitted
Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681427-06 (PH) - 4.9@18.3c

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681427-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 9HA-B 6-12IN

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/17/14 08:40

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	1.3	0.26	1.2	mg/kg		7199	02/11/14	1
ORP	180			mV		2580 B-2	02/12/14	1
pH	8.3			su	T8	9045D	02/08/14	1
Total Solids	83.3	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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The reported analytical results relate only to the sample submitted
Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681427-07 (PH) - 8.3@21.5c

12065 Lebanon Rd.
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1-800-767-5859
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 12,2014

ESC Sample # : L681427-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-C

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/16/14 17:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Hexavalent Chromium	0.30	0.26	1.2	mg/kg		7199	02/11/14	1
ORP	160			mV		2580 B-2	02/12/14	1
pH	8.3			su	T8	9045D	02/08/14	1
Total Solids	83.8	0.0333	0.100	%		2540 G-2	01/22/14	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 02/12/14 17:22 Printed: 02/12/14 17:22
L681427-08 (PH) - 8.3@20.9c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L681427-05	WG705610	SAMP	Hexavalent Chromium	R2884007	J
L681427-06	WG704943	SAMP	pH	R2882602	J3
L681427-07	WG705399	SAMP	pH	R2883403	T8
L681427-08	WG705399	SAMP	pH	R2883403	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/12/14 at 17:22:29

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L681427-01 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 02/12/14 00:00 RPT Date: 02/12/14 17:22
Relogged from L679288-01
Sample: L681427-02 Account: DUNDUNNC Received: 01/22/14 09:30 Due Date: 02/12/14 00:00 RPT Date: 02/12/14 17:22
Relogged from L679288-01
Sample: L681427-03 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 02/12/14 00:00 RPT Date: 02/12/14 17:22
Relogged from L678609-01
Sample: L681427-04 Account: DUNDUNNC Received: 01/17/14 09:30 Due Date: 02/12/14 00:00 RPT Date: 02/12/14 17:22
Relogged from L678609-02
Sample: L681427-05 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 02/12/14 00:00 RPT Date: 02/12/14 17:22
Relogged from L678497-07
Sample: L681427-06 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 02/12/14 00:00 RPT Date: 02/12/14 17:22
Relogged from L678497-11
Sample: L681427-07 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/12/14 00:00 RPT Date: 02/12/14 17:22
Relogged from L678897-02
Sample: L681427-08 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 02/12/14 00:00 RPT Date: 02/12/14 17:22
Relogged from L678898-07

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Mt. Juliet, TN 37122
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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L681427

February 12, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG701954	01/18/14 08:02
Total Solids	< .1	%			WG701953	01/18/14 08:11
Total Solids	< .1	%			WG702085	01/18/14 08:54
Total Solids	< .1	%			WG702527	01/22/14 08:42
Total Solids	< .1	%			WG702817	01/23/14 07:36
Hexavalent Chromium	< 1	mg/kg			WG705610	02/11/14 13:16

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	86.4	84.6	2.20	5	L678399-01	WG701954
Total Solids	%	90.8	91.3	0.572	5	L678497-01	WG701953
Total Solids	%	83.7	87.9	4.95	5	L678615-02	WG702085
Total Solids	%	76.9	76.6	0.331	5	L678902-01	WG702527
Total Solids	%	81.2	81.1	0.167	5	L679297-01	WG702817
pH	su	7.50	7.50	0.535	1	L681261-01	WG704943
pH	su	5.00	4.90	2.42*	1	L681427-06	WG704943
pH	su	12.0	12.0	2.47*	1	L681215-01	WG705399
pH	su	7.00	7.00	0.573	1	L681920-01	WG705399
Hexavalent Chromium	mg/kg	2.20	2.20	0.905	20	L681427-01	WG705610
Hexavalent Chromium	mg/kg	1.70	1.70	0.590	20	L681666-02	WG705610
ORP	mV	120.	120.	1.65	20	L681427-01	WG705707
ORP	mV	130.	130.	0.0	20	L682047-01	WG705707

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	49.9	99.8	85-115	WG701954
Total Solids	%	50	50.1	100.	85-115	WG701953

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L681427

February 12, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	49.9	99.8	85-115	WG702085
Total Solids	%	50	50.0	100.	85-115	WG702527
Total Solids	%	50	50.0	100.	85-115	WG702817
pH	su	5.93	6.00	101.	98.3-101.7	WG704943
pH	su	5.93	5.90	99.5	98.3-101.7	WG705399
Hexavalent Chromium	mg/kg	125	130.	104.	90-110	WG705610
ORP	mV	100	110.	110.	90-110	WG705707

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
pH	su	6.00	6.00	101.	98.3-101.7	0.0	20	WG704943
pH	su	5.90	5.90	99.0	98.3-101.7	0.0	20	WG705399
Hexavalent Chromium	mg/kg	130.	130.	104.	90-110	0.0	20	WG705610
ORP	mV	110.	110.	110.	90-110	0.0	20	WG705707

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Hexavalent Chromium	mg/kg	22.0	0.830	20	100.	75-125	L681427-02	WG705610

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Hexavalent Chromium	mg/kg	22.0	22.0	106.	75-125	0.0	20	L681427-02	WG705610

Post Spike

Batch number /Run number / Sample number cross reference

WG701954: R2877362: L681427-06
WG701953: R2877364: L681427-05
WG702085: R2877378: L681427-03 04
WG702527: R2878260: L681427-07 08
WG702817: R2878680: L681427-01 02
WG704943: R2882602: L681427-01 02 03 04 05 06
WG705399: R2883403: L681427-07 08

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L681427

February 12, 2014

WG705610: R2884007: L681427-01 02 03 04 05 06 07 08
WG705707: R2884087: L681427-01 02 03 04 05 06 07 08

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L681427

February 12, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project # 201336

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

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Phone: 800-767-5859
Fax: 615-758-5859

L# 1675288
T 1205
L631427
Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
1-SB-A (9.5-10.5')	G	SS	9.5-10.5	1/20/14	1000	6	X	X	X								-01	01
1-SB-B (4-5')	↓	↓	4-5'	↓	1045	↓	X	X	X								-02	02
1-SB-C (5.5-6')	↓	↓	5.5-6'	↓	1105	↓	X	X	X									03
EB-5	N/A	W	N/A	↓	1115	15	X	X	X									04
1-SB-D (4-5')	G	SS	4-5'	↓	1135	↓	X	X	X									05
1-SB-E (3-4')	↓	↓	3-4'	↓	1200	↓	X	X	X									06
1-SB-F (11-12')	↓	↓	11-12'	↓	1345	↓	X	X	X									07
1-SB-G (	↓		7-8'	1/21/14	0900	6	X	X	X									08
Trip Blank	N/A	W	N/A	→	→	2	X											09

MT

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Flow _____ Other _____

Remarks: No TICs on EB or TB

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Daphne Jones	1/21/14	12:30	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/21/14	17:20	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SW

Temp: 3.6 °C Bottles Received: 63

Date: 1-22-14 Time: 0930

Hold #

Condition: (lab use only) JV

COC Seal Intact: ___Y ___N ___NA

pH Checked: 4.2

NCF: X

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project # 201336

Lab Project #

Collected by (print): Daphne Jones

Site/Facility ID #

P.O. #

Collected by (signature): Daphne M Jones

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 day maximum

Email? ___ No X Yes
FAX? X No ___ Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
5-SB-B(6-7')	G	SS	6-7'	1/16/14	0900	7	X	X	X		X						-03	-01
5-SB-C (6-7')	↓	↓	6-7'	↓	0940	7	↓	↓	↓		↓						-04	-02
5-SB-D (5-6')			5-6'		1110	7												-03
5-SB-E (7-8')					1210	7												-04
5-SB-D 10.5-11.5	G	SS	10.5-11.5	1/16/14	1400	4		X	X		X							-05
Trip blank						1												-06

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Daphne M Jones	1/16/14	17:20	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/16/14	18:00	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA

Temp: 3.2 °C Bottles Received: 32 + TB

Date: 1/17/14 Time: 0930

Hold #

Condition: (lab use only) TD OK

COC Seal Intact: ✓ Y ___ N ___ NA

pH Checked: NCF:

Chain of Custody Page 1 of 1

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Phone: 800-767-5859
Fax: 615-758-5859

L# ~~L678667~~ M
T D037 L681627
Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID #

P.O. #

Collected by (signature): [signature]
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max.
Email? ___No X Yes
FAX? ___No X ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L678497
C128
L681427

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
13-SB-J (8-9')	G	SS	8-9'	1/15/14	0820	9	X	X				X	X	X	X			-01
13-SB-K (8-9')			8-9'		0840													02
13-SB-L (7-8')			7-8'		0930													03
13-SB-M (1-2'			1-2'		1030													04
13-SB-N (7-8')			7-8'		1045													05
6-SB-A (1')			1'		1440	1			X									06
6-SB-B (1')			1'		1450												-05	07
6-SB-C (1')			1'		1500													08
6-SB-D (1')			1'		1510													09
6-SB-E (1')			1'		1520													10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

Remarks: Run TPH DRO/GRO 1st w/in 5 days. Then if results ≥10mg/kg run VOCs/SVOCs/EPH/VPH (Hold until then)

pH ___ Temp ___
Flow ___ Other ___

Page 1 of 2

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/15/14	17:30	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/15/14	18:11	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ [illegible]

Temp: 3.1 °C Bottles Received: 59

Date: 1-16-14 Time: 1445

Hold #

Condition: (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

L681427

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project # 201336

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 day max

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH	Rem./Contaminant	Sample # (lab only)
DUP-4 (1')	G	SS	1'	1/15/14	1515	1			X							06	-11
5-SB-A (12')	↓	↓	12'	↓	1650	6	X	X	X								-12
5-SB-A (17')	↓	↓	17'	↓	1700	1	~~X~~	~~X~~	~~X~~		X						-13
TB-1	N/A	W	N/A	1/15/14	N/A	1	X										-14

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Page 2 of 2

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	1/15/14	17:30	[signature]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/15/14	18:11	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA

Temp: 3.1 °C Bottles Received: 59

Date: 1-16-14 Time: 1445

Chain of Custody Page 2 of 2

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L678497

Table #

Acctnum: DUNDUNNC

Template:

Prelogin:

TSR: Hunt

Cooler:

Shipped Via: Raleigh Serv

Hold #

Condition: (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project #: 201336

Lab Project #:

Collected by (print): Phillip Jones

Site/Facility ID #:

P.O. #:

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ... 200%
___ Next Day ... 100%
___ Two Day ... 50%
___ Three Day ... 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LAB SCIENCES
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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 675591N
C163
L681427

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	Herbicides x 8151B	Organophosphate Pesticides x 8141B				Rem/Contaminant	Sample # (lab only)
9HA-A (6-12")	G	SS	6-12"	1/17/14	0815	2			X		X							-01
9HA-B (6-12")					0840				X		X						07	-02
9HA-C (6-12")					0905				X		X							-03
9HA-D (6-8")			G-8"		0940				X		X							-04
9HA-E (6-8")					0955				X		X							-05
EB-3		OT			1010	3			X		X							-06
DUP-3 (6-8")		SS	G-12"		0915	2			X		X							-07
~~TRIP BLANK~~		OT				1	X										NO TICs	

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other DI water (Lab)

Remarks: NO TICs on duplicates

pH ___ Temp ___
Flow ___ Other ___

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ Swift
[signature]	1/17/14	17:15	[signature]	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1 °C Bottles Received: 15
[signature]	1/17/14	17:55	[signature]	Date: 1-18-14 Time: @1430

Hold #
Condition: OK (lab use only)
COC Seal Intact: ___Y ___N ___NA
pH Checked: <2
NCF:

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project #: 201336

Lab Project #:

Collected by (print): Daphne Jones

Site/Facility ID #:

P.O. #:

Collected by (signature): Daphne M Jones

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___ No X Yes
FAX? X No ___ Yes

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# ~~L706540~~ N

C164
L681427

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH	Rem./Contaminant	Sample # (lab only)
21-SW-A	G	SW	N/A	1/16/14	1615	7	X	X	X	X	X						~~01~~
21-SED-A	↓	SED	↓	↓	1625	7	↓	↓	↓	↓	↓						~~02~~
21-SW-B	↓	SW	↓	↓	1645	7	↓	↓	↓	↓	↓						~~03~~
DUP-SW	↓	SW	↓	↓	1650	7	↓	↓	↓	↓	↓						~~04~~
21-SED-B	↓	SED	↓	↓	1700	7	↓	↓	↓	↓	↓						~~05~~
21-SW-C	↓	SW	↓	↓	1740	7	↓	↓	↓	↓	↓						~~06~~
21-SED-C	↓	SED	↓	↓	1750	7	↓	↓	↓	↓	↓					08	~~07~~
SED EQUIP. BLANK	N/A	Lab water	↓	↓	1715	7	↓	↓	↓	↓	↓						~~09~~
TRIP BLANK	↓	↓	↓	↓	NA	1	X										~~04~~
						126											

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other SW surface water SED Sediment

Remarks: NO TICs for Equip Blank

pH ___ Temp ___
Flow ___ Other ___

Hold #:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Daphne M Jones	1/17/14	12:50	[signature]
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
[signature]	1/17/14	17:55	[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA

Temp: 3.1 °C Bottles Received: 58

Date: 1-18-14 Time: 1430

Condition: (01) (lab use only)

COC Seal Intact: ___ Y ___ N ___ NA

pH Checked: <2 NCF:

Andy Vann

From: Jimmy Hunt
Sent: Wednesday, February 05, 2014 1:02 PM
To: Login
Subject: FW: Additional Hexavalent Chromium Analyses

Please log the 8 samples below from DUNDUNNC for CR6IC and TS. Move the TS results from the original sample to the new sample number. Put all 8 samples on the same login number. Make these R5 due 2/12.

Thanks,
Jimmy

From: Daphne Jones [mailto:daphne@dunckleedunham.com]
Sent: Wednesday, February 05, 2014 12:42 PM
To: Jimmy Hunt
Subject: Additional Hexavalent Chromium Analyses

Jimmy: Here are the remaining samples we want tested for hex chrome based on the total Cr results we from the remaining soil /sediment samples. Test by Method 7199 again. You can set these up on a separate chain of custody.

Thanks, Daphne

Area No.	Pace lab number	Our sample number (to double check)
1	L679288-01	1-SB-A (9.5 – 10.5')
	L679288-02	1-SB-B (4-5')
5	L678609-02	5-SB-B (6-7')
	L678609-02	5-SB-C (6-7')
6	L678497-07	6-SB-B (1')
	L678497-11	DUP-4 (1')
9	L678897-02	9HA-B(6-12")
21	L678898-07	21-SED-C
		8 total

Daphne M. Jones, P.G., R.S.M.
Senior Geologist
511 Keisler Drive, Suite 102
Cary, North Carolina 27518
Mobile: 919-271-3251
Office: 919-858-9898 x207
www.dunckleedunham.com

DUNCKLEE & DUNHAM
ENVIRONMENTAL CONSULTING & ENGINEERING

A Professional Geologic and Engineering Corporation

Divider
Page

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Mt. Juliet, TN 37122
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Monday January 27, 2014

Report Number: L678898
Samples Received: 01/18/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.40	0.21	1.0	ug/l	J	6020	01/22/14	1
Arsenic	1.0	0.25	1.0	ug/l		6020	01/21/14	1
Lead	1.9	0.24	1.0	ug/l		6020	01/21/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/21/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/21/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/20/14	1
Cadmium	1.2	0.70	5.0	ug/l	J	6010C	01/20/14	1
Chromium	U	1.4	10.	ug/l		6010C	01/20/14	1
Copper	U	5.3	20.	ug/l		6010C	01/20/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/20/14	1
Selenium	U	7.4	20.	ug/l		6010C	01/20/14	1
Silver	U	2.8	10.	ug/l		6010C	01/20/14	1
Zinc	18.	5.9	30.	ug/l	J	6010C	01/20/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/22/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/22/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/22/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/22/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/22/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/22/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/22/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/22/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/22/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/22/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/22/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/22/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/22/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/22/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/22/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 01/27/14 13:00 Printed: 01/27/14 13:02

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Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/22/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/22/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/22/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/22/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/22/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/22/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/22/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/22/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/22/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/22/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/22/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/22/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/22/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/22/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/22/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/22/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/22/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/22/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/22/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/22/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/22/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	01/22/14	1
Dibromofluoromethane	93.3			% Rec.		8260B	01/22/14	1
a,a,a-Trifluorotoluene	97.7			% Rec.		8260B	01/22/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	99.6			% Rec.		8260B	01/22/14	1
Pesticide/PCBs								
Aldrin	U	0.0081	0.050	ug/l		8081A/8	01/23/14	1
Alpha BHC	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Beta BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Delta BHC	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Gamma BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Chlordane	U	0.098	0.50	ug/l		8081A/8	01/23/14	1
4,4-DDD	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDE	U	0.016	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDT	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Dieldrin	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan I	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan II	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan sulfate	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Endrin	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Endrin aldehyde	U	0.014	0.050	ug/l		8081A/8	01/23/14	1
Endrin ketone	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor	U	0.011	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor epoxide	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Hexachlorobenzene	U	0.013	0.050	ug/l		8081A/8	01/23/14	1
Methoxychlor	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Toxaphene	U	0.17	0.50	ug/l		8081A/8	01/23/14	1
PCB 1016	U	0.020	0.50	ug/l		8081A/8	01/23/14	1
PCB 1221	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1232	U	0.021	0.50	ug/l		8081A/8	01/23/14	1
PCB 1242	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1248	U	0.014	0.50	ug/l		8081A/8	01/23/14	1
PCB 1254	U	0.018	0.50	ug/l		8081A/8	01/23/14	1
PCB 1260	U	0.015	0.50	ug/l		8081A/8	01/23/14	1
Pest/PCBs Surrogates								
Decachlorobiphenyl	84.3			% Rec.		8081A/8	01/23/14	1
Tetrachloro-m-xylene	88.0			% Rec.		8081A/8	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	01/21/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	01/21/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	01/21/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	01/21/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	01/21/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	01/21/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	01/21/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	01/21/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	01/21/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	01/21/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	01/21/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	01/21/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	01/21/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	01/21/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	01/21/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	01/21/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	01/21/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	01/21/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	01/21/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	01/21/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	01/21/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	01/21/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	01/21/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	01/21/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	01/21/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	01/21/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	01/21/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	01/21/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	01/21/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	01/21/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	01/21/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	01/21/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	01/21/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	01/21/14	1
Bis(2-ethylhexyl)phthalate	1.2	0.71	3.0	ug/l	J	8270 D	01/21/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	01/21/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/21/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/21/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	01/21/14	1
Pyrene	U	0.33	1.0	ug/l		8270 D	01/21/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	01/21/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	01/21/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	01/21/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	01/21/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	01/21/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	01/21/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	01/21/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-01

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	01/21/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	01/21/14	1
Phenol	U	0.33	10.	ug/l		8270 D	01/21/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	01/21/14	1
Surrogate Recovery								
2-Fluorophenol	30.7			% Rec.		8270 D	01/21/14	1
Phenol-d5	20.3			% Rec.		8270 D	01/21/14	1
Nitrobenzene-d5	57.2			% Rec.		8270 D	01/21/14	1
2-Fluorobiphenyl	59.9			% Rec.		8270 D	01/21/14	1
2,4,6-Tribromophenol	59.5			% Rec.		8270 D	01/21/14	1
p-Terphenyl-d14	61.6			% Rec.		8270 D	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	75.4	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.0045	0.0014	0.026	mg/kg	J	7471	01/22/14	1
Antimony	U	0.38	1.3	mg/kg		6010C	01/26/14	1
Arsenic	2.5	0.32	1.3	mg/kg		6010C	01/23/14	1
Beryllium	0.16	0.035	0.13	mg/kg		6010C	01/23/14	1
Cadmium	0.13	0.035	0.33	mg/kg	J	6010C	01/23/14	1
Chromium	6.0	0.070	0.66	mg/kg		6010C	01/23/14	1
Copper	16.	0.26	1.3	mg/kg		6010C	01/23/14	1
Lead	4.6	0.095	0.33	mg/kg		6010C	01/23/14	1
Nickel	3.2	0.24	1.3	mg/kg		6010C	01/23/14	1
Selenium	U	0.37	1.3	mg/kg		6010C	01/23/14	1
Silver	U	0.14	0.66	mg/kg		6010C	01/23/14	1
Thallium	U	0.32	1.3	mg/kg		6010C	01/23/14	1
Zinc	18.	0.30	2.0	mg/kg		6010C	01/23/14	1
Volatile Organics								
Acetone	U	0.010	0.066	mg/kg		8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.013	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0013	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0066	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0013	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0013	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0066	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.066	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0066	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0033	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0066	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0066	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.013	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0066	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.013	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0066	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0066	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0013	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0013	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0066	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0033	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0040	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	97.8			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	93.7			% Rec.		8260B	01/21/14	1

Results listed are dry weight basis.
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	94.9			% Rec.		8260B	01/21/14	1
Pesticide/PCBs								
Aldrin	U	0.0014	0.026	mg/kg		8081/808	01/24/14	1
Alpha BHC	U	0.0014	0.026	mg/kg		8081/808	01/24/14	1
Beta BHC	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Delta BHC	U	0.0014	0.026	mg/kg		8081/808	01/24/14	1
Gamma BHC	U	0.0014	0.026	mg/kg		8081/808	01/24/14	1
Chlordane	U	0.039	0.26	mg/kg		8081/808	01/24/14	1
4,4-DDD	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
4,4-DDE	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
4,4-DDT	U	0.0020	0.026	mg/kg		8081/808	01/24/14	1
Dieldrin	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
Endosulfan I	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
Endosulfan II	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Endosulfan sulfate	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
Endrin	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Endrin aldehyde	U	0.0013	0.026	mg/kg		8081/808	01/24/14	1
Endrin ketone	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Heptachlor	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
Heptachlor epoxide	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Hexachlorobenzene	U	0.0012	0.026	mg/kg		8081/808	01/24/14	1
Methoxychlor	U	0.0018	0.026	mg/kg		8081/808	01/24/14	1
Toxaphene	U	0.036	0.53	mg/kg		8081/808	01/24/14	1
PCB 1016	U	0.0035	0.022	mg/kg		8081/808	01/24/14	1
PCB 1221	U	0.0054	0.022	mg/kg		8081/808	01/24/14	1
PCB 1232	U	0.0042	0.022	mg/kg		8081/808	01/24/14	1
PCB 1242	U	0.0032	0.022	mg/kg		8081/808	01/24/14	1
PCB 1248	U	0.0032	0.022	mg/kg		8081/808	01/24/14	1
PCB 1254	U	0.0047	0.022	mg/kg		8081/808	01/24/14	1
PCB 1260	U	0.0049	0.022	mg/kg		8081/808	01/24/14	1
Pest/PCBs Surrogates								
Decachlorobiphenyl	67.9			% Rec.		8081/808	01/24/14	1
Tetrachloro-m-xylene	91.3			% Rec.		8081/808	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.13	0.88	mg/kg	O	8270D	01/23/14	20
Acenaphthylene	U	0.13	0.88	mg/kg	O	8270D	01/23/14	20
Anthracene	U	0.13	0.88	mg/kg	O	8270D	01/23/14	20
Benzidine	U	1.3	8.8	mg/kg	OJ	8270D	01/23/14	20
Benzo(a)anthracene	U	0.086	0.88	mg/kg	O	8270D	01/23/14	20
Benzo(b)fluoranthene	U	0.14	0.88	mg/kg	O	8270D	01/23/14	20
Benzo(k)fluoranthene	U	0.12	0.88	mg/kg	O	8270D	01/23/14	20

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.14	0.88	mg/kg	O	8270D	01/23/14	20
Benzo(a)pyrene	U	0.11	0.88	mg/kg	O	8270D	01/23/14	20
Bis(2-chlorethoxy)methane	U	0.15	8.8	mg/kg	O	8270D	01/23/14	20
Bis(2-chloroethyl)ether	U	0.18	8.8	mg/kg	O	8270D	01/23/14	20
Bis(2-chloroisopropyl)ether	U	0.15	8.8	mg/kg	O	8270D	01/23/14	20
4-Bromophenyl-phenylether	U	0.23	8.8	mg/kg	O	8270D	01/23/14	20
2-Chloronaphthalene	U	0.13	0.88	mg/kg	O	8270D	01/23/14	20
4-Chlorophenyl-phenylether	U	0.12	8.8	mg/kg	O	8270D	01/23/14	20
Chrysene	U	0.11	0.88	mg/kg	O	8270D	01/23/14	20
Dibenz(a,h)anthracene	U	0.16	0.88	mg/kg	O	8270D	01/23/14	20
3,3-Dichlorobenzidine	U	1.6	8.8	mg/kg	O	8270D	01/23/14	20
2,4-Dinitrotoluene	U	0.12	8.8	mg/kg	O	8270D	01/23/14	20
2,6-Dinitrotoluene	U	0.15	8.8	mg/kg	O	8270D	01/23/14	20
Fluoranthene	U	0.099	0.88	mg/kg	O	8270D	01/23/14	20
Fluorene	U	0.14	0.88	mg/kg	O	8270D	01/23/14	20
Hexachlorobenzene	U	0.17	8.8	mg/kg	O	8270D	01/23/14	20
Hexachloro-1,3-butadiene	U	0.20	8.8	mg/kg	O	8270D	01/23/14	20
Hexachlorocyclopentadiene	U	1.2	8.8	mg/kg	O	8270D	01/23/14	20
Hexachloroethane	U	0.27	8.8	mg/kg	O	8270D	01/23/14	20
Indeno(1,2,3-cd)pyrene	U	0.15	0.88	mg/kg	O	8270D	01/23/14	20
Isophorone	U	0.10	8.8	mg/kg	O	8270D	01/23/14	20
Naphthalene	U	0.18	0.88	mg/kg	O	8270D	01/23/14	20
Nitrobenzene	U	0.14	8.8	mg/kg	O	8270D	01/23/14	20
n-Nitrosodimethylamine	U	1.3	8.8	mg/kg	O	8270D	01/23/14	20
n-Nitrosodiphenylamine	U	0.12	8.8	mg/kg	O	8270D	01/23/14	20
n-Nitrosodi-n-propylamine	U	0.18	8.8	mg/kg	O	8270D	01/23/14	20
Phenanthrene	U	0.10	0.88	mg/kg	O	8270D	01/23/14	20
Benzylbutyl phthalate	U	0.21	8.8	mg/kg	O	8270D	01/23/14	20
Bis(2-ethylhexyl)phthalate	U	0.24	8.8	mg/kg	O	8270D	01/23/14	20
Di-n-butyl phthalate	U	0.22	8.8	mg/kg	O	8270D	01/23/14	20
Diethyl phthalate	U	0.14	8.8	mg/kg	O	8270D	01/23/14	20
Dimethyl phthalate	U	0.11	8.8	mg/kg	O	8270D	01/23/14	20
Di-n-octyl phthalate	U	0.18	8.8	mg/kg	O	8270D	01/23/14	20
Pyrene	U	0.25	0.88	mg/kg	O	8270D	01/23/14	20
1,2,4-Trichlorobenzene	U	0.18	8.8	mg/kg	O	8270D	01/23/14	20
Acid Extractables								
4-Chloro-3-methylphenol	U	0.095	8.8	mg/kg	O	8270D	01/23/14	20
2-Chlorophenol	U	0.17	8.8	mg/kg	O	8270D	01/23/14	20
2,4-Dichlorophenol	U	0.15	8.8	mg/kg	O	8270D	01/23/14	20
2,4-Dimethylphenol	U	0.94	8.8	mg/kg	O	8270D	01/23/14	20
4,6-Dinitro-2-methylphenol	U	2.5	8.8	mg/kg	O	8270D	01/23/14	20
2,4-Dinitrophenol	U	2.0	8.8	mg/kg	O	8270D	01/23/14	20
2-Nitrophenol	U	0.26	8.8	mg/kg	O	8270D	01/23/14	20

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-02

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-A

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:25

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Nitrophenol	U	1.0	8.8	mg/kg	O	8270D	01/23/14	20
Pentachlorophenol	U	0.96	8.8	mg/kg	O	8270D	01/23/14	20
Phenol	U	0.14	8.8	mg/kg	O	8270D	01/23/14	20
2,4,6-Trichlorophenol	U	0.16	8.8	mg/kg	O	8270D	01/23/14	20
Surrogate Recovery								
2-Fluorophenol	74.0			% Rec.	J7	8270D	01/23/14	20
Phenol-d5	78.2			% Rec.	J7	8270D	01/23/14	20
Nitrobenzene-d5	72.9			% Rec.	J7	8270D	01/23/14	20
2-Fluorobiphenyl	69.6			% Rec.	J7	8270D	01/23/14	20
2,4,6-Tribromophenol	100.			% Rec.	J7	8270D	01/23/14	20
p-Terphenyl-d14	57.7			% Rec.	J7	8270D	01/23/14	20

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January 27, 2014

ESC Sample # : L678898-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-B

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.40	0.21	1.0	ug/l	J	6020	01/22/14	1
Arsenic	0.82	0.25	1.0	ug/l	J	6020	01/21/14	1
Lead	1.3	0.24	1.0	ug/l		6020	01/21/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/21/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/21/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/21/14	1
Cadmium	3.0	0.70	5.0	ug/l	J	6010C	01/21/14	1
Chromium	U	1.4	10.	ug/l		6010C	01/21/14	1
Copper	U	5.3	20.	ug/l		6010C	01/21/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/21/14	1
Selenium	U	7.4	20.	ug/l		6010C	01/21/14	1
Silver	U	2.8	10.	ug/l		6010C	01/21/14	1
Zinc	13.	5.9	30.	ug/l	J	6010C	01/21/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/22/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/22/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/22/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/22/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/22/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/22/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/22/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/22/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/22/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/22/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/22/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/22/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/22/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/22/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-B

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/22/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/22/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/22/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/22/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/22/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/22/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/22/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/22/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/22/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/22/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/22/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/22/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/22/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/22/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/22/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/22/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/22/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/22/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/22/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/22/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/22/14	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	01/22/14	1
Dibromofluoromethane	91.4			% Rec.		8260B	01/22/14	1
a,a,a-Trifluorotoluene	97.8			% Rec.		8260B	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-B

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	96.4			% Rec.		8260B	01/22/14	1
Pesticide/PCBs								
Aldrin	U	0.0081	0.050	ug/l		8081A/8	01/23/14	1
Alpha BHC	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Beta BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Delta BHC	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Gamma BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Chlordane	U	0.098	0.50	ug/l		8081A/8	01/23/14	1
4,4-DDD	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDE	U	0.016	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDT	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Dieldrin	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan I	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan II	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan sulfate	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Endrin	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Endrin aldehyde	U	0.014	0.050	ug/l		8081A/8	01/23/14	1
Endrin ketone	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor	U	0.011	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor epoxide	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Hexachlorobenzene	U	0.013	0.050	ug/l		8081A/8	01/23/14	1
Methoxychlor	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Toxaphene	U	0.17	0.50	ug/l		8081A/8	01/23/14	1
PCB 1016	U	0.020	0.50	ug/l		8081A/8	01/23/14	1
PCB 1221	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1232	U	0.021	0.50	ug/l		8081A/8	01/23/14	1
PCB 1242	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1248	U	0.014	0.50	ug/l		8081A/8	01/23/14	1
PCB 1254	U	0.018	0.50	ug/l		8081A/8	01/23/14	1
PCB 1260	U	0.015	0.50	ug/l		8081A/8	01/23/14	1
Pest/PCBs Surrogates								
Decachlorobiphenyl	84.8			% Rec.		8081A/8	01/23/14	1
Tetrachloro-m-xylene	87.1			% Rec.		8081A/8	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	01/22/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	01/22/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	01/22/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	01/22/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	01/22/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-B

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	01/22/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	01/22/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	01/22/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	01/22/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	01/22/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	01/22/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	01/22/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	01/22/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	01/22/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	01/22/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	01/22/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	01/22/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	01/22/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	01/22/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	01/22/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	01/22/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	01/22/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Bis(2-ethylhexyl)phthalate	1.3	0.71	3.0	ug/l	J	8270 D	01/22/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	01/22/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	01/22/14	1
Pyrene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	01/22/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	01/22/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	01/22/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	01/22/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	01/22/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-03

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-B

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	01/22/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	01/22/14	1
Phenol	U	0.33	10.	ug/l		8270 D	01/22/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	32.4			% Rec.		8270 D	01/22/14	1
Phenol-d5	19.6			% Rec.		8270 D	01/22/14	1
Nitrobenzene-d5	47.4			% Rec.		8270 D	01/22/14	1
2-Fluorobiphenyl	50.1			% Rec.		8270 D	01/22/14	1
2,4,6-Tribromophenol	61.7			% Rec.		8270 D	01/22/14	1
p-Terphenyl-d14	57.9			% Rec.		8270 D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-SW

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:50

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.36	0.21	1.0	ug/l	J	6020	01/22/14	1
Arsenic	0.62	0.25	1.0	ug/l	J	6020	01/21/14	1
Lead	2.0	0.24	1.0	ug/l		6020	01/21/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/21/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/21/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/20/14	1
Cadmium	1.8	0.70	5.0	ug/l	J	6010C	01/20/14	1
Chromium	U	1.4	10.	ug/l		6010C	01/20/14	1
Copper	U	5.3	20.	ug/l		6010C	01/20/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/20/14	1
Selenium	U	7.4	20.	ug/l		6010C	01/20/14	1
Silver	U	2.8	10.	ug/l		6010C	01/20/14	1
Zinc	6.2	5.9	30.	ug/l	J	6010C	01/20/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/22/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/22/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/22/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/22/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/22/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/22/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/22/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/22/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/22/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/22/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/22/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/22/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/22/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/22/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-SW

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:50

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/22/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/22/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/22/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/22/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/22/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/22/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/22/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/22/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/22/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/22/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/22/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/22/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/22/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/22/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/22/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/22/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/22/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/22/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/22/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/22/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/22/14	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	01/22/14	1
Dibromofluoromethane	93.9			% Rec.		8260B	01/22/14	1
a,a,a-Trifluorotoluene	97.9			% Rec.		8260B	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-SW

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:50

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	95.2			% Rec.		8260B	01/22/14	1
Pesticide/PCBs								
Aldrin	U	0.0081	0.050	ug/l		8081A/8	01/23/14	1
Alpha BHC	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Beta BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Delta BHC	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Gamma BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Chlordane	U	0.098	0.50	ug/l		8081A/8	01/23/14	1
4,4-DDD	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDE	U	0.016	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDT	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Dieldrin	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan I	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan II	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan sulfate	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Endrin	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Endrin aldehyde	U	0.014	0.050	ug/l		8081A/8	01/23/14	1
Endrin ketone	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor	U	0.011	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor epoxide	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Hexachlorobenzene	U	0.013	0.050	ug/l		8081A/8	01/23/14	1
Methoxychlor	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Toxaphene	U	0.17	0.50	ug/l		8081A/8	01/23/14	1
PCB 1016	U	0.020	0.50	ug/l		8081A/8	01/23/14	1
PCB 1221	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1232	U	0.021	0.50	ug/l		8081A/8	01/23/14	1
PCB 1242	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1248	U	0.014	0.50	ug/l		8081A/8	01/23/14	1
PCB 1254	U	0.018	0.50	ug/l		8081A/8	01/23/14	1
PCB 1260	U	0.015	0.50	ug/l		8081A/8	01/23/14	1
Pest/PCBs Surrogates								
Decachlorobiphenyl	79.9			% Rec.		8081A/8	01/23/14	1
Tetrachloro-m-xylene	82.9			% Rec.		8081A/8	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	01/22/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	01/22/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	01/22/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	01/22/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	01/22/14	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-SW

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:50

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	01/22/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	01/22/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	01/22/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	01/22/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	01/22/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	01/22/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	01/22/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	01/22/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	01/22/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	01/22/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	01/22/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	01/22/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	01/22/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	01/22/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	01/22/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	01/22/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	01/22/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Bis(2-ethylhexyl)phthalate	0.97	0.71	3.0	ug/l	J	8270 D	01/22/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	01/22/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	01/22/14	1
Pyrene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	01/22/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	01/22/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	01/22/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	01/22/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	01/22/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	01/22/14	1

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-04

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-SW

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 16:50

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	01/22/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	01/22/14	1
Phenol	U	0.33	10.	ug/l		8270 D	01/22/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	20.2			% Rec.		8270 D	01/22/14	1
Phenol-d5	13.7			% Rec.		8270 D	01/22/14	1
Nitrobenzene-d5	43.5			% Rec.		8270 D	01/22/14	1
2-Fluorobiphenyl	52.6			% Rec.		8270 D	01/22/14	1
2,4,6-Tribromophenol	27.8			% Rec.		8270 D	01/22/14	1
p-Terphenyl-d14	54.3			% Rec.		8270 D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-B

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	79.4	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.019	0.0014	0.025	mg/kg	J	7471	01/22/14	1
Antimony	U	0.38	1.2	mg/kg		6010C	01/26/14	1
Arsenic	5.0	0.32	1.2	mg/kg		6010C	01/23/14	1
Beryllium	0.58	0.035	0.12	mg/kg		6010C	01/23/14	1
Cadmium	0.14	0.035	0.31	mg/kg	J	6010C	01/23/14	1
Chromium	30.	0.070	0.63	mg/kg		6010C	01/23/14	1
Copper	12.	0.26	1.2	mg/kg		6010C	01/23/14	1
Lead	8.3	0.095	0.31	mg/kg		6010C	01/23/14	1
Nickel	4.2	0.24	1.2	mg/kg		6010C	01/23/14	1
Selenium	U	0.37	1.2	mg/kg		6010C	01/23/14	1
Silver	U	0.14	0.63	mg/kg		6010C	01/23/14	1
Thallium	U	0.32	1.2	mg/kg		6010C	01/23/14	1
Zinc	18.	0.30	1.9	mg/kg		6010C	01/23/14	1
Volatile Organics								
Acetone	0.016	0.010	0.063	mg/kg	J	8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.012	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0012	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0012	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0063	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0012	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0012	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0012	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0063	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.063	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0063	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0031	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0063	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0012	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0012	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0012	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-B

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0063	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0012	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0012	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0012	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0012	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0012	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0012	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0012	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0012	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.012	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0063	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.012	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0063	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0012	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0012	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0012	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0063	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0012	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0012	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0012	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0012	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0063	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0031	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0012	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0012	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0012	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0038	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	96.8			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	95.7			% Rec.		8260B	01/21/14	1

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January 27, 2014

ESC Sample # : L678898-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-B

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	94.5			% Rec.		8260B	01/21/14	1
Pesticide/PCBs								
Aldrin	U	0.0014	0.025	mg/kg		8081/808	01/24/14	1
Alpha BHC	U	0.0014	0.025	mg/kg		8081/808	01/24/14	1
Beta BHC	U	0.0016	0.025	mg/kg		8081/808	01/24/14	1
Delta BHC	U	0.0014	0.025	mg/kg		8081/808	01/24/14	1
Gamma BHC	U	0.0014	0.025	mg/kg		8081/808	01/24/14	1
Chlordane	U	0.039	0.25	mg/kg		8081/808	01/24/14	1
4,4-DDD	U	0.0016	0.025	mg/kg		8081/808	01/24/14	1
4,4-DDE	U	0.0015	0.025	mg/kg		8081/808	01/24/14	1
4,4-DDT	U	0.0020	0.025	mg/kg		8081/808	01/24/14	1
Dieldrin	U	0.0015	0.025	mg/kg		8081/808	01/24/14	1
Endosulfan I	U	0.0015	0.025	mg/kg		8081/808	01/24/14	1
Endosulfan II	U	0.0016	0.025	mg/kg		8081/808	01/24/14	1
Endosulfan sulfate	U	0.0015	0.025	mg/kg		8081/808	01/24/14	1
Endrin	U	0.0016	0.025	mg/kg		8081/808	01/24/14	1
Endrin aldehyde	U	0.0013	0.025	mg/kg		8081/808	01/24/14	1
Endrin ketone	U	0.0016	0.025	mg/kg		8081/808	01/24/14	1
Heptachlor	U	0.0015	0.025	mg/kg		8081/808	01/24/14	1
Heptachlor epoxide	U	0.0016	0.025	mg/kg		8081/808	01/24/14	1
Hexachlorobenzene	U	0.0012	0.025	mg/kg		8081/808	01/24/14	1
Methoxychlor	U	0.0018	0.025	mg/kg		8081/808	01/24/14	1
Toxaphene	U	0.036	0.50	mg/kg		8081/808	01/24/14	1
PCB 1016	U	0.0035	0.021	mg/kg		8081/808	01/24/14	1
PCB 1221	U	0.0054	0.021	mg/kg		8081/808	01/24/14	1
PCB 1232	U	0.0042	0.021	mg/kg		8081/808	01/24/14	1
PCB 1242	U	0.0032	0.021	mg/kg		8081/808	01/24/14	1
PCB 1248	U	0.0032	0.021	mg/kg		8081/808	01/24/14	1
PCB 1254	U	0.0047	0.021	mg/kg		8081/808	01/24/14	1
PCB 1260	U	0.0049	0.021	mg/kg		8081/808	01/24/14	1
Pest/PCBs Surrogates								
Decachlorobiphenyl	71.5			% Rec.		8081/808	01/24/14	1
Tetrachloro-m-xylene	92.2			% Rec.		8081/808	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.032	0.21	mg/kg	O	8270D	01/23/14	5
Acenaphthylene	U	0.034	0.21	mg/kg	O	8270D	01/23/14	5
Anthracene	U	0.032	0.21	mg/kg	O	8270D	01/23/14	5
Benzidine	U	0.32	2.1	mg/kg	O	8270D	01/23/14	5
Benzo(a)anthracene	U	0.021	0.21	mg/kg	O	8270D	01/23/14	5
Benzo(b)fluoranthene	U	0.035	0.21	mg/kg	O	8270D	01/23/14	5
Benzo(k)fluoranthene	U	0.029	0.21	mg/kg	O	8270D	01/23/14	5

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-05

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-B

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.036	0.21	mg/kg	O	8270D	01/23/14	5
Benzo(a)pyrene	U	0.027	0.21	mg/kg	O	8270D	01/23/14	5
Bis(2-chlorethoxy)methane	U	0.038	2.1	mg/kg	O	8270D	01/23/14	5
Bis(2-chloroethyl)ether	U	0.045	2.1	mg/kg	O	8270D	01/23/14	5
Bis(2-chloroisopropyl)ether	U	0.038	2.1	mg/kg	O	8270D	01/23/14	5
4-Bromophenyl-phenylether	U	0.057	2.1	mg/kg	O	8270D	01/23/14	5
2-Chloronaphthalene	U	0.032	0.21	mg/kg	O	8270D	01/23/14	5
4-Chlorophenyl-phenylether	U	0.031	2.1	mg/kg	O	8270D	01/23/14	5
Chrysene	U	0.028	0.21	mg/kg	O	8270D	01/23/14	5
Dibenz(a,h)anthracene	U	0.041	0.21	mg/kg	O	8270D	01/23/14	5
3,3-Dichlorobenzidine	U	0.40	2.1	mg/kg	O	8270D	01/23/14	5
2,4-Dinitrotoluene	U	0.030	2.1	mg/kg	O	8270D	01/23/14	5
2,6-Dinitrotoluene	U	0.037	2.1	mg/kg	O	8270D	01/23/14	5
Fluoranthene	U	0.025	0.21	mg/kg	O	8270D	01/23/14	5
Fluorene	U	0.034	0.21	mg/kg	O	8270D	01/23/14	5
Hexachlorobenzene	U	0.043	2.1	mg/kg	O	8270D	01/23/14	5
Hexachloro-1,3-butadiene	U	0.050	2.1	mg/kg	O	8270D	01/23/14	5
Hexachlorocyclopentadiene	U	0.29	2.1	mg/kg	O	8270D	01/23/14	5
Hexachloroethane	U	0.067	2.1	mg/kg	O	8270D	01/23/14	5
Indeno(1,2,3-cd)pyrene	U	0.039	0.21	mg/kg	O	8270D	01/23/14	5
Isophorone	U	0.026	2.1	mg/kg	O	8270D	01/23/14	5
Naphthalene	U	0.044	0.21	mg/kg	O	8270D	01/23/14	5
Nitrobenzene	U	0.035	2.1	mg/kg	O	8270D	01/23/14	5
n-Nitrosodimethylamine	U	0.32	2.1	mg/kg	O	8270D	01/23/14	5
n-Nitrosodiphenylamine	U	0.030	2.1	mg/kg	O	8270D	01/23/14	5
n-Nitrosodi-n-propylamine	U	0.045	2.1	mg/kg	O	8270D	01/23/14	5
Phenanthrene	U	0.026	0.21	mg/kg	O	8270D	01/23/14	5
Benzylbutyl phthalate	U	0.052	2.1	mg/kg	O	8270D	01/23/14	5
Bis(2-ethylhexyl)phthalate	U	0.060	2.1	mg/kg	O	8270D	01/23/14	5
Di-n-butyl phthalate	U	0.054	2.1	mg/kg	O	8270D	01/23/14	5
Diethyl phthalate	U	0.034	2.1	mg/kg	O	8270D	01/23/14	5
Dimethyl phthalate	U	0.027	2.1	mg/kg	O	8270D	01/23/14	5
Di-n-octyl phthalate	U	0.045	2.1	mg/kg	O	8270D	01/23/14	5
Pyrene	U	0.062	0.21	mg/kg	O	8270D	01/23/14	5
1,2,4-Trichlorobenzene	U	0.044	2.1	mg/kg	O	8270D	01/23/14	5
Acid Extractables								
4-Chloro-3-methylphenol	U	0.024	2.1	mg/kg	O	8270D	01/23/14	5
2-Chlorophenol	U	0.042	2.1	mg/kg	O	8270D	01/23/14	5
2,4-Dichlorophenol	U	0.037	2.1	mg/kg	O	8270D	01/23/14	5
2,4-Dimethylphenol	U	0.24	2.1	mg/kg	O	8270D	01/23/14	5
4,6-Dinitro-2-methylphenol	U	0.62	2.1	mg/kg	O	8270D	01/23/14	5
2,4-Dinitrophenol	U	0.49	2.1	mg/kg	O	8270D	01/23/14	5
2-Nitrophenol	U	0.065	2.1	mg/kg	O	8270D	01/23/14	5

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-05

Site ID : RALEIGH, NC

Project # : 201336

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Sample ID : 21-SED-B

Collected By : Daphne Jones
Collection Date : 01/16/14 17:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Nitrophenol	U	0.26	2.1	mg/kg	O	8270D	01/23/14	5
Pentachlorophenol	U	0.24	2.1	mg/kg	O	8270D	01/23/14	5
Phenol	U	0.035	2.1	mg/kg	O	8270D	01/23/14	5
2,4,6-Trichlorophenol	U	0.039	2.1	mg/kg	O	8270D	01/23/14	5
Surrogate Recovery								
2-Fluorophenol	53.1			% Rec.		8270D	01/23/14	5
Phenol-d5	54.8			% Rec.		8270D	01/23/14	5
Nitrobenzene-d5	51.9			% Rec.		8270D	01/23/14	5
2-Fluorobiphenyl	48.2			% Rec.		8270D	01/23/14	5
2,4,6-Tribromophenol	60.4			% Rec.		8270D	01/23/14	5
p-Terphenyl-d14	30.0			% Rec.		8270D	01/23/14	5

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.57	0.21	1.0	ug/l	J	6020	01/22/14	1
Arsenic	0.73	0.25	1.0	ug/l	J	6020	01/21/14	1
Lead	1.4	0.24	1.0	ug/l		6020	01/21/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/21/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/21/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/20/14	1
Cadmium	1.0	0.70	5.0	ug/l	J	6010C	01/20/14	1
Chromium	U	1.4	10.	ug/l		6010C	01/20/14	1
Copper	5.7	5.3	20.	ug/l	J	6010C	01/20/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/20/14	1
Selenium	12.	7.4	20.	ug/l	J	6010C	01/20/14	1
Silver	U	2.8	10.	ug/l		6010C	01/20/14	1
Zinc	41.	5.9	30.	ug/l		6010C	01/20/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/22/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/22/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/22/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/22/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/22/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/22/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/22/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/22/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/22/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/22/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/22/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/22/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/22/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/22/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/22/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/22/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/22/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/22/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/22/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/22/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/22/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/22/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/22/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/22/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/22/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/22/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/22/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/22/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/22/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/22/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/22/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/22/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/22/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/22/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/22/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	01/22/14	1
Dibromofluoromethane	95.0			% Rec.		8260B	01/22/14	1
a,a,a-Trifluorotoluene	98.7			% Rec.		8260B	01/22/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	101.			% Rec.		8260B	01/22/14	1
Pesticide/PCBs								
Aldrin	U	0.0081	0.050	ug/l		8081A/8	01/23/14	1
Alpha BHC	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Beta BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Delta BHC	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Gamma BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Chlordane	U	0.098	0.50	ug/l		8081A/8	01/23/14	1
4,4-DDD	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDE	U	0.016	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDT	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Dieldrin	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan I	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan II	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan sulfate	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Endrin	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Endrin aldehyde	U	0.014	0.050	ug/l		8081A/8	01/23/14	1
Endrin ketone	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor	U	0.011	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor epoxide	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Hexachlorobenzene	U	0.013	0.050	ug/l		8081A/8	01/23/14	1
Methoxychlor	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Toxaphene	U	0.17	0.50	ug/l		8081A/8	01/23/14	1
PCB 1016	U	0.020	0.50	ug/l		8081A/8	01/23/14	1
PCB 1221	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1232	U	0.021	0.50	ug/l		8081A/8	01/23/14	1
PCB 1242	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1248	U	0.014	0.50	ug/l		8081A/8	01/23/14	1
PCB 1254	U	0.018	0.50	ug/l		8081A/8	01/23/14	1
PCB 1260	U	0.015	0.50	ug/l		8081A/8	01/23/14	1
Pest/PCBs Surrogates								
Decachlorobiphenyl	78.8			% Rec.		8081A/8	01/23/14	1
Tetrachloro-m-xylene	85.2			% Rec.		8081A/8	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	01/22/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	01/22/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	01/22/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	01/22/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	01/22/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	01/22/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	01/22/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	01/22/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	01/22/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	01/22/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	01/22/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	01/22/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	01/22/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	01/22/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	01/22/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	01/22/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	01/22/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	01/22/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	01/22/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	01/22/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	01/22/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	01/22/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Bis(2-ethylhexyl)phthalate	1.2	0.71	3.0	ug/l	J	8270 D	01/22/14	1
Di-n-butyl phthalate	0.47	0.27	3.0	ug/l	J	8270 D	01/22/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	01/22/14	1
Pyrene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	01/22/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	01/22/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	01/22/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	01/22/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	01/22/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27,2014

ESC Sample # : L678898-06

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SW-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	01/22/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	01/22/14	1
Phenol	U	0.33	10.	ug/l		8270 D	01/22/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	37.0			% Rec.		8270 D	01/22/14	1
Phenol-d5	23.1			% Rec.		8270 D	01/22/14	1
Nitrobenzene-d5	60.7			% Rec.		8270 D	01/22/14	1
2-Fluorobiphenyl	61.9			% Rec.		8270 D	01/22/14	1
2,4,6-Tribromophenol	55.7			% Rec.		8270 D	01/22/14	1
p-Terphenyl-d14	63.6			% Rec.		8270 D	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	75.2	0.0333	0.100	%		2540 G-2	01/22/14	1
Mercury	0.015	0.0014	0.026	mg/kg	J	7471	01/22/14	1
Antimony	U	0.38	1.3	mg/kg		6010C	01/26/14	1
Arsenic	7.8	0.32	1.3	mg/kg		6010C	01/23/14	1
Beryllium	0.26	0.035	0.13	mg/kg		6010C	01/23/14	1
Cadmium	0.064	0.035	0.33	mg/kg	J	6010C	01/23/14	1
Chromium	100	0.070	0.66	mg/kg		6010C	01/23/14	1
Copper	40.	0.26	1.3	mg/kg		6010C	01/23/14	1
Lead	370	0.095	0.33	mg/kg		6010C	01/23/14	1
Nickel	7.6	0.24	1.3	mg/kg		6010C	01/23/14	1
Selenium	U	0.37	1.3	mg/kg		6010C	01/23/14	1
Silver	0.37	0.14	0.66	mg/kg	J	6010C	01/23/14	1
Thallium	0.46	0.32	1.3	mg/kg	J	6010C	01/23/14	1
Zinc	42.	0.30	2.0	mg/kg		6010C	01/23/14	1
Volatile Organics								
Acetone	0.020	0.010	0.066	mg/kg	J	8260B	01/21/14	1
Acrylonitrile	U	0.0018	0.013	mg/kg	J4	8260B	01/21/14	1
Benzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Bromobenzene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Bromodichloromethane	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Bromoform	U	0.00042	0.0013	mg/kg		8260B	01/21/14	1
Bromomethane	U	0.0013	0.0066	mg/kg		8260B	01/21/14	1
n-Butylbenzene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
sec-Butylbenzene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
tert-Butylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Carbon tetrachloride	U	0.00033	0.0013	mg/kg		8260B	01/21/14	1
Chlorobenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Chlorodibromomethane	U	0.00037	0.0013	mg/kg		8260B	01/21/14	1
Chloroethane	U	0.00095	0.0066	mg/kg		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	0.0023	0.066	mg/kg	J3	8260B	01/21/14	1
Chloroform	U	0.00023	0.0066	mg/kg		8260B	01/21/14	1
Chloromethane	U	0.00038	0.0033	mg/kg		8260B	01/21/14	1
2-Chlorotoluene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
4-Chlorotoluene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	0.0010	0.0066	mg/kg		8260B	01/21/14	1
1,2-Dibromoethane	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Dibromomethane	U	0.00038	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.00071	0.0066	mg/kg		8260B	01/21/14	1
1,1-Dichloroethane	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloroethene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,2-Dichloropropane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
1,1-Dichloropropene	U	0.00032	0.0013	mg/kg		8260B	01/21/14	1
1,3-Dichloropropane	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
2,2-Dichloropropane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Di-isopropyl ether	U	0.00025	0.0013	mg/kg		8260B	01/21/14	1
Ethylbenzene	U	0.00030	0.0013	mg/kg		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.00034	0.0013	mg/kg		8260B	01/21/14	1
Isopropylbenzene	U	0.00024	0.0013	mg/kg		8260B	01/21/14	1
p-Isopropyltoluene	U	0.00020	0.0013	mg/kg		8260B	01/21/14	1
2-Butanone (MEK)	U	0.0047	0.013	mg/kg	J3	8260B	01/21/14	1
Methylene Chloride	U	0.0010	0.0066	mg/kg		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0019	0.013	mg/kg		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Naphthalene	U	0.0010	0.0066	mg/kg		8260B	01/21/14	1
n-Propylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
Styrene	U	0.00023	0.0013	mg/kg		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.00026	0.0013	mg/kg		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.00036	0.0013	mg/kg		8260B	01/21/14	1
Tetrachloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Toluene	U	0.00043	0.0066	mg/kg		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.00031	0.0013	mg/kg		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.00039	0.0013	mg/kg		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichloroethene	U	0.00028	0.0013	mg/kg		8260B	01/21/14	1
Trichlorofluoromethane	U	0.00038	0.0066	mg/kg		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.00074	0.0033	mg/kg		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.00021	0.0013	mg/kg		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.00027	0.0013	mg/kg		8260B	01/21/14	1
Vinyl chloride	U	0.00029	0.0013	mg/kg		8260B	01/21/14	1
Xylenes, Total	U	0.00070	0.0040	mg/kg		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	104.			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	95.8			% Rec.		8260B	01/21/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	97.6			% Rec.		8260B	01/21/14	1
Pesticide/PCBs								
Aldrin	U	0.0014	0.026	mg/kg		8081/808	01/24/14	1
Alpha BHC	U	0.0014	0.026	mg/kg		8081/808	01/24/14	1
Beta BHC	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Delta BHC	U	0.0014	0.026	mg/kg		8081/808	01/24/14	1
Gamma BHC	U	0.0014	0.026	mg/kg		8081/808	01/24/14	1
Chlordane	U	0.039	0.26	mg/kg		8081/808	01/24/14	1
4,4-DDD	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
4,4-DDE	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
4,4-DDT	U	0.0020	0.026	mg/kg		8081/808	01/24/14	1
Dieldrin	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
Endosulfan I	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
Endosulfan II	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Endosulfan sulfate	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
Endrin	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Endrin aldehyde	U	0.0013	0.026	mg/kg		8081/808	01/24/14	1
Endrin ketone	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Heptachlor	U	0.0015	0.026	mg/kg		8081/808	01/24/14	1
Heptachlor epoxide	U	0.0016	0.026	mg/kg		8081/808	01/24/14	1
Hexachlorobenzene	U	0.0012	0.026	mg/kg		8081/808	01/24/14	1
Methoxychlor	U	0.0018	0.026	mg/kg		8081/808	01/24/14	1
Toxaphene	U	0.036	0.53	mg/kg		8081/808	01/24/14	1
PCB 1016	U	0.0035	0.023	mg/kg		8081/808	01/24/14	1
PCB 1221	U	0.0054	0.023	mg/kg		8081/808	01/24/14	1
PCB 1232	U	0.0042	0.023	mg/kg		8081/808	01/24/14	1
PCB 1242	U	0.0032	0.023	mg/kg		8081/808	01/24/14	1
PCB 1248	U	0.0032	0.023	mg/kg		8081/808	01/24/14	1
PCB 1254	U	0.0047	0.023	mg/kg		8081/808	01/24/14	1
PCB 1260	U	0.0049	0.023	mg/kg		8081/808	01/24/14	1
Pest/PCBs Surrogates								
Decachlorobiphenyl	59.5			% Rec.		8081/808	01/24/14	1
Tetrachloro-m-xylene	82.1			% Rec.		8081/808	01/24/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.13	0.88	mg/kg	O	8270D	01/23/14	20
Acenaphthylene	U	0.13	0.88	mg/kg	O	8270D	01/23/14	20
Anthracene	U	0.13	0.88	mg/kg	O	8270D	01/23/14	20
Benzidine	U	1.3	8.8	mg/kg	OJ	8270D	01/23/14	20
Benzo(a)anthracene	U	0.086	0.88	mg/kg	O	8270D	01/23/14	20
Benzo(b)fluoranthene	U	0.14	0.88	mg/kg	O	8270D	01/23/14	20
Benzo(k)fluoranthene	U	0.12	0.88	mg/kg	O	8270D	01/23/14	20

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.14	0.88	mg/kg	O	8270D	01/23/14	20
Benzo(a)pyrene	U	0.11	0.88	mg/kg	O	8270D	01/23/14	20
Bis(2-chlorethoxy)methane	U	0.15	8.8	mg/kg	O	8270D	01/23/14	20
Bis(2-chloroethyl)ether	U	0.18	8.8	mg/kg	O	8270D	01/23/14	20
Bis(2-chloroisopropyl)ether	U	0.15	8.8	mg/kg	O	8270D	01/23/14	20
4-Bromophenyl-phenylether	U	0.23	8.8	mg/kg	O	8270D	01/23/14	20
2-Chloronaphthalene	U	0.13	0.88	mg/kg	O	8270D	01/23/14	20
4-Chlorophenyl-phenylether	U	0.12	8.8	mg/kg	O	8270D	01/23/14	20
Chrysene	U	0.11	0.88	mg/kg	O	8270D	01/23/14	20
Dibenz(a,h)anthracene	U	0.16	0.88	mg/kg	O	8270D	01/23/14	20
3,3-Dichlorobenzidine	U	1.6	8.8	mg/kg	O	8270D	01/23/14	20
2,4-Dinitrotoluene	U	0.12	8.8	mg/kg	O	8270D	01/23/14	20
2,6-Dinitrotoluene	U	0.15	8.8	mg/kg	O	8270D	01/23/14	20
Fluoranthene	U	0.099	0.88	mg/kg	O	8270D	01/23/14	20
Fluorene	U	0.14	0.88	mg/kg	O	8270D	01/23/14	20
Hexachlorobenzene	U	0.17	8.8	mg/kg	O	8270D	01/23/14	20
Hexachloro-1,3-butadiene	U	0.20	8.8	mg/kg	O	8270D	01/23/14	20
Hexachlorocyclopentadiene	U	1.2	8.8	mg/kg	O	8270D	01/23/14	20
Hexachloroethane	U	0.27	8.8	mg/kg	O	8270D	01/23/14	20
Indeno(1,2,3-cd)pyrene	U	0.15	0.88	mg/kg	O	8270D	01/23/14	20
Isophorone	U	0.10	8.8	mg/kg	O	8270D	01/23/14	20
Naphthalene	U	0.18	0.88	mg/kg	O	8270D	01/23/14	20
Nitrobenzene	U	0.14	8.8	mg/kg	O	8270D	01/23/14	20
n-Nitrosodimethylamine	U	1.3	8.8	mg/kg	O	8270D	01/23/14	20
n-Nitrosodiphenylamine	U	0.12	8.8	mg/kg	O	8270D	01/23/14	20
n-Nitrosodi-n-propylamine	U	0.18	8.8	mg/kg	O	8270D	01/23/14	20
Phenanthrene	U	0.10	0.88	mg/kg	O	8270D	01/23/14	20
Benzylbutyl phthalate	U	0.21	8.8	mg/kg	O	8270D	01/23/14	20
Bis(2-ethylhexyl)phthalate	U	0.24	8.8	mg/kg	O	8270D	01/23/14	20
Di-n-butyl phthalate	U	0.22	8.8	mg/kg	O	8270D	01/23/14	20
Diethyl phthalate	U	0.14	8.8	mg/kg	O	8270D	01/23/14	20
Dimethyl phthalate	U	0.11	8.8	mg/kg	O	8270D	01/23/14	20
Di-n-octyl phthalate	U	0.18	8.8	mg/kg	O	8270D	01/23/14	20
Pyrene	U	0.25	0.88	mg/kg	O	8270D	01/23/14	20
1,2,4-Trichlorobenzene	U	0.18	8.8	mg/kg	O	8270D	01/23/14	20
Acid Extractables								
4-Chloro-3-methylphenol	U	0.095	8.8	mg/kg	O	8270D	01/23/14	20
2-Chlorophenol	U	0.17	8.8	mg/kg	O	8270D	01/23/14	20
2,4-Dichlorophenol	U	0.15	8.8	mg/kg	O	8270D	01/23/14	20
2,4-Dimethylphenol	U	0.94	8.8	mg/kg	O	8270D	01/23/14	20
4,6-Dinitro-2-methylphenol	U	2.5	8.8	mg/kg	O	8270D	01/23/14	20
2,4-Dinitrophenol	U	2.0	8.8	mg/kg	O	8270D	01/23/14	20
2-Nitrophenol	U	0.26	8.8	mg/kg	O	8270D	01/23/14	20

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-07

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 21-SED-C

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:50

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Nitrophenol	U	1.0	8.8	mg/kg	O	8270D	01/23/14	20
Pentachlorophenol	U	0.96	8.8	mg/kg	O	8270D	01/23/14	20
Phenol	U	0.14	8.8	mg/kg	O	8270D	01/23/14	20
2,4,6-Trichlorophenol	U	0.16	8.8	mg/kg	O	8270D	01/23/14	20
Surrogate Recovery								
2-Fluorophenol	75.3			% Rec.	J7	8270D	01/23/14	20
Phenol-d5	75.9			% Rec.	J7	8270D	01/23/14	20
Nitrobenzene-d5	77.9			% Rec.	J7	8270D	01/23/14	20
2-Fluorobiphenyl	72.7			% Rec.	J7	8270D	01/23/14	20
2,4,6-Tribromophenol	98.3			% Rec.	J7	8270D	01/23/14	20
p-Terphenyl-d14	45.2			% Rec.	J7	8270D	01/23/14	20

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : SED EQUIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.39	0.21	1.0	ug/l	J	6020	01/22/14	1
Arsenic	0.38	0.25	1.0	ug/l	J	6020	01/21/14	1
Lead	0.81	0.24	1.0	ug/l	J	6020	01/21/14	1
Thallium	U	0.19	1.0	ug/l		6020	01/21/14	1
Mercury	U	0.049	0.20	ug/l		7470A	01/21/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	01/20/14	1
Cadmium	0.76	0.70	5.0	ug/l	JO1P1	6010C	01/20/14	1
Chromium	U	1.4	10.	ug/l		6010C	01/20/14	1
Copper	U	5.3	20.	ug/l		6010C	01/20/14	1
Nickel	U	4.9	20.	ug/l		6010C	01/20/14	1
Selenium	11.	7.4	20.	ug/l	JO1P1	6010C	01/20/14	1
Silver	U	2.8	10.	ug/l		6010C	01/20/14	1
Zinc	U	5.9	30.	ug/l		6010C	01/20/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/22/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/22/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/22/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/22/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/22/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/22/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/22/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/22/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/22/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/22/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/22/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/22/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/22/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/22/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/22/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/22/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : SED EQUIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/22/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/22/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/22/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/22/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/22/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/22/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/22/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/22/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/22/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/22/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/22/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/22/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/22/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/22/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/22/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/22/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/22/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/22/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/22/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/22/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/22/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/22/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/22/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/22/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/22/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/22/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/22/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/22/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/22/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/22/14	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	01/22/14	1
Dibromofluoromethane	95.9			% Rec.		8260B	01/22/14	1
a,a,a-Trifluorotoluene	96.9			% Rec.		8260B	01/22/14	1

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January 27, 2014

ESC Sample # : L678898-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : SED EQUIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	95.9			% Rec.		8260B	01/22/14	1
Pesticide/PCBs								
Aldrin	U	0.0081	0.050	ug/l		8081A/8	01/23/14	1
Alpha BHC	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Beta BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Delta BHC	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Gamma BHC	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Chlordane	U	0.098	0.50	ug/l		8081A/8	01/23/14	1
4,4-DDD	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDE	U	0.016	0.050	ug/l		8081A/8	01/23/14	1
4,4-DDT	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Dieldrin	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan I	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan II	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Endosulfan sulfate	U	0.020	0.050	ug/l		8081A/8	01/23/14	1
Endrin	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Endrin aldehyde	U	0.014	0.050	ug/l		8081A/8	01/23/14	1
Endrin ketone	U	0.017	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor	U	0.011	0.050	ug/l		8081A/8	01/23/14	1
Heptachlor epoxide	U	0.018	0.050	ug/l		8081A/8	01/23/14	1
Hexachlorobenzene	U	0.013	0.050	ug/l		8081A/8	01/23/14	1
Methoxychlor	U	0.019	0.050	ug/l		8081A/8	01/23/14	1
Toxaphene	U	0.17	0.50	ug/l		8081A/8	01/23/14	1
PCB 1016	U	0.020	0.50	ug/l		8081A/8	01/23/14	1
PCB 1221	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1232	U	0.021	0.50	ug/l		8081A/8	01/23/14	1
PCB 1242	U	0.024	0.50	ug/l		8081A/8	01/23/14	1
PCB 1248	U	0.014	0.50	ug/l		8081A/8	01/23/14	1
PCB 1254	U	0.018	0.50	ug/l		8081A/8	01/23/14	1
PCB 1260	U	0.015	0.50	ug/l		8081A/8	01/23/14	1
Pest/PCBs Surrogates								
Decachlorobiphenyl	74.4			% Rec.		8081A/8	01/23/14	1
Tetrachloro-m-xylene	87.8			% Rec.		8081A/8	01/23/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	01/22/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	01/22/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	01/22/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	01/22/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	01/22/14	1

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : SED EQUIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	01/22/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	01/22/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	01/22/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	01/22/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	01/22/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	01/22/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	01/22/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	01/22/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	01/22/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	01/22/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	01/22/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	01/22/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	01/22/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	01/22/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	01/22/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	01/22/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	01/22/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	01/22/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	01/22/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	01/22/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	01/22/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	01/22/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Bis(2-ethylhexyl)phthalate	1.1	0.71	3.0	ug/l	J	8270 D	01/22/14	1
Di-n-butyl phthalate	0.32	0.27	3.0	ug/l	J	8270 D	01/22/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	01/22/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	01/22/14	1
Pyrene	U	0.33	1.0	ug/l		8270 D	01/22/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	01/22/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	01/22/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	01/22/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	01/22/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	01/22/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	01/22/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	01/22/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	01/22/14	1

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PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-08

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : SED EQUIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 17:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	01/22/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	01/22/14	1
Phenol	U	0.33	10.	ug/l		8270 D	01/22/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	01/22/14	1
Surrogate Recovery								
2-Fluorophenol	42.2			% Rec.		8270 D	01/22/14	1
Phenol-d5	22.4			% Rec.		8270 D	01/22/14	1
Nitrobenzene-d5	61.2			% Rec.		8270 D	01/22/14	1
2-Fluorobiphenyl	67.2			% Rec.		8270 D	01/22/14	1
2,4,6-Tribromophenol	66.4			% Rec.		8270 D	01/22/14	1
p-Terphenyl-d14	68.9			% Rec.		8270 D	01/22/14	1

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-09

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	01/21/14	1
Acrolein	U	8.9	50.	ug/l		8260B	01/21/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	01/21/14	1
Benzene	U	0.33	1.0	ug/l		8260B	01/21/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	01/21/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	01/21/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/21/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	01/21/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	01/21/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	01/21/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	01/21/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	01/21/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	01/21/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	01/21/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	01/21/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	01/21/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	01/21/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	01/21/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	01/21/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	01/21/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	01/21/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	01/21/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/21/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	01/21/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	01/21/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	01/21/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	01/21/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	01/21/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/21/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	01/21/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	01/21/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	01/21/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	01/21/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	01/21/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	01/21/14	1

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Cary, NC 27512

January 27, 2014

ESC Sample # : L678898-09

Date Received : January 18, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Daphne Jones
Collection Date : 01/16/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	01/21/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	01/21/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	01/21/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	01/21/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	01/21/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	01/21/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	01/21/14	1
Styrene	U	0.31	1.0	ug/l		8260B	01/21/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	01/21/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	01/21/14	1
Toluene	U	0.78	5.0	ug/l		8260B	01/21/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	01/21/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	01/21/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	01/21/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	01/21/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	01/21/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	01/21/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	01/21/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	01/21/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	01/21/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	01/21/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	01/21/14	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	01/21/14	1
Dibromofluoromethane	93.7			% Rec.		8260B	01/21/14	1
a,a,a-Trifluorotoluene	98.6			% Rec.		8260B	01/21/14	1
4-Bromofluorobenzene	97.6			% Rec.		8260B	01/21/14	1

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L678898-01	WG702274	SAMP	Bis(2-ethylhexyl)phthalate	R2878031	J
	WG702315	SAMP	Antimony	R2878172	J
	WG702291	SAMP	Cadmium	R2877742	J
	WG702291	SAMP	Zinc	R2877742	J
L678898-02	WG702460	SAMP	Mercury	R2878605	J
	WG702802	SAMP	Acenaphthene	R2878823	O
	WG702802	SAMP	Acenaphthylene	R2878823	O
	WG702802	SAMP	Anthracene	R2878823	O
	WG702802	SAMP	Benzidine	R2878823	OJ
	WG702802	SAMP	Benzo(a)anthracene	R2878823	O
	WG702802	SAMP	Benzo(b)fluoranthene	R2878823	O
	WG702802	SAMP	Benzo(k)fluoranthene	R2878823	O
	WG702802	SAMP	Benzo(g,h,i)perylene	R2878823	O
	WG702802	SAMP	Benzo(a)pyrene	R2878823	O
	WG702802	SAMP	Bis(2-chlorethoxy)methane	R2878823	O
	WG702802	SAMP	Bis(2-chloroethyl)ether	R2878823	O
	WG702802	SAMP	Bis(2-chloroisopropyl)ether	R2878823	O
	WG702802	SAMP	4-Bromophenyl-phenylether	R2878823	O
	WG702802	SAMP	2-Chloronaphthalene	R2878823	O
	WG702802	SAMP	4-Chlorophenyl-phenylether	R2878823	O
	WG702802	SAMP	Chrysene	R2878823	O
	WG702802	SAMP	Dibenz(a,h)anthracene	R2878823	O
	WG702802	SAMP	3,3-Dichlorobenzidine	R2878823	O
	WG702802	SAMP	2,4-Dinitrotoluene	R2878823	O
	WG702802	SAMP	2,6-Dinitrotoluene	R2878823	O
	WG702802	SAMP	Fluoranthene	R2878823	O
	WG702802	SAMP	Fluorene	R2878823	O
	WG702802	SAMP	Hexachlorobenzene	R2878823	O
	WG702802	SAMP	Hexachloro-1,3-butadiene	R2878823	O
	WG702802	SAMP	Hexachlorocyclopentadiene	R2878823	O
	WG702802	SAMP	Hexachloroethane	R2878823	O
	WG702802	SAMP	Indeno(1,2,3-cd)pyrene	R2878823	O
	WG702802	SAMP	Isophorone	R2878823	O
	WG702802	SAMP	Naphthalene	R2878823	O
	WG702802	SAMP	Nitrobenzene	R2878823	O
	WG702802	SAMP	n-Nitrosodimethylamine	R2878823	O
	WG702802	SAMP	n-Nitrosodiphenylamine	R2878823	O
	WG702802	SAMP	n-Nitrosodi-n-propylamine	R2878823	O
	WG702802	SAMP	Phenanthrene	R2878823	O
	WG702802	SAMP	Benzylbutyl phthalate	R2878823	O
	WG702802	SAMP	Bis(2-ethylhexyl)phthalate	R2878823	O
	WG702802	SAMP	Di-n-butyl phthalate	R2878823	O
	WG702802	SAMP	Diethyl phthalate	R2878823	O
	WG702802	SAMP	Dimethyl phthalate	R2878823	O
	WG702802	SAMP	Di-n-octyl phthalate	R2878823	O
	WG702802	SAMP	Pyrene	R2878823	O
	WG702802	SAMP	1,2,4-Trichlorobenzene	R2878823	O
	WG702802	SAMP	4-Chloro-3-methylphenol	R2878823	O
	WG702802	SAMP	2-Chlorophenol	R2878823	O
	WG702802	SAMP	2,4-Dichlorophenol	R2878823	O
	WG702802	SAMP	2,4-Dimethylphenol	R2878823	O
	WG702802	SAMP	4,6-Dinitro-2-methylphenol	R2878823	O
	WG702802	SAMP	2,4-Dinitrophenol	R2878823	O
	WG702802	SAMP	2-Nitrophenol	R2878823	O
	WG702802	SAMP	4-Nitrophenol	R2878823	O
	WG702802	SAMP	Pentachlorophenol	R2878823	O
	WG702802	SAMP	Phenol	R2878823	O
	WG702802	SAMP	2,4,6-Trichlorophenol	R2878823	O
	WG702802	SAMP	2-Fluorophenol	R2878823	J7
	WG702802	SAMP	Phenol-d5	R2878823	J7
	WG702802	SAMP	Nitrobenzene-d5	R2878823	J7
	WG702802	SAMP	2-Fluorobiphenyl	R2878823	J7
	WG702802	SAMP	2,4,6-Tribromophenol	R2878823	J7
	WG702802	SAMP	p-Terphenyl-d14	R2878823	J7
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702433	SAMP	Cadmium	R2878962	J
L678898-03	WG702274	SAMP	Bis(2-ethylhexyl)phthalate	R2878365	J

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
	WG702315	SAMP	Antimony	R2878172	J
	WG702315	SAMP	Arsenic	R2878172	J
	WG702313	SAMP	Cadmium	R2878353	J
	WG702313	SAMP	Zinc	R2878353	J
L678898-04	WG702274	SAMP	Bis(2-ethylhexyl)phthalate	R2878365	J
	WG702315	SAMP	Antimony	R2878172	J
	WG702315	SAMP	Arsenic	R2878172	J
	WG702291	SAMP	Cadmium	R2877742	J
	WG702291	SAMP	Zinc	R2877742	J
L678898-05	WG702460	SAMP	Mercury	R2878605	J
	WG702802	SAMP	Acenaphthene	R2878823	O
	WG702802	SAMP	Acenaphthylene	R2878823	O
	WG702802	SAMP	Anthracene	R2878823	O
	WG702802	SAMP	Benzidine	R2878823	O
	WG702802	SAMP	Benzo(a)anthracene	R2878823	O
	WG702802	SAMP	Benzo(b)fluoranthene	R2878823	O
	WG702802	SAMP	Benzo(k)fluoranthene	R2878823	O
	WG702802	SAMP	Benzo(g,h,i)perylene	R2878823	O
	WG702802	SAMP	Benzo(a)pyrene	R2878823	O
	WG702802	SAMP	Bis(2-chlorethoxy)methane	R2878823	O
	WG702802	SAMP	Bis(2-chloroethyl)ether	R2878823	O
	WG702802	SAMP	Bis(2-chloroisopropyl)ether	R2878823	O
	WG702802	SAMP	4-Bromophenyl-phenylether	R2878823	O
	WG702802	SAMP	2-Chloronaphthalene	R2878823	O
	WG702802	SAMP	4-Chlorophenyl-phenylether	R2878823	O
	WG702802	SAMP	Chrysene	R2878823	O
	WG702802	SAMP	Dibenz(a,h)anthracene	R2878823	O
	WG702802	SAMP	3,3-Dichlorobenzidine	R2878823	O
	WG702802	SAMP	2,4-Dinitrotoluene	R2878823	O
	WG702802	SAMP	2,6-Dinitrotoluene	R2878823	O
	WG702802	SAMP	Fluoranthene	R2878823	O
	WG702802	SAMP	Fluorene	R2878823	O
	WG702802	SAMP	Hexachlorobenzene	R2878823	O
	WG702802	SAMP	Hexachloro-1,3-butadiene	R2878823	O
	WG702802	SAMP	Hexachlorocyclopentadiene	R2878823	O
	WG702802	SAMP	Hexachloroethane	R2878823	O
	WG702802	SAMP	Indeno(1,2,3-cd)pyrene	R2878823	O
	WG702802	SAMP	Isophorone	R2878823	O
	WG702802	SAMP	Naphthalene	R2878823	O
	WG702802	SAMP	Nitrobenzene	R2878823	O
	WG702802	SAMP	n-Nitrosodimethylamine	R2878823	O
	WG702802	SAMP	n-Nitrosodiphenylamine	R2878823	O
	WG702802	SAMP	n-Nitrosodi-n-propylamine	R2878823	O
	WG702802	SAMP	Phenanthrene	R2878823	O
	WG702802	SAMP	Benzylbutyl phthalate	R2878823	O
	WG702802	SAMP	Bis(2-ethylhexyl)phthalate	R2878823	O
	WG702802	SAMP	Di-n-butyl phthalate	R2878823	O
	WG702802	SAMP	Diethyl phthalate	R2878823	O
	WG702802	SAMP	Dimethyl phthalate	R2878823	O
	WG702802	SAMP	Di-n-octyl phthalate	R2878823	O
	WG702802	SAMP	Pyrene	R2878823	O
	WG702802	SAMP	1,2,4-Trichlorobenzene	R2878823	O
	WG702802	SAMP	4-Chloro-3-methylphenol	R2878823	O
	WG702802	SAMP	2-Chlorophenol	R2878823	O
	WG702802	SAMP	2,4-Dichlorophenol	R2878823	O
	WG702802	SAMP	2,4-Dimethylphenol	R2878823	O
	WG702802	SAMP	4,6-Dinitro-2-methylphenol	R2878823	O
	WG702802	SAMP	2,4-Dinitrophenol	R2878823	O
	WG702802	SAMP	2-Nitrophenol	R2878823	O
	WG702802	SAMP	4-Nitrophenol	R2878823	O
	WG702802	SAMP	Pentachlorophenol	R2878823	O
	WG702802	SAMP	Phenol	R2878823	O
	WG702802	SAMP	2,4,6-Trichlorophenol	R2878823	O
	WG702232	SAMP	Acetone	R2878186	J
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702433	SAMP	Cadmium	R2878962	J
L678898-06	WG702274	SAMP	Bis(2-ethylhexyl)phthalate	R2878365	J
	WG702274	SAMP	Di-n-butyl phthalate	R2878365	J

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
	WG702315	SAMP	Antimony	R2878172	J
	WG702315	SAMP	Arsenic	R2878172	J
	WG702291	SAMP	Cadmium	R2877742	J
	WG702291	SAMP	Copper	R2877742	J
	WG702291	SAMP	Selenium	R2877742	J
L678898-07	WG702460	SAMP	Mercury	R2878605	J
	WG702802	SAMP	Acenaphthene	R2878823	O
	WG702802	SAMP	Acenaphthylene	R2878823	O
	WG702802	SAMP	Anthracene	R2878823	O
	WG702802	SAMP	Benzidine	R2878823	OJ
	WG702802	SAMP	Benzo(a)anthracene	R2878823	O
	WG702802	SAMP	Benzo(b)fluoranthene	R2878823	O
	WG702802	SAMP	Benzo(k)fluoranthene	R2878823	O
	WG702802	SAMP	Benzo(g,h,i)perylene	R2878823	O
	WG702802	SAMP	Benzo(a)pyrene	R2878823	O
	WG702802	SAMP	Bis(2-chlorethoxy)methane	R2878823	O
	WG702802	SAMP	Bis(2-chloroethyl)ether	R2878823	O
	WG702802	SAMP	Bis(2-chloroisopropyl)ether	R2878823	O
	WG702802	SAMP	4-Bromophenyl-phenylether	R2878823	O
	WG702802	SAMP	2-Chloronaphthalene	R2878823	O
	WG702802	SAMP	4-Chlorophenyl-phenylether	R2878823	O
	WG702802	SAMP	Chrysene	R2878823	O
	WG702802	SAMP	Dibenz(a,h)anthracene	R2878823	O
	WG702802	SAMP	3,3-Dichlorobenzidine	R2878823	O
	WG702802	SAMP	2,4-Dinitrotoluene	R2878823	O
	WG702802	SAMP	2,6-Dinitrotoluene	R2878823	O
	WG702802	SAMP	Fluoranthene	R2878823	O
	WG702802	SAMP	Fluorene	R2878823	O
	WG702802	SAMP	Hexachlorobenzene	R2878823	O
	WG702802	SAMP	Hexachloro-1,3-butadiene	R2878823	O
	WG702802	SAMP	Hexachlorocyclopentadiene	R2878823	O
	WG702802	SAMP	Hexachloroethane	R2878823	O
	WG702802	SAMP	Indeno(1,2,3-cd)pyrene	R2878823	O
	WG702802	SAMP	Isophorone	R2878823	O
	WG702802	SAMP	Naphthalene	R2878823	O
	WG702802	SAMP	Nitrobenzene	R2878823	O
	WG702802	SAMP	n-Nitrosodimethylamine	R2878823	O
	WG702802	SAMP	n-Nitrosodiphenylamine	R2878823	O
	WG702802	SAMP	n-Nitrosodi-n-propylamine	R2878823	O
	WG702802	SAMP	Phenanthrene	R2878823	O
	WG702802	SAMP	Benzylbutyl phthalate	R2878823	O
	WG702802	SAMP	Bis(2-ethylhexyl)phthalate	R2878823	O
	WG702802	SAMP	Di-n-butyl phthalate	R2878823	O
	WG702802	SAMP	Diethyl phthalate	R2878823	O
	WG702802	SAMP	Dimethyl phthalate	R2878823	O
	WG702802	SAMP	Di-n-octyl phthalate	R2878823	O
	WG702802	SAMP	Pyrene	R2878823	O
	WG702802	SAMP	1,2,4-Trichlorobenzene	R2878823	O
	WG702802	SAMP	4-Chloro-3-methylphenol	R2878823	O
	WG702802	SAMP	2-Chlorophenol	R2878823	O
	WG702802	SAMP	2,4-Dichlorophenol	R2878823	O
	WG702802	SAMP	2,4-Dimethylphenol	R2878823	O
	WG702802	SAMP	4,6-Dinitro-2-methylphenol	R2878823	O
	WG702802	SAMP	2,4-Dinitrophenol	R2878823	O
	WG702802	SAMP	2-Nitrophenol	R2878823	O
	WG702802	SAMP	4-Nitrophenol	R2878823	O
	WG702802	SAMP	Pentachlorophenol	R2878823	O
	WG702802	SAMP	Phenol	R2878823	O
	WG702802	SAMP	2,4,6-Trichlorophenol	R2878823	O
	WG702802	SAMP	2-Fluorophenol	R2878823	J7
	WG702802	SAMP	Phenol-d5	R2878823	J7
	WG702802	SAMP	Nitrobenzene-d5	R2878823	J7
	WG702802	SAMP	2-Fluorobiphenyl	R2878823	J7
	WG702802	SAMP	2,4,6-Tribromophenol	R2878823	J7
	WG702802	SAMP	p-Terphenyl-d14	R2878823	J7
	WG702232	SAMP	Acetone	R2878186	J
	WG702232	SAMP	Acrylonitrile	R2878186	J4
	WG702232	SAMP	2-Chloroethyl vinyl ether	R2878186	J3
	WG702232	SAMP	2-Butanone (MEK)	R2878186	J3
	WG702433	SAMP	Cadmium	R2878962	J

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
	WG702433	SAMP	Silver	R2878962	J
	WG702433	SAMP	Thallium	R2878962	J
L678898-08	WG702274	SAMP	Bis(2-ethylhexyl)phthalate	R2878365	J
	WG702274	SAMP	Di-n-butyl phthalate	R2878365	J
	WG702315	SAMP	Antimony	R2878172	J
	WG702315	SAMP	Arsenic	R2878172	J
	WG702315	SAMP	Lead	R2878172	J
	WG702291	SAMP	Cadmium	R2877742	JO1P1
	WG702291	SAMP	Selenium	R2877742	JO1P1

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/27/14 at 13:03:00

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678898-01 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/27/14 13:00

Sample: L678898-02 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/27/14 13:00

Sample: L678898-03 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/27/14 13:00

Sample: L678898-04 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/27/14 13:00

Sample: L678898-05 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/27/14 13:00

Sample: L678898-06 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/27/14 13:00
100ml amb broken in lab
Sample: L678898-07 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/27/14 13:00

Sample: L678898-08 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/27/14 13:00

Sample: L678898-09 Account: DUNDUNNC Received: 01/18/14 14:30 Due Date: 01/27/14 00:00 RPT Date: 01/27/14 13:00

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Beryllium	< .002	mg/l			WG702291	01/20/14 10:18
Cadmium	< .005	mg/l			WG702291	01/20/14 10:18
Chromium	< .01	mg/l			WG702291	01/20/14 10:18
Copper	< .02	mg/l			WG702291	01/20/14 10:18
Nickel	< .02	mg/l			WG702291	01/20/14 10:18
Selenium	< .02	mg/l			WG702291	01/20/14 10:18
Silver	< .01	mg/l			WG702291	01/20/14 10:18
Zinc	< .03	mg/l			WG702291	01/20/14 10:18
Beryllium	< .002	mg/l			WG702313	01/20/14 18:10
Cadmium	< .005	mg/l			WG702313	01/20/14 18:10
Chromium	< .01	mg/l			WG702313	01/20/14 18:10
Copper	< .02	mg/l			WG702313	01/20/14 18:10
Nickel	< .02	mg/l			WG702313	01/20/14 18:10
Selenium	< .02	mg/l			WG702313	01/20/14 18:10
Silver	< .01	mg/l			WG702313	01/20/14 18:10
Zinc	< .03	mg/l			WG702313	01/20/14 18:10
1,2,4-Trichlorobenzene	< .01	mg/l			WG702274	01/21/14 03:24
2,4,6-Trichlorophenol	< .01	mg/l			WG702274	01/21/14 03:24
2,4-Dichlorophenol	< .01	mg/l			WG702274	01/21/14 03:24
2,4-Dimethylphenol	< .01	mg/l			WG702274	01/21/14 03:24
2,4-Dinitrophenol	< .01	mg/l			WG702274	01/21/14 03:24
2,4-Dinitrotoluene	< .01	mg/l			WG702274	01/21/14 03:24
2,6-Dinitrotoluene	< .01	mg/l			WG702274	01/21/14 03:24
2-Chloronaphthalene	< .001	mg/l			WG702274	01/21/14 03:24
2-Chlorophenol	< .01	mg/l			WG702274	01/21/14 03:24
2-Nitrophenol	< .01	mg/l			WG702274	01/21/14 03:24
3,3-Dichlorobenzidine	< .01	mg/l			WG702274	01/21/14 03:24
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG702274	01/21/14 03:24
4-Bromophenyl-phenylether	< .01	mg/l			WG702274	01/21/14 03:24
4-Chloro-3-methylphenol	< .01	mg/l			WG702274	01/21/14 03:24
4-Chlorophenyl-phenylether	< .01	mg/l			WG702274	01/21/14 03:24
4-Nitrophenol	< .01	mg/l			WG702274	01/21/14 03:24
Acenaphthene	< .001	mg/l			WG702274	01/21/14 03:24
Acenaphthylene	< .001	mg/l			WG702274	01/21/14 03:24
Anthracene	< .001	mg/l			WG702274	01/21/14 03:24
Benzidine	< .01	mg/l			WG702274	01/21/14 03:24
Benzo(a)anthracene	< .001	mg/l			WG702274	01/21/14 03:24
Benzo(a)pyrene	< .001	mg/l			WG702274	01/21/14 03:24
Benzo(b)fluoranthene	< .001	mg/l			WG702274	01/21/14 03:24
Benzo(g,h,i)perylene	< .001	mg/l			WG702274	01/21/14 03:24
Benzo(k)fluoranthene	< .001	mg/l			WG702274	01/21/14 03:24
Benzylbutyl phthalate	< .003	mg/l			WG702274	01/21/14 03:24
Bis(2-chlorethoxy)methane	< .01	mg/l			WG702274	01/21/14 03:24
Bis(2-chloroethyl)ether	< .01	mg/l			WG702274	01/21/14 03:24
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG702274	01/21/14 03:24
Bis(2-ethylhexyl)phthalate	< .003	mg/l			WG702274	01/21/14 03:24
Chrysene	< .001	mg/l			WG702274	01/21/14 03:24
Di-n-butyl phthalate	< .003	mg/l			WG702274	01/21/14 03:24
Di-n-octyl phthalate	< .003	mg/l			WG702274	01/21/14 03:24
Dibenz(a,h)anthracene	< .001	mg/l			WG702274	01/21/14 03:24
Diethyl phthalate	< .003	mg/l			WG702274	01/21/14 03:24
Dimethyl phthalate	< .003	mg/l			WG702274	01/21/14 03:24
Fluoranthene	< .001	mg/l			WG702274	01/21/14 03:24
Fluorene	< .001	mg/l			WG702274	01/21/14 03:24
Hexachloro-1,3-butadiene	< .01	mg/l			WG702274	01/21/14 03:24

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Hexachlorobenzene	< .001	mg/l			WG702274	01/21/14 03:24
Hexachlorocyclopentadiene	< .01	mg/l			WG702274	01/21/14 03:24
Hexachloroethane	< .01	mg/l			WG702274	01/21/14 03:24
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG702274	01/21/14 03:24
Isophorone	< .01	mg/l			WG702274	01/21/14 03:24
n-Nitrosodi-n-propylamine	< .01	mg/l			WG702274	01/21/14 03:24
n-Nitrosodimethylamine	< .01	mg/l			WG702274	01/21/14 03:24
n-Nitrosodiphenylamine	< .01	mg/l			WG702274	01/21/14 03:24
Naphthalene	< .001	mg/l			WG702274	01/21/14 03:24
Nitrobenzene	< .01	mg/l			WG702274	01/21/14 03:24
Pentachlorophenol	< .001	mg/l			WG702274	01/21/14 03:24
Phenanthrene	< .001	mg/l			WG702274	01/21/14 03:24
Phenol	< .01	mg/l			WG702274	01/21/14 03:24
Pyrene	< .001	mg/l			WG702274	01/21/14 03:24
2,4,6-Tribromophenol		% Rec.	49.20	11.2-130	WG702274	01/21/14 03:24
2-Fluorobiphenyl		% Rec.	73.00	29.5-131	WG702274	01/21/14 03:24
2-Fluorophenol		% Rec.	34.00	10-77.9	WG702274	01/21/14 03:24
Nitrobenzene-d5		% Rec.	67.40	21.8-123	WG702274	01/21/14 03:24
Phenol-d5		% Rec.	22.90	5-70.1	WG702274	01/21/14 03:24
p-Terphenyl-d14		% Rec.	63.50	29.3-137	WG702274	01/21/14 03:24
Mercury	< .0002	mg/l			WG702302	01/21/14 10:59
Arsenic	< .001	mg/l			WG702315	01/21/14 00:25
Lead	< .001	mg/l			WG702315	01/21/14 00:25
Thallium	< .001	mg/l			WG702315	01/21/14 00:25
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,1-Trichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1,2-Trichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
1,1-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,3-Trichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,3-Trichloropropane	< .0025	mg/kg			WG702232	01/21/14 12:10
1,2,4-Trichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2,4-Trimethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG702232	01/21/14 12:10
1,2-Dibromoethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichloroethane	< .001	mg/kg			WG702232	01/21/14 12:10
1,2-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
1,3,5-Trimethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,3-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
1,3-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
1,4-Dichlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
2,2-Dichloropropane	< .001	mg/kg			WG702232	01/21/14 12:10
2-Butanone (MEK)	< .01	mg/kg			WG702232	01/21/14 12:10
2-Chloroethyl vinyl ether	< .05	mg/kg			WG702232	01/21/14 12:10
2-Chlorotoluene	< .001	mg/kg			WG702232	01/21/14 12:10
4-Chlorotoluene	< .001	mg/kg			WG702232	01/21/14 12:10
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG702232	01/21/14 12:10
Acetone	< .05	mg/kg			WG702232	01/21/14 12:10
Acrylonitrile	< .01	mg/kg			WG702232	01/21/14 12:10
Benzene	< .001	mg/kg			WG702232	01/21/14 12:10

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Quality Assurance Report
Level II

L678898

January 27, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Bromobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Bromodichloromethane	< .001	mg/kg			WG702232	01/21/14 12:10
Bromoform	< .001	mg/kg			WG702232	01/21/14 12:10
Bromomethane	< .005	mg/kg			WG702232	01/21/14 12:10
Carbon tetrachloride	< .001	mg/kg			WG702232	01/21/14 12:10
Chlorobenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Chlorodibromomethane	< .001	mg/kg			WG702232	01/21/14 12:10
Chloroethane	< .005	mg/kg			WG702232	01/21/14 12:10
Chloroform	< .005	mg/kg			WG702232	01/21/14 12:10
Chloromethane	< .0025	mg/kg			WG702232	01/21/14 12:10
cis-1,2-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
cis-1,3-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
Di-isopropyl ether	< .001	mg/kg			WG702232	01/21/14 12:10
Dibromomethane	< .001	mg/kg			WG702232	01/21/14 12:10
Dichlorodifluoromethane	< .005	mg/kg			WG702232	01/21/14 12:10
Ethylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Hexachloro-1,3-butadiene	< .001	mg/kg			WG702232	01/21/14 12:10
Isopropylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Methyl tert-butyl ether	< .001	mg/kg			WG702232	01/21/14 12:10
Methylene Chloride	< .005	mg/kg			WG702232	01/21/14 12:10
n-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
n-Propylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Naphthalene	< .005	mg/kg			WG702232	01/21/14 12:10
p-Isopropyltoluene	< .001	mg/kg			WG702232	01/21/14 12:10
sec-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Styrene	< .001	mg/kg			WG702232	01/21/14 12:10
tert-Butylbenzene	< .001	mg/kg			WG702232	01/21/14 12:10
Tetrachloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
Toluene	< .005	mg/kg			WG702232	01/21/14 12:10
trans-1,2-Dichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
trans-1,3-Dichloropropene	< .001	mg/kg			WG702232	01/21/14 12:10
Trichloroethene	< .001	mg/kg			WG702232	01/21/14 12:10
Trichlorofluoromethane	< .005	mg/kg			WG702232	01/21/14 12:10
Vinyl chloride	< .001	mg/kg			WG702232	01/21/14 12:10
Xylenes, Total	< .003	mg/kg			WG702232	01/21/14 12:10
4-Bromofluorobenzene		% Rec.	99.50	71-126	WG702232	01/21/14 12:10
Dibromofluoromethane		% Rec.	98.00	78.3-121	WG702232	01/21/14 12:10
Toluene-d8		% Rec.	104.0	88.5-111	WG702232	01/21/14 12:10
a,a,a-Trifluorotoluene		% Rec.	101.0	85-114	WG702232	01/21/14 12:10
Total Solids	< .1	%			WG702527	01/22/14 08:42
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1,1-Trichloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1,2-Trichloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1-Dichloroethane	< .001	mg/l			WG702215	01/21/14 22:24
1,1-Dichloroethene	< .001	mg/l			WG702215	01/21/14 22:24
1,1-Dichloropropene	< .001	mg/l			WG702215	01/21/14 22:24
1,2,3-Trichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,2,3-Trichloropropane	< .001	mg/l			WG702215	01/21/14 22:24
1,2,4-Trichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,2,4-Trimethylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG702215	01/21/14 22:24
1,2-Dibromoethane	< .001	mg/l			WG702215	01/21/14 22:24
1,2-Dichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,2-Dichloroethane	< .001	mg/l			WG702215	01/21/14 22:24

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Quality Assurance Report
Level II

L678898

January 27, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,2-Dichloropropane	< .001	mg/l			WG702215	01/21/14 22:24
1,3,5-Trimethylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,3-Dichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
1,3-Dichloropropane	< .001	mg/l			WG702215	01/21/14 22:24
1,4-Dichlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
2,2-Dichloropropane	< .001	mg/l			WG702215	01/21/14 22:24
2-Butanone (MEK)	< .01	mg/l			WG702215	01/21/14 22:24
2-Chloroethyl vinyl ether	< .05	mg/l			WG702215	01/21/14 22:24
2-Chlorotoluene	< .001	mg/l			WG702215	01/21/14 22:24
4-Chlorotoluene	< .001	mg/l			WG702215	01/21/14 22:24
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG702215	01/21/14 22:24
Acetone	< .05	mg/l			WG702215	01/21/14 22:24
Acrolein	< .025	mg/l			WG702215	01/21/14 22:24
Acrylonitrile	< .01	mg/l			WG702215	01/21/14 22:24
Benzene	< .001	mg/l			WG702215	01/21/14 22:24
Bromobenzene	< .001	mg/l			WG702215	01/21/14 22:24
Bromodichloromethane	< .001	mg/l			WG702215	01/21/14 22:24
Bromoform	< .001	mg/l			WG702215	01/21/14 22:24
Bromomethane	< .005	mg/l			WG702215	01/21/14 22:24
Carbon tetrachloride	< .001	mg/l			WG702215	01/21/14 22:24
Chlorobenzene	< .001	mg/l			WG702215	01/21/14 22:24
Chlorodibromomethane	< .001	mg/l			WG702215	01/21/14 22:24
Chloroethane	< .005	mg/l			WG702215	01/21/14 22:24
Chloroform	< .005	mg/l			WG702215	01/21/14 22:24
Chloromethane	< .0025	mg/l			WG702215	01/21/14 22:24
cis-1,2-Dichloroethene	< .001	mg/l			WG702215	01/21/14 22:24
cis-1,3-Dichloropropene	< .001	mg/l			WG702215	01/21/14 22:24
Di-isopropyl ether	< .001	mg/l			WG702215	01/21/14 22:24
Dibromomethane	< .001	mg/l			WG702215	01/21/14 22:24
Dichlorodifluoromethane	< .005	mg/l			WG702215	01/21/14 22:24
Ethylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Hexachloro-1,3-butadiene	< .001	mg/l			WG702215	01/21/14 22:24
Isopropylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Methyl tert-butyl ether	< .001	mg/l			WG702215	01/21/14 22:24
Methylene Chloride	< .005	mg/l			WG702215	01/21/14 22:24
n-Butylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
n-Propylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Naphthalene	< .005	mg/l			WG702215	01/21/14 22:24
p-Isopropyltoluene	< .001	mg/l			WG702215	01/21/14 22:24
sec-Butylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Styrene	< .001	mg/l			WG702215	01/21/14 22:24
tert-Butylbenzene	< .001	mg/l			WG702215	01/21/14 22:24
Tetrachloroethene	< .001	mg/l			WG702215	01/21/14 22:24
Toluene	< .005	mg/l			WG702215	01/21/14 22:24
trans-1,2-Dichloroethene	< .001	mg/l			WG702215	01/21/14 22:24
trans-1,3-Dichloropropene	< .001	mg/l			WG702215	01/21/14 22:24
Trichloroethene	< .001	mg/l			WG702215	01/21/14 22:24
Trichlorofluoromethane	< .005	mg/l			WG702215	01/21/14 22:24
Vinyl chloride	< .001	mg/l			WG702215	01/21/14 22:24
Xylenes, Total	< .003	mg/l			WG702215	01/21/14 22:24
4-Bromofluorobenzene		% Rec.	101.0	71-126	WG702215	01/21/14 22:24
Dibromofluoromethane		% Rec.	99.00	78.3-121	WG702215	01/21/14 22:24
Toluene-d8		% Rec.	103.0	88.5-111	WG702215	01/21/14 22:24
a,a,a-Trifluorotoluene		% Rec.	102.0	85-114	WG702215	01/21/14 22:24
Mercury	< .02	mg/kg			WG702460	01/22/14 16:08

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Quality Assurance Report
Level II

L678898

January 27, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,2,4-Trichlorobenzene	< .333	mg/kg			WG702802	01/23/14 04:31
2,4,6-Trichlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dichlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dimethylphenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dinitrophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2,4-Dinitrotoluene	< .333	mg/kg			WG702802	01/23/14 04:31
2,6-Dinitrotoluene	< .333	mg/kg			WG702802	01/23/14 04:31
2-Chloronaphthalene	< .033	mg/kg			WG702802	01/23/14 04:31
2-Chlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
2-Nitrophenol	< .333	mg/kg			WG702802	01/23/14 04:31
3,3-Dichlorobenzidine	< .333	mg/kg			WG702802	01/23/14 04:31
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG702802	01/23/14 04:31
4-Bromophenyl-phenylether	< .333	mg/kg			WG702802	01/23/14 04:31
4-Chloro-3-methylphenol	< .333	mg/kg			WG702802	01/23/14 04:31
4-Chlorophenyl-phenylether	< .333	mg/kg			WG702802	01/23/14 04:31
4-Nitrophenol	< .333	mg/kg			WG702802	01/23/14 04:31
Acenaphthene	< .033	mg/kg			WG702802	01/23/14 04:31
Acenaphthylene	< .033	mg/kg			WG702802	01/23/14 04:31
Anthracene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzidine	< .333	mg/kg			WG702802	01/23/14 04:31
Benzo(a)anthracene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(a)pyrene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(b)fluoranthene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(g,h,i)perylene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzo(k)fluoranthene	< .033	mg/kg			WG702802	01/23/14 04:31
Benzylbutyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-chloroethyl)ether	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG702802	01/23/14 04:31
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Chrysene	< .033	mg/kg			WG702802	01/23/14 04:31
Di-n-butyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Di-n-octyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Dibenz(a,h)anthracene	< .033	mg/kg			WG702802	01/23/14 04:31
Diethyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Dimethyl phthalate	< .333	mg/kg			WG702802	01/23/14 04:31
Fluoranthene	< .033	mg/kg			WG702802	01/23/14 04:31
Fluorene	< .033	mg/kg			WG702802	01/23/14 04:31
Hexachloro-1,3-butadiene	< .333	mg/kg			WG702802	01/23/14 04:31
Hexachlorobenzene	< .333	mg/kg			WG702802	01/23/14 04:31
Hexachlorocyclopentadiene	< .333	mg/kg			WG702802	01/23/14 04:31
Hexachloroethane	< .333	mg/kg			WG702802	01/23/14 04:31
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG702802	01/23/14 04:31
Isophorone	< .333	mg/kg			WG702802	01/23/14 04:31
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG702802	01/23/14 04:31
n-Nitrosodimethylamine	< .333	mg/kg			WG702802	01/23/14 04:31
n-Nitrosodiphenylamine	< .333	mg/kg			WG702802	01/23/14 04:31
Naphthalene	< .033	mg/kg			WG702802	01/23/14 04:31
Nitrobenzene	< .333	mg/kg			WG702802	01/23/14 04:31
Pentachlorophenol	< .333	mg/kg			WG702802	01/23/14 04:31
Phenanthrene	< .033	mg/kg			WG702802	01/23/14 04:31
Phenol	< .333	mg/kg			WG702802	01/23/14 04:31
Pyrene	< .033	mg/kg			WG702802	01/23/14 04:31
2,4,6-Tribromophenol		% Rec.	93.60	21.6-142	WG702802	01/23/14 04:31
2-Fluorobiphenyl		% Rec.	68.00	34.9-129	WG702802	01/23/14 04:31
2-Fluorophenol		% Rec.	70.60	21.1-116	WG702802	01/23/14 04:31
Nitrobenzene-d5		% Rec.	72.10	21.9-129	WG702802	01/23/14 04:31
Phenol-d5		% Rec.	76.70	26.3-121	WG702802	01/23/14 04:31
p-Terphenyl-d14		% Rec.	77.40	21.5-128	WG702802	01/23/14 04:31

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Quality Assurance Report
Level II

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Antimony	< .001	mg/l			WG702315	01/22/14 16:05
4,4-DDD	< .00005	mg/l			WG702276	01/23/14 09:23
4,4-DDE	< .00005	mg/l			WG702276	01/23/14 09:23
4,4-DDT	< .00005	mg/l			WG702276	01/23/14 09:23
Aldrin	< .00005	mg/l			WG702276	01/23/14 09:23
Alpha BHC	< .00005	mg/l			WG702276	01/23/14 09:23
Beta BHC	< .00005	mg/l			WG702276	01/23/14 09:23
Chlordane	< .005	mg/l			WG702276	01/23/14 09:23
Delta BHC	< .00005	mg/l			WG702276	01/23/14 09:23
Dieldrin	< .00005	mg/l			WG702276	01/23/14 09:23
Endosulfan I	< .00005	mg/l			WG702276	01/23/14 09:23
Endosulfan II	< .00005	mg/l			WG702276	01/23/14 09:23
Endosulfan sulfate	< .00005	mg/l			WG702276	01/23/14 09:23
Endrin	< .00005	mg/l			WG702276	01/23/14 09:23
Endrin aldehyde	< .00005	mg/l			WG702276	01/23/14 09:23
Endrin ketone	< .00005	mg/l			WG702276	01/23/14 09:23
Gamma BHC	< .00005	mg/l			WG702276	01/23/14 09:23
Heptachlor	< .00005	mg/l			WG702276	01/23/14 09:23
Heptachlor epoxide	< .00005	mg/l			WG702276	01/23/14 09:23
Hexachlorobenzene	< .00005	mg/l			WG702276	01/23/14 09:23
Methoxychlor	< .00005	mg/l			WG702276	01/23/14 09:23
Toxaphene	< .0005	mg/l			WG702276	01/23/14 09:23
Decachlorobiphenyl		% Rec.	81.40	10-156	WG702276	01/23/14 09:23
Tetrachloro-m-xylene		% Rec.	83.10	13.9-137	WG702276	01/23/14 09:23
Antimony	< 1	mg/kg			WG702433	01/23/14 11:35
Arsenic	< 1	mg/kg			WG702433	01/23/14 11:35
Beryllium	< .1	mg/kg			WG702433	01/23/14 11:35
Cadmium	< .25	mg/kg			WG702433	01/23/14 11:35
Chromium	< .5	mg/kg			WG702433	01/23/14 11:35
Copper	< 1	mg/kg			WG702433	01/23/14 11:35
Lead	< .25	mg/kg			WG702433	01/23/14 11:35
Nickel	< 1	mg/kg			WG702433	01/23/14 11:35
Selenium	< 1	mg/kg			WG702433	01/23/14 11:35
Silver	< .5	mg/kg			WG702433	01/23/14 11:35
Thallium	< 1	mg/kg			WG702433	01/23/14 11:35
Zinc	< 1.5	mg/kg			WG702433	01/23/14 11:35
PCB 1016	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1221	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1232	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1242	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1248	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1254	< .0005	mg/l			WG702276	01/23/14 14:22
PCB 1260	< .0005	mg/l			WG702276	01/23/14 14:22
Decachlorobiphenyl		% Rec.	76.70	10-156	WG702276	01/23/14 14:22
Tetrachloro-m-xylene		% Rec.	79.80	13.9-137	WG702276	01/23/14 14:22
PCB 1016	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1221	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1232	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1242	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1248	< .017	mg/kg			WG702937	01/24/14 08:36
PCB 1254	< .017	mg/kg			WG702937	01/24/14 08:36

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Quality Assurance Report
Level II

L678898

January 27, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
PCB 1260	< .017	mg/kg			WG702937	01/24/14 08:36
Decachlorobiphenyl		% Rec.	78.30	10-145	WG702937	01/24/14 08:36
Tetrachloro-m-xylene		% Rec.	84.60	21.1-148	WG702937	01/24/14 08:36
Antimony	< 1	mg/kg			WG702433	01/26/14 03:03
4,4-DDD	< .02	mg/kg			WG702937	01/24/14 10:53
4,4-DDE	< .02	mg/kg			WG702937	01/24/14 10:53
4,4-DDT	< .02	mg/kg			WG702937	01/24/14 10:53
Aldrin	< .02	mg/kg			WG702937	01/24/14 10:53
Alpha BHC	< .02	mg/kg			WG702937	01/24/14 10:53
Beta BHC	< .02	mg/kg			WG702937	01/24/14 10:53
Chlordane	< .2	mg/kg			WG702937	01/24/14 10:53
Delta BHC	< .02	mg/kg			WG702937	01/24/14 10:53
Dieldrin	< .02	mg/kg			WG702937	01/24/14 10:53
Endosulfan I	< .02	mg/kg			WG702937	01/24/14 10:53
Endosulfan II	< .02	mg/kg			WG702937	01/24/14 10:53
Endosulfan sulfate	< .02	mg/kg			WG702937	01/24/14 10:53
Endrin	< .02	mg/kg			WG702937	01/24/14 10:53
Endrin aldehyde	< .02	mg/kg			WG702937	01/24/14 10:53
Endrin ketone	< .02	mg/kg			WG702937	01/24/14 10:53
Gamma BHC	< .02	mg/kg			WG702937	01/24/14 10:53
Heptachlor	< .02	mg/kg			WG702937	01/24/14 10:53
Heptachlor epoxide	< .02	mg/kg			WG702937	01/24/14 10:53
Hexachlorobenzene	< .02	mg/kg			WG702937	01/24/14 10:53
Methoxychlor	< .02	mg/kg			WG702937	01/24/14 10:53
Toxaphene	< .4	mg/kg			WG702937	01/24/14 10:53
Decachlorobiphenyl		% Rec.	74.90	10-145	WG702937	01/24/14 10:53
Tetrachloro-m-xylene		% Rec.	94.60	21.1-148	WG702937	01/24/14 10:53

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Beryllium	mg/l	0.0	0.000294	7.00	20	L678898-08	WG702291
Cadmium	mg/l	0.0	0.000766	67.0*	20	L678898-08	WG702291
Chromium	mg/l	0.0	0.000360	31.0*	20	L678898-08	WG702291
Copper	mg/l	0.0	0.000182	1380*	20	L678898-08	WG702291
Nickel	mg/l	0.0	-0.00197	20.0	20	L678898-08	WG702291
Selenium	mg/l	0.0	0.0106	111.*	20	L678898-08	WG702291
Silver	mg/l	0.0	0.000866	343.*	20	L678898-08	WG702291
Zinc	mg/l	0.0	0.00186	4.00	20	L678898-08	WG702291
Beryllium	mg/l	0.0	0.000302	47.0*	20	L678726-01	WG702313
Cadmium	mg/l	0.0	0.000479	12.0	20	L678726-01	WG702313
Chromium	mg/l	0.0	0.000706	91.0*	20	L678726-01	WG702313
Copper	mg/l	0.0	0.0000103	202.*	20	L678726-01	WG702313
Nickel	mg/l	0.0	0.00249	63.0*	20	L678726-01	WG702313
Selenium	mg/l	0.0	0.00319	99.0*	20	L678726-01	WG702313
Silver	mg/l	0.0	-0.00307	618.*	20	L678726-01	WG702313
Zinc	mg/l	0.0	0.00271	13.0	20	L678726-01	WG702313
Mercury	mg/l	0.0	0.0000536	1.00	20	L678913-02	WG702302
Arsenic	mg/l	0.00170	0.00170	0.0	20	L678603-04	WG702315

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Quality Assurance Report
Level II

L678898

January 27, 2014

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Lead	mg/l	0.00150	0.00160	6.45	20	L678603-04	WG702315
Thallium	mg/l	0.0	0.0	0.0	20	L678603-04	WG702315
Total Solids	%	76.9	76.6	0.331	5	L678902-01	WG702527
Mercury	mg/kg	0.0	0.0866	175.*	20	L678967-01	WG702460
Antimony	mg/l	0.0	0.0	0.0	20	L678603-04	WG702315
Antimony	mg/kg	0.0	-0.0409	240.*	20	L678662-01	WG702433
Arsenic	mg/kg	0.0	0.360	275.*	20	L678662-01	WG702433
Beryllium	mg/kg	0.130	0.0810	45.0*	20	L678662-01	WG702433
Cadmium	mg/kg	0.0	0.0199	168.*	20	L678662-01	WG702433
Chromium	mg/kg	1.80	1.54	15.0	20	L678662-01	WG702433
Copper	mg/kg	1.60	1.04	41.0*	20	L678662-01	WG702433
Lead	mg/kg	1.40	1.11	25.0*	20	L678662-01	WG702433
Nickel	mg/kg	1.10	1.08	5.00	20	L678662-01	WG702433
Selenium	mg/kg	0.0	0.147	109.*	20	L678662-01	WG702433
Silver	mg/kg	0.0	-0.0317	647.*	20	L678662-01	WG702433
Thallium	mg/kg	2.10	1.35	45.0*	20	L678662-01	WG702433
Zinc	mg/kg	6.50	4.75	31.0*	20	L678662-01	WG702433
Antimony	mg/kg	0.0	0.0187	134.*	20	L678662-01	WG702433

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
			Laboratory Control Sample			
Beryllium	mg/l	1	0.999	100.	85-115	WG702291
Cadmium	mg/l	1	1.00	100.	85-115	WG702291
Chromium	mg/l	1	1.03	103.	85-115	WG702291
Copper	mg/l	1	1.04	104.	85-115	WG702291
Nickel	mg/l	1	0.966	97.0	85-115	WG702291
Selenium	mg/l	1	1.01	101.	85-115	WG702291
Silver	mg/l	1	1.05	105.	85-115	WG702291
Zinc	mg/l	1	1.01	101.	85-115	WG702291
Beryllium	mg/l	1	1.04	104.	85-115	WG702313
Cadmium	mg/l	1	1.04	104.	85-115	WG702313
Chromium	mg/l	1	1.06	106.	85-115	WG702313
Copper	mg/l	1	1.03	103.	85-115	WG702313
Nickel	mg/l	1	0.946	95.0	85-115	WG702313
Selenium	mg/l	1	1.01	101.	85-115	WG702313
Silver	mg/l	1	1.00	100.	85-115	WG702313
Zinc	mg/l	1	1.02	102.	85-115	WG702313
1,2,4-Trichlorobenzene	mg/l	.025	0.0141	56.4	22.9-96.1	WG702274
2,4,6-Trichlorophenol	mg/l	.025	0.0146	58.4	29.8-107	WG702274
2,4-Dichlorophenol	mg/l	.025	0.0165	65.8	31.4-103	WG702274
2,4-Dimethylphenol	mg/l	.025	0.0146	58.5	31.9-107	WG702274
2,4-Dinitrophenol	mg/l	.025	0.0143	57.4	24.2-128	WG702274
2,4-Dinitrotoluene	mg/l	.025	0.0165	66.1	31.2-105	WG702274
2,6-Dinitrotoluene	mg/l	.025	0.0175	70.1	30.6-106	WG702274
2-Chloronaphthalene	mg/l	.025	0.0167	66.9	33.6-105	WG702274
2-Chlorophenol	mg/l	.025	0.0138	55.1	26.2-91.5	WG702274

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L678898

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
2-Nitrophenol	mg/l	.025	0.0144	57.7	25.9-106	WG702274
3,3-Dichlorobenzidine	mg/l	.025	0.0177	70.8	27.2-142	WG702274
4,6-Dinitro-2-methylphenol	mg/l	.025	0.0179	71.7	18.4-148	WG702274
4-Bromophenyl-phenylether	mg/l	.025	0.0186	74.3	40.7-116	WG702274
4-Chloro-3-methylphenol	mg/l	.025	0.0157	62.7	35.7-100	WG702274
4-Chlorophenyl-phenylether	mg/l	.025	0.0157	62.9	39-113	WG702274
4-Nitrophenol	mg/l	.025	0.00841	33.7	10-52.7	WG702274
Acenaphthene	mg/l	.025	0.0159	63.7	38.7-109	WG702274
Acenaphthylene	mg/l	.025	0.0168	67.3	36-106	WG702274
Anthracene	mg/l	.025	0.0171	68.4	43.6-113	WG702274
Benzidine	mg/l	.025	0.0246	98.5	10-165.2	WG702274
Benzo(a)anthracene	mg/l	.025	0.0161	64.4	51.2-112	WG702274
Benzo(a)pyrene	mg/l	.025	0.0150	60.2	45.6-106	WG702274
Benzo(b)fluoranthene	mg/l	.025	0.0161	64.6	47.6-111	WG702274
Benzo(g,h,i)perylene	mg/l	.025	0.0166	66.3	45.2-117	WG702274
Benzo(k)fluoranthene	mg/l	.025	0.0159	63.6	49.4-114	WG702274
Benzylbutyl phthalate	mg/l	.025	0.0166	66.6	31.8-123	WG702274
Bis(2-chlorethoxy)methane	mg/l	.025	0.0156	62.3	37.2-111	WG702274
Bis(2-chloroethyl)ether	mg/l	.025	0.0155	61.9	22.6-108	WG702274
Bis(2-chloroisopropyl)ether	mg/l	.025	0.0148	59.4	32.9-100	WG702274
Bis(2-ethylhexyl)phthalate	mg/l	.025	0.0176	70.4	36.9-134	WG702274
Chrysene	mg/l	.025	0.0158	63.4	54.6-120	WG702274
Di-n-butyl phthalate	mg/l	.025	0.0181	72.2	41.8-120	WG702274
Di-n-octyl phthalate	mg/l	.025	0.0164	65.5	39.7-112	WG702274
Dibenz(a,h)anthracene	mg/l	.025	0.0150	60.0	42.8-118	WG702274
Diethyl phthalate	mg/l	.025	0.0188	75.1	36.5-129	WG702274
Dimethyl phthalate	mg/l	.025	0.0178	71.4	35.3-128	WG702274
Fluoranthene	mg/l	.025	0.0169	67.5	45.9-115	WG702274
Fluorene	mg/l	.025	0.0160	64.0	41-112	WG702274
Hexachloro-1,3-butadiene	mg/l	.025	0.0149	59.4	16.1-104	WG702274
Hexachlorobenzene	mg/l	.025	0.0189	75.7	38.5-116	WG702274
Hexachlorocyclopentadiene	mg/l	.025	0.0115	45.9	10-121	WG702274
Hexachloroethane	mg/l	.025	0.0138	55.1	16.5-89.8	WG702274
Indeno(1,2,3-cd)pyrene	mg/l	.025	0.0164	65.7	45-116	WG702274
Isophorone	mg/l	.025	0.0174	69.5	35.4-112	WG702274
n-Nitrosodi-n-propylamine	mg/l	.025	0.0162	64.9	33.2-106	WG702274
n-Nitrosodimethylamine	mg/l	.025	0.00960	38.4	10-80.1	WG702274
n-Nitrosodiphenylamine	mg/l	.025	0.0161	64.6	44.4-113	WG702274
Naphthalene	mg/l	.025	0.0143	57.3	32.2-101	WG702274
Nitrobenzene	mg/l	.025	0.0158	63.3	31.4-106	WG702274
Pentachlorophenol	mg/l	.025	0.0136	54.4	10-97.4	WG702274
Phenanthrene	mg/l	.025	0.0161	64.5	46.4-113	WG702274
Phenol	mg/l	.025	0.00692	27.7	10-57.9	WG702274
Pyrene	mg/l	.025	0.0150	60.0	46.3-117	WG702274
2,4,6-Tribromophenol				70.60	11.2-130	WG702274
2-Fluorobiphenyl				59.20	29.5-131	WG702274
2-Fluorophenol				39.40	10-77.9	WG702274
Nitrobenzene-d5				56.80	21.8-123	WG702274
Phenol-d5				24.40	5-70.1	WG702274
p-Terphenyl-d14				55.20	29.3-137	WG702274
Mercury	mg/l	.003	0.00306	102.	85-115	WG702302
Arsenic	mg/l	.05	0.0492	98.4	85-115	WG702315
Lead	mg/l	.05	0.0492	98.4	85-115	WG702315
Thallium	mg/l	.05	0.0500	100.	85-115	WG702315

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January 27, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0243	97.3	72.9-124	WG702232
1,1,1-Trichloroethane	mg/kg	.025	0.0261	104.	73.7-124	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0250	100.	69.4-122	WG702232
1,1,2-Trichloroethane	mg/kg	.025	0.0273	109.	79.1-118	WG702232
1,1-Dichloroethane	mg/kg	.025	0.0280	112.	75-124	WG702232
1,1-Dichloroethene	mg/kg	.025	0.0251	101.	70.4-129	WG702232
1,1-Dichloropropene	mg/kg	.025	0.0275	110.	74.9-124	WG702232
1,2,3-Trichlorobenzene	mg/kg	.025	0.0254	102.	69.3-131	WG702232
1,2,3-Trichloropropane	mg/kg	.025	0.0247	98.6	71.4-123	WG702232
1,2,4-Trichlorobenzene	mg/kg	.025	0.0264	106.	71.9-137	WG702232
1,2,4-Trimethylbenzene	mg/kg	.025	0.0239	95.4	75.5-122	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0268	107.	62.8-133	WG702232
1,2-Dibromoethane	mg/kg	.025	0.0279	111.	78.6-120	WG702232
1,2-Dichlorobenzene	mg/kg	.025	0.0245	97.8	78.3-118	WG702232
1,2-Dichloroethane	mg/kg	.025	0.0247	98.9	70.1-124	WG702232
1,2-Dichloropropane	mg/kg	.025	0.0281	112.	77.9-119	WG702232
1,3,5-Trimethylbenzene	mg/kg	.025	0.0244	97.7	75.9-124	WG702232
1,3-Dichlorobenzene	mg/kg	.025	0.0233	93.3	72-126	WG702232
1,3-Dichloropropane	mg/kg	.025	0.0276	110.	79.1-117	WG702232
1,4-Dichlorobenzene	mg/kg	.025	0.0239	95.5	78.3-117	WG702232
2,2-Dichloropropane	mg/kg	.025	0.0244	97.7	61.3-136	WG702232
2-Butanone (MEK)	mg/kg	.125	0.160	128.	53.7-153	WG702232
2-Chloroethyl vinyl ether	mg/kg	.125	0.179	144.	37.7-157	WG702232
2-Chlorotoluene	mg/kg	.025	0.0228	91.4	75.6-121	WG702232
4-Chlorotoluene	mg/kg	.025	0.0241	96.6	77.3-120	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.150	120.	70.4-137	WG702232
Acetone	mg/kg	.125	0.116	92.9	35.1-175	WG702232
Acrylonitrile	mg/kg	.125	0.167	134.*	56.4-128	WG702232
Benzene	mg/kg	.025	0.0268	107.	77.1-121	WG702232
Bromobenzene	mg/kg	.025	0.0247	98.7	78.2-115	WG702232
Bromodichloromethane	mg/kg	.025	0.0230	92.1	74.9-115	WG702232
Bromoform	mg/kg	.025	0.0249	99.8	65.9-132	WG702232
Bromomethane	mg/kg	.025	0.0267	107.	48.7-165	WG702232
Carbon tetrachloride	mg/kg	.025	0.0259	104.	70-124	WG702232
Chlorobenzene	mg/kg	.025	0.0259	104.	79.1-119	WG702232
Chlorodibromomethane	mg/kg	.025	0.0256	102.	73.5-121	WG702232
Chloroethane	mg/kg	.025	0.0269	108.	66.2-132	WG702232
Chloroform	mg/kg	.025	0.0253	101.	76.7-122	WG702232
Chloromethane	mg/kg	.025	0.0304	121.	63.4-131	WG702232
cis-1,2-Dichloroethene	mg/kg	.025	0.0266	106.	78.2-119	WG702232
cis-1,3-Dichloropropene	mg/kg	.025	0.0281	112.	79.6-120	WG702232
Di-isopropyl ether	mg/kg	.025	0.0284	114.	70.4-133	WG702232
Dibromomethane	mg/kg	.025	0.0258	103.	79.4-120	WG702232
Dichlorodifluoromethane	mg/kg	.025	0.0282	113.	57.1-137	WG702232
Ethylbenzene	mg/kg	.025	0.0262	105.	79.7-122	WG702232
Hexachloro-1,3-butadiene	mg/kg	.025	0.0234	93.8	68.2-123	WG702232
Isopropylbenzene	mg/kg	.025	0.0274	109.	80-135	WG702232
Methyl tert-butyl ether	mg/kg	.025	0.0251	100.	73-129	WG702232
Methylene Chloride	mg/kg	.025	0.0252	101.	72.6-120	WG702232
n-Butylbenzene	mg/kg	.025	0.0263	105.	77.5-126	WG702232
n-Propylbenzene	mg/kg	.025	0.0248	99.1	77.9-123	WG702232
Naphthalene	mg/kg	.025	0.0256	102.	69.8-128	WG702232
p-Isopropyltoluene	mg/kg	.025	0.0251	100.	75.8-129	WG702232
sec-Butylbenzene	mg/kg	.025	0.0247	98.7	75.8-126	WG702232
Styrene	mg/kg	.025	0.0262	105.	82.4-126	WG702232
tert-Butylbenzene	mg/kg	.025	0.0253	101.	76.4-126	WG702232
Tetrachloroethene	mg/kg	.025	0.0267	107.	73.9-125	WG702232
Toluene	mg/kg	.025	0.0259	104.	79.7-118	WG702232

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
trans-1,2-Dichloroethene	mg/kg	.025	0.0258	103.	73.8-122	WG702232
trans-1,3-Dichloropropene	mg/kg	.025	0.0267	107.	75.9-124	WG702232
Trichloroethene	mg/kg	.025	0.0260	104.	77.9-118	WG702232
Trichlorofluoromethane	mg/kg	.025	0.0234	93.7	67.7-131	WG702232
Vinyl chloride	mg/kg	.025	0.0297	119.	66.7-130	WG702232
Xylenes, Total	mg/kg	.075	0.0768	102.	78.8-121	WG702232
4-Bromofluorobenzene				95.90	71-126	WG702232
Dibromofluoromethane				95.30	78.3-121	WG702232
Toluene-d8				102.0	88.5-111	WG702232
a,a,a-Trifluorotoluene				98.10	85-114	WG702232
Total Solids	%	50	50.0	100.	85-115	WG702527
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0223	89.0	74.2-124	WG702215
1,1,1-Trichloroethane	mg/l	.025	0.0225	90.0	73.2-123	WG702215
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0230	91.9	70.7-122	WG702215
1,1,2-Trichloroethane	mg/l	.025	0.0250	100.	77.7-118	WG702215
1,1-Dichloroethane	mg/l	.025	0.0254	102.	70.7-126	WG702215
1,1-Dichloroethene	mg/l	.025	0.0204	81.6	67.8-129	WG702215
1,1-Dichloropropene	mg/l	.025	0.0239	95.6	73.1-125	WG702215
1,2,3-Trichlorobenzene	mg/l	.025	0.0233	93.2	64.9-135	WG702215
1,2,3-Trichloropropane	mg/l	.025	0.0229	91.4	71.8-121	WG702215
1,2,4-Trichlorobenzene	mg/l	.025	0.0233	93.0	69.7-136	WG702215
1,2,4-Trimethylbenzene	mg/l	.025	0.0209	83.6	75-123	WG702215
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0232	93.0	65.4-128	WG702215
1,2-Dibromoethane	mg/l	.025	0.0251	100.	76.6-121	WG702215
1,2-Dichlorobenzene	mg/l	.025	0.0221	88.4	78.4-117	WG702215
1,2-Dichloroethane	mg/l	.025	0.0232	92.7	68.8-124	WG702215
1,2-Dichloropropane	mg/l	.025	0.0264	105.	76.5-119	WG702215
1,3,5-Trimethylbenzene	mg/l	.025	0.0213	85.4	75.6-124	WG702215
1,3-Dichlorobenzene	mg/l	.025	0.0206	82.3	70.8-128	WG702215
1,3-Dichloropropane	mg/l	.025	0.0253	101.	77.4-117	WG702215
1,4-Dichlorobenzene	mg/l	.025	0.0216	86.4	78.8-115	WG702215
2,2-Dichloropropane	mg/l	.025	0.0210	84.1	62.4-133	WG702215
2-Butanone (MEK)	mg/l	.125	0.111	89.0	55-149	WG702215
2-Chloroethyl vinyl ether	mg/l	.125	0.167	134.	43.8-150	WG702215
2-Chlorotoluene	mg/l	.025	0.0202	80.8	74.7-122	WG702215
4-Chlorotoluene	mg/l	.025	0.0217	86.6	77.5-120	WG702215
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.136	109.	70.5-133	WG702215
Acetone	mg/l	.125	0.0578	46.3	35.6-163	WG702215
Acrolein	mg/l	.125	0.183	147.	10-190	WG702215
Acrylonitrile	mg/l	.125	0.148	119.	55.2-130	WG702215
Benzene	mg/l	.025	0.0245	98.0	74.8-121	WG702215
Bromobenzene	mg/l	.025	0.0226	90.5	77.5-116	WG702215
Bromodichloromethane	mg/l	.025	0.0213	85.2	75.1-116	WG702215
Bromoform	mg/l	.025	0.0223	89.1	67.5-130	WG702215
Bromomethane	mg/l	.025	0.0202	80.8	49.9-162	WG702215
Carbon tetrachloride	mg/l	.025	0.0222	88.7	70.2-123	WG702215
Chlorobenzene	mg/l	.025	0.0235	94.2	78.1-119	WG702215
Chlorodibromomethane	mg/l	.025	0.0227	90.7	74-121	WG702215
Chloroethane	mg/l	.025	0.0203	81.4	61.7-135	WG702215
Chloroform	mg/l	.025	0.0231	92.4	76-121	WG702215
Chloromethane	mg/l	.025	0.0256	102.	61.5-129	WG702215
cis-1,2-Dichloroethene	mg/l	.025	0.0246	98.3	76-119	WG702215
cis-1,3-Dichloropropene	mg/l	.025	0.0256	103.	78.2-120	WG702215
Di-isopropyl ether	mg/l	.025	0.0262	105.	65.6-132	WG702215
Dibromomethane	mg/l	.025	0.0243	97.1	79.5-118	WG702215

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Dichlorodifluoromethane	mg/l	.025	0.0230	91.9	54.8-135	WG702215
Ethylbenzene	mg/l	.025	0.0230	91.8	78.8-122	WG702215
Hexachloro-1,3-butadiene	mg/l	.025	0.0199	79.4	64.7-129	WG702215
Isopropylbenzene	mg/l	.025	0.0239	95.8	78.6-132	WG702215
Methyl tert-butyl ether	mg/l	.025	0.0238	95.2	71.2-126	WG702215
Methylene Chloride	mg/l	.025	0.0239	95.4	70.3-120	WG702215
n-Butylbenzene	mg/l	.025	0.0219	87.4	76.2-126	WG702215
n-Propylbenzene	mg/l	.025	0.0215	85.9	78.2-122	WG702215
Naphthalene	mg/l	.025	0.0232	92.8	68.4-128	WG702215
p-Isopropyltoluene	mg/l	.025	0.0218	87.1	74-131	WG702215
sec-Butylbenzene	mg/l	.025	0.0212	85.0	74.4-127	WG702215
Styrene	mg/l	.025	0.0236	94.3	80.4-126	WG702215
tert-Butylbenzene	mg/l	.025	0.0220	88.2	75.3-126	WG702215
Tetrachloroethene	mg/l	.025	0.0227	90.9	72.6-126	WG702215
Toluene	mg/l	.025	0.0239	95.7	79.7-116	WG702215
trans-1,2-Dichloroethene	mg/l	.025	0.0233	93.4	72.6-121	WG702215
trans-1,3-Dichloropropene	mg/l	.025	0.0253	101.	74.3-123	WG702215
Trichloroethene	mg/l	.025	0.0231	92.6	77.7-118	WG702215
Trichlorofluoromethane	mg/l	.025	0.0185	73.9	63.5-135	WG702215
Vinyl chloride	mg/l	.025	0.0243	97.4	65.9-128	WG702215
Xylenes, Total	mg/l	.075	0.0680	90.7	78.7-121	WG702215
4-Bromofluorobenzene				94.70	71-126	WG702215
Dibromofluoromethane				93.50	78.3-121	WG702215
Toluene-d8				105.0	88.5-111	WG702215
a,a,a-Trifluorotoluene				97.50	85-114	WG702215
Mercury	mg/kg	12.4	14.4	116.	71.6-128	WG702460
1,2,4-Trichlorobenzene	mg/kg	.333	0.234	70.4	39.8-100	WG702802
2,4,6-Trichlorophenol	mg/kg	.333	0.270	81.0	44.4-108	WG702802
2,4-Dichlorophenol	mg/kg	.333	0.268	80.6	46.2-109	WG702802
2,4-Dimethylphenol	mg/kg	.333	0.284	85.2	42.2-110	WG702802
2,4-Dinitrophenol	mg/kg	.333	0.144	43.4	10-105	WG702802
2,4-Dinitrotoluene	mg/kg	.333	0.323	97.1	53-112	WG702802
2,6-Dinitrotoluene	mg/kg	.333	0.325	97.5	51.6-110	WG702802
2-Chloronaphthalene	mg/kg	.333	0.256	76.9	47.1-105	WG702802
2-Chlorophenol	mg/kg	.333	0.246	74.0	40.8-103	WG702802
2-Nitrophenol	mg/kg	.333	0.272	81.8	44.2-113	WG702802
3,3-Dichlorobenzidine	mg/kg	.333	0.223	67.1	21-101	WG702802
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.283	85.1	23.1-119	WG702802
4-Bromophenyl-phenylether	mg/kg	.333	0.291	87.4	51.4-110	WG702802
4-Chloro-3-methylphenol	mg/kg	.333	0.305	91.5	51.1-113	WG702802
4-Chlorophenyl-phenylether	mg/kg	.333	0.253	75.8	48.1-108	WG702802
4-Nitrophenol	mg/kg	.333	0.250	75.2	34.8-109	WG702802
Acenaphthene	mg/kg	.333	0.274	82.3	48.9-107	WG702802
Acenaphthylene	mg/kg	.333	0.276	82.8	49.2-111	WG702802
Anthracene	mg/kg	.333	0.292	87.8	52-112	WG702802
Benzidine	mg/kg	.333	0.00588	1.77	0-48	WG702802
Benzo(a)anthracene	mg/kg	.333	0.265	79.5	52.3-106	WG702802
Benzo(a)pyrene	mg/kg	.333	0.247	74.3	51.9-106	WG702802
Benzo(b)fluoranthene	mg/kg	.333	0.259	77.7	51.3-106	WG702802
Benzo(g,h,i)perylene	mg/kg	.333	0.276	83.0	45.8-108	WG702802
Benzo(k)fluoranthene	mg/kg	.333	0.272	81.7	52.9-107	WG702802
Benzylbutyl phthalate	mg/kg	.333	0.348	105.	47.5-115	WG702802
Bis(2-chlorethoxy)methane	mg/kg	.333	0.268	80.4	44.9-108	WG702802
Bis(2-chloroethyl)ether	mg/kg	.333	0.221	66.2	32.5-112	WG702802
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.261	78.5	40.4-99	WG702802

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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.300	90.0	48.1-116	WG702802
Chrysene	mg/kg	.333	0.265	79.6	54.4-110	WG702802
Di-n-butyl phthalate	mg/kg	.333	0.361	109.	49.7-113	WG702802
Di-n-octyl phthalate	mg/kg	.333	0.300	90.2	49.6-112	WG702802
Dibenz(a,h)anthracene	mg/kg	.333	0.280	84.2	45.7-111	WG702802
Diethyl phthalate	mg/kg	.333	0.344	103.	52-112	WG702802
Dimethyl phthalate	mg/kg	.333	0.322	96.7	51.4-108	WG702802
Fluoranthene	mg/kg	.333	0.289	86.6	53.7-110	WG702802
Fluorene	mg/kg	.333	0.276	82.8	51.1-109	WG702802
Hexachloro-1,3-butadiene	mg/kg	.333	0.288	86.3	41.5-112	WG702802
Hexachlorobenzene	mg/kg	.333	0.301	90.5	43.2-104	WG702802
Hexachlorocyclopentadiene	mg/kg	.333	0.236	70.9	13.5-123	WG702802
Hexachloroethane	mg/kg	.333	0.258	77.5	36.2-103	WG702802
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.285	85.5	47.5-109	WG702802
Isophorone	mg/kg	.333	0.323	97.0	28.8-104	WG702802
n-Nitrosodi-n-propylamine	mg/kg	.333	0.267	80.0	43.3-109	WG702802
n-Nitrosodimethylamine	mg/kg	.333	0.232	69.6	18.1-122	WG702802
n-Nitrosodiphenylamine	mg/kg	.333	0.299	89.7	48.8-107	WG702802
Naphthalene	mg/kg	.333	0.235	70.5	43.4-103	WG702802
Nitrobenzene	mg/kg	.333	0.273	82.0	40.7-109	WG702802
Pentachlorophenol	mg/kg	.333	0.264	79.2	16.2-102	WG702802
Phenanthrene	mg/kg	.333	0.279	83.8	51.6-107	WG702802
Phenol	mg/kg	.333	0.251	75.5	41.5-106	WG702802
Pyrene	mg/kg	.333	0.267	80.2	47.1-108	WG702802
2,4,6-Tribromophenol				107.0	21.6-142	WG702802
2-Fluorobiphenyl				74.20	34.9-129	WG702802
2-Fluorophenol				70.60	21.1-116	WG702802
Nitrobenzene-d5				78.50	21.9-129	WG702802
Phenol-d5				76.80	26.3-121	WG702802
p-Terphenyl-d14				75.30	21.5-128	WG702802
Antimony	mg/l	.05	0.0443	88.6	85-115	WG702315
4,4-DDD	mg/l	.0002	0.000201	101.	47.6-144	WG702276
4,4-DDE	mg/l	.0002	0.000204	102.	45-124	WG702276
4,4-DDT	mg/l	.0002	0.000192	96.1	49.8-130	WG702276
Aldrin	mg/l	.0002	0.000196	98.2	10-120	WG702276
Alpha BHC	mg/l	.0002	0.000182	90.8	53.6-125	WG702276
Beta BHC	mg/l	.0002	0.000195	97.4	55.8-130	WG702276
Delta BHC	mg/l	.0002	0.000183	91.6	42.2-135	WG702276
Dieldrin	mg/l	.0002	0.000194	96.9	55-127	WG702276
Endosulfan I	mg/l	.0002	0.000201	100.	54.7-127	WG702276
Endosulfan II	mg/l	.0002	0.000202	101.	53.1-135	WG702276
Endosulfan sulfate	mg/l	.0002	0.000190	95.1	51.5-132	WG702276
Endrin	mg/l	.0002	0.000204	102.	50.1-131	WG702276
Endrin aldehyde	mg/l	.0002	0.000193	96.7	39.5-137	WG702276
Endrin ketone	mg/l	.0002	0.000200	100.	53.5-139	WG702276
Gamma BHC	mg/l	.0002	0.000187	93.5	54.7-125	WG702276
Heptachlor	mg/l	.0002	0.000186	93.2	20.7-127	WG702276
Heptachlor epoxide	mg/l	.0002	0.000203	101.	56.4-124	WG702276
Hexachlorobenzene	mg/l	.0002	0.000173	86.7	26.7-114	WG702276
Methoxychlor	mg/l	.0002	0.000199	99.7	48.2-144	WG702276
Decachlorobiphenyl				78.10	10-156	WG702276
Tetrachloro-m-xylene				65.40	13.9-137	WG702276
Arsenic	mg/kg	237	231.	98.0	83.1-117	WG702433

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Quality Assurance Report
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Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Beryllium	mg/kg	93.3	89.5	96.0	83.3-117	WG702433
Cadmium	mg/kg	191	160.	84.0	83.2-117	WG702433
Chromium	mg/kg	128	120.	94.0	81.3-118	WG702433
Copper	mg/kg	123	118.	96.0	83.7-116	WG702433
Lead	mg/kg	103	91.3	89.0	83.1-117	WG702433
Nickel	mg/kg	118	105.	89.0	82-118	WG702433
Selenium	mg/kg	110	106.	96.0	78.7-122	WG702433
Silver	mg/kg	47.3	45.3	96.0	66.2-134	WG702433
Thallium	mg/kg	158	141.	89.0	81-119	WG702433
Zinc	mg/kg	183	170.	93.0	82-118	WG702433
PCB 1016	mg/l	.0005	0.000452	90.5	24.7-128	WG702276
PCB 1260	mg/l	.0005	0.000445	89.0	47.7-149	WG702276
Decachlorobiphenyl				77.80	10-156	WG702276
Tetrachloro-m-xylene				51.30	13.9-137	WG702276
PCB 1016	mg/kg	.167	0.139	83.0	63.2-118	WG702937
PCB 1260	mg/kg	.167	0.154	92.4	64.6-123	WG702937
Decachlorobiphenyl				92.80	10-145	WG702937
Tetrachloro-m-xylene				102.0	21.1-148	WG702937
Antimony	mg/kg	113	59.5	53.0	0.88-223	WG702433
4,4-DDD	mg/kg	.067	0.0631	94.2	70.3-111	WG702937
4,4-DDE	mg/kg	.067	0.0641	95.7	69.9-113	WG702937
4,4-DDT	mg/kg	.067	0.0540	80.5	68.1-111	WG702937
Aldrin	mg/kg	.067	0.0650	97.0	66.9-111	WG702937
Alpha BHC	mg/kg	.067	0.0657	98.1	65.1-111	WG702937
Beta BHC	mg/kg	.067	0.0657	98.1	69.6-112	WG702937
Delta BHC	mg/kg	.067	0.0662	98.8	68.3-114	WG702937
Dieldrin	mg/kg	.067	0.0630	94.0	70.2-112	WG702937
Endosulfan I	mg/kg	.067	0.0639	95.4	69.8-113	WG702937
Endosulfan II	mg/kg	.067	0.0629	93.8	69.2-113	WG702937
Endosulfan sulfate	mg/kg	.067	0.0662	98.8	62-123	WG702937
Endrin	mg/kg	.067	0.0674	101.	65.9-115	WG702937
Endrin aldehyde	mg/kg	.067	0.0529	79.0	47.6-124	WG702937
Endrin ketone	mg/kg	.067	0.0618	92.3	69-120	WG702937
Gamma BHC	mg/kg	.067	0.0658	98.3	68.2-111	WG702937
Heptachlor	mg/kg	.067	0.0592	88.4	65.9-111	WG702937
Heptachlor epoxide	mg/kg	.067	0.0658	98.1	69.7-113	WG702937
Hexachlorobenzene	mg/kg	.067	0.0665	99.2	59.6-113	WG702937
Methoxychlor	mg/kg	.067	0.0574	85.6	66.2-114	WG702937
Decachlorobiphenyl				78.90	10-145	WG702937
Tetrachloro-m-xylene				98.50	21.1-148	WG702937

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2,4-Trichlorobenzene	mg/l	0.0148	0.0141	59.0	22.9-96.1	4.89	27.5	WG702274
2,4,6-Trichlorophenol	mg/l	0.0166	0.0146	66.0	29.8-107	13.1	24.1	WG702274
2,4-Dichlorophenol	mg/l	0.0184	0.0165	74.0	31.4-103	11.1	24.9	WG702274
2,4-Dimethylphenol	mg/l	0.0174	0.0146	70.0	31.9-107	17.5	25.7	WG702274
2,4-Dinitrophenol	mg/l	0.0171	0.0143	68.0	24.2-128	17.4	20.5	WG702274
2,4-Dinitrotoluene	mg/l	0.0175	0.0165	70.0	31.2-105	5.72	22	WG702274
2,6-Dinitrotoluene	mg/l	0.0184	0.0175	74.0	30.6-106	4.89	23.1	WG702274

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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
2-Chloronaphthalene	mg/l	0.0170	0.0167	68.0	33.6-105	1.46	23	WG702274
2-Chlorophenol	mg/l	0.0139	0.0138	56.0	26.2-91.5	1.04	26.5	WG702274
2-Nitrophenol	mg/l	0.0180	0.0144	72.0	25.9-106	22.1	26.9	WG702274
3,3-Dichlorobenzidine	mg/l	0.0194	0.0177	78.0	27.2-142	9.37	22.3	WG702274
4,6-Dinitro-2-methylphenol	mg/l	0.0187	0.0179	75.0	18.4-148	4.11	24.4	WG702274
4-Bromophenyl-phenylether	mg/l	0.0188	0.0186	75.0	40.7-116	1.06	21	WG702274
4-Chloro-3-methylphenol	mg/l	0.0164	0.0157	66.0	35.7-100	4.70	22.9	WG702274
4-Chlorophenyl-phenylether	mg/l	0.0170	0.0157	68.0	39-113	7.51	20.9	WG702274
4-Nitrophenol	mg/l	0.00952	0.00841	38.0	10-52.7	12.4	40	WG702274
Acenaphthene	mg/l	0.0164	0.0159	65.0	38.7-109	2.77	21.5	WG702274
Acenaphthylene	mg/l	0.0168	0.0168	67.0	36-106	0.320	21	WG702274
Anthracene	mg/l	0.0169	0.0171	68.0	43.6-113	0.950	18.8	WG702274
Benzidine	mg/l	0.0259	0.0246	104.	10-165.2	5.20	40	WG702274
Benzo(a)anthracene	mg/l	0.0173	0.0161	69.0	51.2-112	6.92	20	WG702274
Benzo(a)pyrene	mg/l	0.0155	0.0150	62.0	45.6-106	3.15	20	WG702274
Benzo(b)fluoranthene	mg/l	0.0170	0.0161	68.0	47.6-111	5.01	20	WG702274
Benzo(g,h,i)perylene	mg/l	0.0173	0.0166	69.0	45.2-117	4.33	20	WG702274
Benzo(k)fluoranthene	mg/l	0.0173	0.0159	69.0	49.4-114	8.42	20	WG702274
Benzylbutyl phthalate	mg/l	0.0177	0.0166	71.0	31.8-123	6.06	20.7	WG702274
Bis(2-chlorethoxy)methane	mg/l	0.0153	0.0156	61.0	37.2-111	1.41	24.1	WG702274
Bis(2-chloroethyl)ether	mg/l	0.0154	0.0155	61.0	22.6-108	0.720	27.9	WG702274
Bis(2-chloroisopropyl)ether	mg/l	0.0161	0.0148	64.0	32.9-100	8.23	25.1	WG702274
Bis(2-ethylhexyl)phthalate	mg/l	0.0185	0.0176	74.0	36.9-134	5.04	23.6	WG702274
Chrysene	mg/l	0.0169	0.0158	67.0	54.6-120	6.30	20	WG702274
Di-n-butyl phthalate	mg/l	0.0189	0.0181	76.0	41.8-120	4.83	20.2	WG702274
Di-n-octyl phthalate	mg/l	0.0178	0.0164	71.0	39.7-112	8.01	21.1	WG702274
Dibenz(a,h)anthracene	mg/l	0.0162	0.0150	65.0	42.8-118	7.69	20	WG702274
Diethyl phthalate	mg/l	0.0191	0.0188	76.0	36.5-129	1.51	20	WG702274
Dimethyl phthalate	mg/l	0.0182	0.0178	73.0	35.3-128	1.92	20.8	WG702274
Fluoranthene	mg/l	0.0171	0.0169	68.0	45.9-115	1.48	20	WG702274
Fluorene	mg/l	0.0164	0.0160	66.0	41-112	2.67	20.2	WG702274
Hexachloro-1,3-butadiene	mg/l	0.0172	0.0149	69.0	16.1-104	14.4	31.2	WG702274
Hexachlorobenzene	mg/l	0.0197	0.0189	79.0	38.5-116	4.31	20.1	WG702274
Hexachlorocyclopentadiene	mg/l	0.0127	0.0115	51.0	10-121	10.2	27.9	WG702274
Hexachloroethane	mg/l	0.0148	0.0138	59.0	16.5-89.8	6.88	30.7	WG702274
Indeno(1,2,3-cd)pyrene	mg/l	0.0171	0.0164	68.0	45-116	4.00	20	WG702274
Isophorone	mg/l	0.0194	0.0174	78.0	35.4-112	11.1	21.5	WG702274
n-Nitrosodi-n-propylamine	mg/l	0.0162	0.0162	65.0	33.2-106	0.380	23.7	WG702274
n-Nitrosodimethylamine	mg/l	0.00896	0.00960	36.0	10-80.1	6.95	37.5	WG702274
n-Nitrosodiphenylamine	mg/l	0.0166	0.0161	66.0	44.4-113	2.61	20	WG702274
Naphthalene	mg/l	0.0154	0.0143	61.0	32.2-101	7.04	23.8	WG702274
Nitrobenzene	mg/l	0.0168	0.0158	67.0	31.4-106	6.06	25.7	WG702274
Pentachlorophenol	mg/l	0.0152	0.0136	61.0	10-97.4	11.0	35.1	WG702274
Phenanthrene	mg/l	0.0171	0.0161	68.0	46.4-113	5.62	20	WG702274
Phenol	mg/l	0.00764	0.00692	30.0	10-57.9	9.83	35	WG702274
Pyrene	mg/l	0.0164	0.0150	65.0	46.3-117	8.78	20	WG702274
2,4,6-Tribromophenol				78.30	11.2-130			WG702274
2-Fluorobiphenyl				59.20	29.5-131			WG702274
2-Fluorophenol				39.90	10-77.9			WG702274
Nitrobenzene-d5				64.00	21.8-123			WG702274
Phenol-d5				27.30	5-70.1			WG702274
p-Terphenyl-d14				58.20	29.3-137			WG702274
1,1,1,2-Tetrachloroethane	mg/kg	0.0256	0.0243	102.	72.9-124	5.03	20	WG702232
1,1,1-Trichloroethane	mg/kg	0.0279	0.0261	112.	73.7-124	6.86	20	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0242	0.0250	97.0	69.4-122	3.42	20	WG702232
1,1,2-Trichloroethane	mg/kg	0.0248	0.0273	99.0	79.1-118	9.59	20	WG702232
1,1-Dichloroethane	mg/kg	0.0303	0.0280	121.	75-124	7.91	20	WG702232

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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January 27, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1-Dichloroethene	mg/kg	0.0269	0.0251	108.	70.4-129	6.83	20	WG702232
1,1-Dichloropropene	mg/kg	0.0286	0.0275	114.	74.9-124	4.03	20	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0280	0.0254	112.	69.3-131	9.66	20	WG702232
1,2,3-Trichloropropane	mg/kg	0.0240	0.0247	96.0	71.4-123	2.66	20	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0293	0.0264	117.	71.9-137	10.2	20	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0254	0.0239	102.	75.5-122	6.44	20	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0255	0.0268	102.	62.8-133	4.83	20	WG702232
1,2-Dibromoethane	mg/kg	0.0245	0.0279	98.0	78.6-120	12.8	20	WG702232
1,2-Dichlorobenzene	mg/kg	0.0253	0.0245	101.	78.3-118	3.41	20	WG702232
1,2-Dichloroethane	mg/kg	0.0248	0.0247	99.0	70.1-124	0.180	20	WG702232
1,2-Dichloropropane	mg/kg	0.0281	0.0281	112.	77.9-119	0.270	20	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0260	0.0244	104.	75.9-124	6.21	20	WG702232
1,3-Dichlorobenzene	mg/kg	0.0245	0.0233	98.0	72-126	5.03	20	WG702232
1,3-Dichloropropane	mg/kg	0.0248	0.0276	99.0	79.1-117	10.7	20	WG702232
1,4-Dichlorobenzene	mg/kg	0.0239	0.0239	96.0	78.3-117	0.0400	20	WG702232
2,2-Dichloropropane	mg/kg	0.0277	0.0244	111.	61.3-136	12.6	20	WG702232
2-Butanone (MEK)	mg/kg	0.127	0.160	102.	53.7-153	22.7*	21.2	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.147	0.179	117.	37.7-157	20.1*	20	WG702232
2-Chlorotoluene	mg/kg	0.0246	0.0228	98.0	75.6-121	7.56	20	WG702232
4-Chlorotoluene	mg/kg	0.0254	0.0241	102.	77.3-120	5.03	20	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.135	0.150	108.	70.4-137	10.7	20	WG702232
Acetone	mg/kg	0.105	0.116	84.0	35.1-175	10.3	26.1	WG702232
Acrylonitrile	mg/kg	0.148	0.167	119.	56.4-128	11.9	20	WG702232
Benzene	mg/kg	0.0279	0.0268	112.	77.1-121	4.11	20	WG702232
Bromobenzene	mg/kg	0.0252	0.0247	101.	78.2-115	2.29	20	WG702232
Bromodichloromethane	mg/kg	0.0231	0.0230	92.0	74.9-115	0.250	20	WG702232
Bromoform	mg/kg	0.0235	0.0249	94.0	65.9-132	6.10	20	WG702232
Bromomethane	mg/kg	0.0299	0.0267	120.	48.7-165	11.4	20	WG702232
Carbon tetrachloride	mg/kg	0.0271	0.0259	108.	70-124	4.58	20	WG702232
Chlorobenzene	mg/kg	0.0256	0.0259	102.	79.1-119	1.02	20	WG702232
Chlorodibromomethane	mg/kg	0.0245	0.0256	98.0	73.5-121	4.07	20	WG702232
Chloroethane	mg/kg	0.0282	0.0269	113.	66.2-132	4.76	20	WG702232
Chloroform	mg/kg	0.0266	0.0253	106.	76.7-122	5.34	20	WG702232
Chloromethane	mg/kg	0.0328	0.0304	131.	63.4-131	7.60	20	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0287	0.0266	115.	78.2-119	7.53	20	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0263	0.0281	105.	79.6-120	6.53	20	WG702232
Di-isopropyl ether	mg/kg	0.0294	0.0284	117.	70.4-133	3.41	20	WG702232
Dibromomethane	mg/kg	0.0258	0.0258	103.	79.4-120	0.140	20	WG702232
Dichlorodifluoromethane	mg/kg	0.0294	0.0282	118.	57.1-137	4.31	20	WG702232
Ethylbenzene	mg/kg	0.0268	0.0262	107.	79.7-122	2.39	20	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0258	0.0234	103.	68.2-123	9.61	20	WG702232
Isopropylbenzene	mg/kg	0.0290	0.0274	116.	80-135	5.95	20	WG702232
Methyl tert-butyl ether	mg/kg	0.0266	0.0251	106.	73-129	5.84	20	WG702232
Methylene Chloride	mg/kg	0.0282	0.0252	113.	72.6-120	10.9	20	WG702232
n-Butylbenzene	mg/kg	0.0276	0.0263	110.	77.5-126	4.88	20	WG702232
n-Propylbenzene	mg/kg	0.0264	0.0248	106.	77.9-123	6.22	20	WG702232
Naphthalene	mg/kg	0.0260	0.0256	104.	69.8-128	1.62	20	WG702232
p-Isopropyltoluene	mg/kg	0.0272	0.0251	109.	75.8-129	8.34	20	WG702232
sec-Butylbenzene	mg/kg	0.0265	0.0247	106.	75.8-126	7.33	20	WG702232
Styrene	mg/kg	0.0264	0.0262	106.	82.4-126	0.850	20	WG702232
tert-Butylbenzene	mg/kg	0.0269	0.0253	108.	76.4-126	6.23	20	WG702232
Tetrachloroethene	mg/kg	0.0260	0.0267	104.	73.9-125	2.76	20	WG702232
Toluene	mg/kg	0.0261	0.0259	104.	79.7-118	0.620	20	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0283	0.0258	113.	73.8-122	9.41	20	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0238	0.0267	95.0	75.9-124	11.7	20	WG702232
Trichloroethene	mg/kg	0.0270	0.0260	108.	77.9-118	4.06	20	WG702232
Trichlorofluoromethane	mg/kg	0.0254	0.0234	102.	67.7-131	8.24	20	WG702232
Vinyl chloride	mg/kg	0.0306	0.0297	122.	66.7-130	2.97	20	WG702232
Xylenes, Total	mg/kg	0.0778	0.0768	104.	78.8-121	1.31	20	WG702232

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Analyte	Units	Laboratory Control Sample Result	Ref	%Rec	Limit	Duplicate RPD	Limit	Batch
4-Bromofluorobenzene				96.20	71-126			
Dibromofluoromethane				101.0	78.3-121			
Toluene-d8				103.0	88.5-111			
a,a,a-Trifluorotoluene				103.0	85-114			
1,1,1,2-Tetrachloroethane	mg/l	0.0228	0.0223	91.0	74.2-124	2.26	20	WG702215
1,1,1-Trichloroethane	mg/l	0.0235	0.0225	94.0	73.2-123	4.19	20	WG702215
1,1,2,2-Tetrachloroethane	mg/l	0.0236	0.0230	94.0	70.7-122	2.55	20	WG702215
1,1,2-Trichloroethane	mg/l	0.0250	0.0250	100.	77.7-118	0.140	20	WG702215
1,1-Dichloroethane	mg/l	0.0262	0.0254	105.	70.7-126	3.16	20	WG702215
1,1-Dichloroethene	mg/l	0.0224	0.0204	90.0	67.8-129	9.35	20	WG702215
1,1-Dichloropropene	mg/l	0.0246	0.0239	98.0	73.1-125	2.84	20	WG702215
1,2,3-Trichlorobenzene	mg/l	0.0238	0.0233	95.0	64.9-135	1.95	20	WG702215
1,2,3-Trichloropropane	mg/l	0.0231	0.0229	92.0	71.8-121	1.19	20	WG702215
1,2,4-Trichlorobenzene	mg/l	0.0234	0.0233	94.0	69.7-136	0.540	20	WG702215
1,2,4-Trimethylbenzene	mg/l	0.0219	0.0209	87.0	75-123	4.51	20	WG702215
1,2-Dibromo-3-Chloropropane	mg/l	0.0243	0.0232	97.0	65.4-128	4.44	20	WG702215
1,2-Dibromoethane	mg/l	0.0250	0.0251	100.	76.6-121	0.0200	20	WG702215
1,2-Dichlorobenzene	mg/l	0.0227	0.0221	91.0	78.4-117	2.72	20	WG702215
1,2-Dichloroethane	mg/l	0.0236	0.0232	94.0	68.8-124	1.95	20	WG702215
1,2-Dichloropropane	mg/l	0.0274	0.0264	110.	76.5-119	3.88	20	WG702215
1,3,5-Trimethylbenzene	mg/l	0.0224	0.0213	90.0	75.6-124	4.73	20	WG702215
1,3-Dichlorobenzene	mg/l	0.0216	0.0206	86.0	70.8-128	5.03	20	WG702215
1,3-Dichloropropane	mg/l	0.0252	0.0253	101.	77.4-117	0.140	20	WG702215
1,4-Dichlorobenzene	mg/l	0.0215	0.0216	86.0	78.8-115	0.390	20	WG702215
2,2-Dichloropropane	mg/l	0.0214	0.0210	86.0	62.4-133	1.93	20	WG702215
2-Butanone (MEK)	mg/l	0.111	0.111	89.0	55-149	0.400	20	WG702215
2-Chloroethyl vinyl ether	mg/l	0.164	0.167	131.	43.8-150	1.57	20	WG702215
2-Chlorotoluene	mg/l	0.0213	0.0202	85.0	74.7-122	5.31	20	WG702215
4-Chlorotoluene	mg/l	0.0223	0.0217	89.0	77.5-120	3.06	20	WG702215
4-Methyl-2-pentanone (MIBK)	mg/l	0.141	0.136	113.	70.5-133	3.71	20	WG702215
Acetone	mg/l	0.0602	0.0578	48.0	35.6-163	3.98	23.9	WG702215
Acrolein	mg/l	0.182	0.183	146.	10-190	0.700	28.1	WG702215
Acrylonitrile	mg/l	0.150	0.148	120.	55.2-130	1.21	20	WG702215
Benzene	mg/l	0.0250	0.0245	100.	74.8-121	2.06	20	WG702215
Bromobenzene	mg/l	0.0235	0.0226	94.0	77.5-116	3.83	20	WG702215
Bromodichloromethane	mg/l	0.0219	0.0213	88.0	75.1-116	2.75	20	WG702215
Bromoform	mg/l	0.0223	0.0223	89.0	67.5-130	0.250	20	WG702215
Bromomethane	mg/l	0.0230	0.0202	92.0	49.9-162	12.8	20	WG702215
Carbon tetrachloride	mg/l	0.0224	0.0222	90.0	70.2-123	0.920	20	WG702215
Chlorobenzene	mg/l	0.0239	0.0235	95.0	78.1-119	1.33	20	WG702215
Chlorodibromomethane	mg/l	0.0237	0.0227	95.0	74-121	4.26	20	WG702215
Chloroethane	mg/l	0.0230	0.0203	92.0	61.7-135	12.3	20	WG702215
Chloroform	mg/l	0.0239	0.0231	96.0	76-121	3.48	20	WG702215
Chloromethane	mg/l	0.0272	0.0256	109.	61.5-129	6.39	20	WG702215
cis-1,2-Dichloroethene	mg/l	0.0254	0.0246	101.	76-119	3.11	20	WG702215
cis-1,3-Dichloropropene	mg/l	0.0260	0.0256	104.	78.2-120	1.55	20	WG702215
Di-isopropyl ether	mg/l	0.0272	0.0262	109.	65.6-132	3.70	20	WG702215
Dibromomethane	mg/l	0.0254	0.0243	101.	79.5-118	4.42	20	WG702215
Dichlorodifluoromethane	mg/l	0.0234	0.0230	94.0	54.8-135	1.92	20	WG702215
Ethylbenzene	mg/l	0.0237	0.0230	95.0	78.8-122	3.36	20	WG702215
Hexachloro-1,3-butadiene	mg/l	0.0200	0.0199	80.0	64.7-129	0.890	20	WG702215
Isopropylbenzene	mg/l	0.0247	0.0239	99.0	78.6-132	3.04	20	WG702215
Methyl tert-butyl ether	mg/l	0.0250	0.0238	100.	71.2-126	4.98	20	WG702215
Methylene Chloride	mg/l	0.0249	0.0239	100.	70.3-120	4.38	20	WG702215
n-Butylbenzene	mg/l	0.0217	0.0219	87.0	76.2-126	0.820	20	WG702215
n-Propylbenzene	mg/l	0.0223	0.0215	89.0	78.2-122	3.70	20	WG702215
Naphthalene	mg/l	0.0237	0.0232	95.0	68.4-128	2.17	20	WG702215
p-Isopropyltoluene	mg/l	0.0226	0.0218	90.0	74-131	3.49	20	WG702215
sec-Butylbenzene	mg/l	0.0225	0.0212	90.0	74.4-127	5.74	20	WG702215

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Est. 1970

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Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Styrene	mg/l	0.0243	0.0236	97.0	80.4-126	2.95	20	WG702215
tert-Butylbenzene	mg/l	0.0230	0.0220	92.0	75.3-126	4.03	20	WG702215
Tetrachloroethene	mg/l	0.0222	0.0227	89.0	72.6-126	2.17	20	WG702215
Toluene	mg/l	0.0241	0.0239	96.0	79.7-116	0.800	20	WG702215
trans-1,2-Dichloroethene	mg/l	0.0240	0.0233	96.0	72.6-121	2.73	20	WG702215
trans-1,3-Dichloropropene	mg/l	0.0252	0.0253	101.	74.3-123	0.580	20	WG702215
Trichloroethene	mg/l	0.0237	0.0231	95.0	77.7-118	2.38	20	WG702215
Trichlorofluoromethane	mg/l	0.0203	0.0185	81.0	63.5-135	9.46	20	WG702215
Vinyl chloride	mg/l	0.0246	0.0243	98.0	65.9-128	1.06	20	WG702215
Xylenes, Total	mg/l	0.0693	0.0680	92.0	78.7-121	1.90	20	WG702215
4-Bromofluorobenzene				96.10	71-126			WG702215
Dibromofluoromethane				97.50	78.3-121			WG702215
Toluene-d8				105.0	88.5-111			WG702215
a,a,a-Trifluorotoluene				98.80	85-114			WG702215
1,2,4-Trichlorobenzene	mg/kg	0.250	0.234	75.0	39.8-100	6.54	20	WG702802
2,4,6-Trichlorophenol	mg/kg	0.264	0.270	79.0	44.4-108	2.13	20	WG702802
2,4-Dichlorophenol	mg/kg	0.285	0.268	86.0	46.2-109	5.97	20	WG702802
2,4-Dimethylphenol	mg/kg	0.266	0.284	80.0	42.2-110	6.52	20	WG702802
2,4-Dinitrophenol	mg/kg	0.133	0.144	40.0	10-105	8.46	36.5	WG702802
2,4-Dinitrotoluene	mg/kg	0.321	0.323	96.0	53-112	0.830	20	WG702802
2,6-Dinitrotoluene	mg/kg	0.311	0.325	93.0	51.6-110	4.20	20	WG702802
2-Chloronaphthalene	mg/kg	0.249	0.256	75.0	47.1-105	2.80	20	WG702802
2-Chlorophenol	mg/kg	0.252	0.246	76.0	40.8-103	2.13	20	WG702802
2-Nitrophenol	mg/kg	0.281	0.272	84.0	44.2-113	3.17	20.9	WG702802
3,3-Dichlorobenzidine	mg/kg	0.209	0.223	63.0	21-101	6.49	22	WG702802
4,6-Dinitro-2-methylphenol	mg/kg	0.288	0.283	86.0	23.1-119	1.41	23.7	WG702802
4-Bromophenyl-phenylether	mg/kg	0.300	0.291	90.0	51.4-110	3.19	20	WG702802
4-Chloro-3-methylphenol	mg/kg	0.326	0.305	98.0	51.1-113	6.77	20	WG702802
4-Chlorophenyl-phenylether	mg/kg	0.255	0.253	76.0	48.1-108	1.00	20	WG702802
4-Nitrophenol	mg/kg	0.253	0.250	76.0	34.8-109	0.930	20	WG702802
Acenaphthene	mg/kg	0.264	0.274	79.0	48.9-107	3.75	20	WG702802
Acenaphthylene	mg/kg	0.269	0.276	81.0	49.2-111	2.60	20	WG702802
Anthracene	mg/kg	0.294	0.292	88.0	52-112	0.460	20	WG702802
Benzidine	mg/kg	0.00590	0.00588	2.00	0-48	0.320	40	WG702802
Benzo(a)anthracene	mg/kg	0.269	0.265	81.0	52.3-106	1.55	20	WG702802
Benzo(a)pyrene	mg/kg	0.246	0.247	74.0	51.9-106	0.510	20	WG702802
Benzo(b)fluoranthene	mg/kg	0.251	0.259	75.0	51.3-106	3.05	20	WG702802
Benzo(g,h,i)perylene	mg/kg	0.268	0.276	80.0	45.8-108	3.01	20	WG702802
Benzo(k)fluoranthene	mg/kg	0.268	0.272	80.0	52.9-107	1.48	20	WG702802
Benzylbutyl phthalate	mg/kg	0.363	0.348	109.	47.5-115	4.19	20	WG702802
Bis(2-chlorethoxy)methane	mg/kg	0.272	0.268	82.0	44.9-108	1.49	20	WG702802
Bis(2-chloroethyl)ether	mg/kg	0.223	0.221	67.0	32.5-112	0.900	26	WG702802
Bis(2-chloroisopropyl)ether	mg/kg	0.262	0.261	79.0	40.4-99	0.160	20.7	WG702802
Bis(2-ethylhexyl)phthalate	mg/kg	0.314	0.300	94.0	48.1-116	4.57	20.5	WG702802
Chrysene	mg/kg	0.282	0.265	84.0	54.4-110	6.06	20	WG702802
Di-n-butyl phthalate	mg/kg	0.360	0.361	108.	49.7-113	0.260	20	WG702802
Di-n-octyl phthalate	mg/kg	0.308	0.300	92.0	49.6-112	2.59	22	WG702802
Dibenz(a,h)anthracene	mg/kg	0.276	0.280	83.0	45.7-111	1.67	20	WG702802
Diethyl phthalate	mg/kg	0.336	0.344	101.	52-112	2.26	20	WG702802
Dimethyl phthalate	mg/kg	0.304	0.322	91.0	51.4-108	5.83	20	WG702802
Fluoranthene	mg/kg	0.282	0.289	85.0	53.7-110	2.16	20	WG702802
Fluorene	mg/kg	0.272	0.276	82.0	51.1-109	1.42	20	WG702802
Hexachloro-1,3-butadiene	mg/kg	0.282	0.288	85.0	41.5-112	1.83	20	WG702802
Hexachlorobenzene	mg/kg	0.321	0.301	96.0	43.2-104	6.41	20.1	WG702802
Hexachlorocyclopentadiene	mg/kg	0.238	0.236	71.0	13.5-123	0.600	20.7	WG702802
Hexachloroethane	mg/kg	0.265	0.258	80.0	36.2-103	2.60	22.7	WG702802
Indeno(1,2,3-cd)pyrene	mg/kg	0.279	0.285	84.0	47.5-109	2.20	20	WG702802

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January 27, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Isophorone	mg/kg	0.327	0.323	98.0	28.8-104	1.35	20	WG702802
n-Nitrosodi-n-propylamine	mg/kg	0.269	0.267	81.0	43.3-109	0.940	20	WG702802
n-Nitrosodimethylamine	mg/kg	0.238	0.232	72.0	18.1-122	2.87	23.5	WG702802
n-Nitrosodiphenylamine	mg/kg	0.304	0.299	91.0	48.8-107	1.67	20	WG702802
Naphthalene	mg/kg	0.242	0.235	73.0	43.4-103	3.26	20	WG702802
Nitrobenzene	mg/kg	0.281	0.273	84.0	40.7-109	3.05	21	WG702802
Pentachlorophenol	mg/kg	0.262	0.264	79.0	16.2-102	0.500	22.9	WG702802
Phenanthrene	mg/kg	0.272	0.279	82.0	51.6-107	2.70	20	WG702802
Phenol	mg/kg	0.260	0.251	78.0	41.5-106	3.51	20	WG702802
Pyrene	mg/kg	0.280	0.267	84.0	47.1-108	4.81	20	WG702802
2,4,6-Tribromophenol				105.0	21.6-142			WG702802
2-Fluorobiphenyl				72.10	34.9-129			WG702802
2-Fluorophenol				69.80	21.1-116			WG702802
Nitrobenzene-d5				78.20	21.9-129			WG702802
Phenol-d5				76.30	26.3-121			WG702802
p-Terphenyl-d14				71.10	21.5-128			WG702802
4,4-DDD	mg/l	0.000201	0.000201	100.	47.6-144	0.0600	24.3	WG702276
4,4-DDE	mg/l	0.000204	0.000204	102.	45-124	0.210	25.7	WG702276
4,4-DDT	mg/l	0.000191	0.000192	96.0	49.8-130	0.620	25.4	WG702276
Aldrin	mg/l	0.000198	0.000196	99.0	10-120	0.960	33.9	WG702276
Alpha BHC	mg/l	0.000185	0.000182	92.0	53.6-125	1.82	22.3	WG702276
Beta BHC	mg/l	0.000197	0.000195	99.0	55.8-130	1.27	20.6	WG702276
Delta BHC	mg/l	0.000194	0.000183	97.0	42.2-135	5.53	23.3	WG702276
Dieldrin	mg/l	0.000191	0.000194	96.0	55-127	1.27	22.9	WG702276
Endosulfan I	mg/l	0.000204	0.000201	102.	54.7-127	1.73	24.3	WG702276
Endosulfan II	mg/l	0.000203	0.000202	101.	53.1-135	0.620	23.5	WG702276
Endosulfan sulfate	mg/l	0.000193	0.000190	97.0	51.5-132	1.61	26.3	WG702276
Endrin	mg/l	0.000209	0.000204	104.	50.1-131	2.38	29.1	WG702276
Endrin aldehyde	mg/l	0.000197	0.000193	99.0	39.5-137	1.98	28.4	WG702276
Endrin ketone	mg/l	0.000203	0.000200	102.	53.5-139	1.46	28.4	WG702276
Gamma BHC	mg/l	0.000190	0.000187	95.0	54.7-125	1.39	21.1	WG702276
Heptachlor	mg/l	0.000187	0.000186	94.0	20.7-127	0.340	30.5	WG702276
Heptachlor epoxide	mg/l	0.000204	0.000203	102.	56.4-124	0.710	23.1	WG702276
Hexachlorobenzene	mg/l	0.000182	0.000173	91.0	26.7-114	4.70	27.6	WG702276
Methoxychlor	mg/l	0.000201	0.000199	100.	48.2-144	0.890	27.8	WG702276
Decachlorobiphenyl				80.90	10-156			WG702276
Tetrachloro-m-xylene				68.80	13.9-137			WG702276
PCB 1016	mg/l	0.000420	0.000452	84.0	24.7-128	7.51	34.9	WG702276
PCB 1260	mg/l	0.000412	0.000445	82.0	47.7-149	7.65	28.8	WG702276
Decachlorobiphenyl				74.80	10-156			WG702276
Tetrachloro-m-xylene				49.80	13.9-137			WG702276
PCB 1016	mg/kg	0.152	0.139	91.0	63.2-118	9.11	20	WG702937
PCB 1260	mg/kg	0.169	0.154	101.	64.6-123	9.31	20.8	WG702937
Decachlorobiphenyl				93.70	10-145			WG702937
Tetrachloro-m-xylene				101.0	21.1-148			WG702937
4,4-DDD	mg/kg	0.0671	0.0631	100.	70.3-111	6.22	20	WG702937
4,4-DDE	mg/kg	0.0680	0.0641	101.	69.9-113	5.84	20	WG702937
4,4-DDT	mg/kg	0.0574	0.0540	86.0	68.1-111	6.20	20	WG702937
Aldrin	mg/kg	0.0680	0.0650	102.	66.9-111	4.56	20	WG702937
Alpha BHC	mg/kg	0.0688	0.0657	103.	65.1-111	4.54	20	WG702937
Beta BHC	mg/kg	0.0691	0.0657	103.	69.6-112	5.05	20	WG702937
Delta BHC	mg/kg	0.0698	0.0662	104.	68.3-114	5.27	20	WG702937
Dieldrin	mg/kg	0.0668	0.0630	100.	70.2-112	5.79	20	WG702937
Endosulfan I	mg/kg	0.0681	0.0639	102.	69.8-113	6.34	20	WG702937
Endosulfan II	mg/kg	0.0665	0.0629	99.0	69.2-113	5.71	20	WG702937

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Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Endosulfan sulfate	mg/kg	0.0695	0.0662	104.	62-123	4.94	20	WG702937
Endrin	mg/kg	0.0717	0.0674	107.	65.9-115	6.24	20	WG702937
Endrin aldehyde	mg/kg	0.0542	0.0529	81.0	47.6-124	2.41	20	WG702937
Endrin ketone	mg/kg	0.0661	0.0618	99.0	69-120	6.73	20	WG702937
Gamma BHC	mg/kg	0.0693	0.0658	104.	68.2-111	5.18	20	WG702937
Heptachlor	mg/kg	0.0628	0.0592	94.0	65.9-111	5.86	20	WG702937
Heptachlor epoxide	mg/kg	0.0694	0.0658	104.	69.7-113	5.34	20	WG702937
Hexachlorobenzene	mg/kg	0.0693	0.0665	103.	59.6-113	4.21	20	WG702937
Methoxychlor	mg/kg	0.0646	0.0574	96.0	66.2-114	11.8	20	WG702937
Decachlorobiphenyl				79.30	10-145			WG702937
Tetrachloro-m-xylene				96.20	21.1-148			WG702937

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Beryllium	mg/l	1.02	0.000294	1	100.	75-125	L678898-08	WG702291
Cadmium	mg/l	1.02	0.000766	1	100.	75-125	L678898-08	WG702291
Chromium	mg/l	1.04	0.000360	1	100.	75-125	L678898-08	WG702291
Copper	mg/l	1.04	0.000182	1	100.	75-125	L678898-08	WG702291
Nickel	mg/l	0.977	-0.00197	1	98.0	75-125	L678898-08	WG702291
Selenium	mg/l	1.03	0.0106	1	100.	75-125	L678898-08	WG702291
Silver	mg/l	1.05	0.000866	1	100.	75-125	L678898-08	WG702291
Zinc	mg/l	1.03	0.00186	1	100.	75-125	L678898-08	WG702291
Mercury	mg/l	0.00291	0.0000536	.003	95.0	80-120	L678913-02	WG702302
Arsenic	mg/l	0.0535	0.00170	.05	100.	75-125	L678603-04	WG702315
Lead	mg/l	0.0481	0.00160	.05	93.0	75-125	L678603-04	WG702315
Thallium	mg/l	0.0483	0.0	.05	97.0	75-125	L678603-04	WG702315
1,1,1,2-Tetrachloroethane	mg/kg	0.0115	0.0	.025	46.0*	64-128	L678902-01	WG702232
1,1,1-Trichloroethane	mg/kg	0.0122	0.0	.025	49.0*	58.7-134	L678902-01	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0113	0.0	.025	45.0*	56-132	L678902-01	WG702232
1,1,2-Trichloroethane	mg/kg	0.0123	0.0	.025	49.0*	66.3-125	L678902-01	WG702232
1,1-Dichloroethane	mg/kg	0.0129	0.0	.025	52.0*	58.5-132	L678902-01	WG702232
1,1-Dichloroethene	mg/kg	0.0115	0.0	.025	46.0*	51.1-140	L678902-01	WG702232
1,1-Dichloropropene	mg/kg	0.0127	0.0	.025	51.0*	57.3-136	L678902-01	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0116	0.0	.025	47.0*	59.1-138	L678902-01	WG702232
1,2,3-Trichloropropane	mg/kg	0.0112	0.0	.025	45.0*	61.4-128	L678902-01	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0125	0.0	.025	50.0*	63.6-143	L678902-01	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0112	0.0	.025	45.0*	57.4-137	L678902-01	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0113	0.0	.025	45.0*	57.3-136	L678902-01	WG702232
1,2-Dibromoethane	mg/kg	0.0120	0.0	.025	48.0*	67.1-125	L678902-01	WG702232
1,2-Dichlorobenzene	mg/kg	0.0118	0.0	.025	47.0*	68.2-123	L678902-01	WG702232
1,2-Dichloroethane	mg/kg	0.0112	0.0	.025	45.0*	60-126	L678902-01	WG702232
1,2-Dichloropropane	mg/kg	0.0130	0.0	.025	52.0*	64.2-123	L678902-01	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0117	0.0	.025	47.0*	63.6-132	L678902-01	WG702232
1,3-Dichlorobenzene	mg/kg	0.0111	0.0	.025	44.0*	63.1-131	L678902-01	WG702232
1,3-Dichloropropane	mg/kg	0.0121	0.0	.025	48.0*	67.9-121	L678902-01	WG702232
1,4-Dichlorobenzene	mg/kg	0.0115	0.0	.025	46.0*	68.6-123	L678902-01	WG702232
2,2-Dichloropropane	mg/kg	0.0124	0.0	.025	50.0*	50.5-144	L678902-01	WG702232
2-Butanone (MEK)	mg/kg	0.0558	0.0	.125	45.0	22.4-138	L678902-01	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.0784	0.0	.125	63.0	10-155	L678902-01	WG702232
2-Chlorotoluene	mg/kg	0.0110	0.0	.025	44.0*	63.6-128	L678902-01	WG702232
4-Chlorotoluene	mg/kg	0.0114	0.0	.025	46.0*	65.7-127	L678902-01	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.0644	0.0	.125	52.0*	60.8-140	L678902-01	WG702232

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Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Acetone	mg/kg	0.0379	0.00537	.125	26.0	10-130	L678902-01	WG702232
Acrylonitrile	mg/kg	0.0654	0.0	.125	52.0	49.4-133	L678902-01	WG702232
Benzene	mg/kg	0.0125	0.0	.025	50.0*	54.3-133	L678902-01	WG702232
Bromobenzene	mg/kg	0.0118	0.0	.025	47.0*	63.9-124	L678902-01	WG702232
Bromodichloromethane	mg/kg	0.0109	0.0	.025	44.0*	63.9-121	L678902-01	WG702232
Bromoform	mg/kg	0.0106	0.0	.025	42.0*	59.5-134	L678902-01	WG702232
Bromomethane	mg/kg	0.0129	0.0	.025	52.0	41.7-155	L678902-01	WG702232
Carbon tetrachloride	mg/kg	0.0119	0.0	.025	48.0*	55.7-134	L678902-01	WG702232
Chlorobenzene	mg/kg	0.0122	0.0	.025	49.0*	67-125	L678902-01	WG702232
Chlorodibromomethane	mg/kg	0.0113	0.0	.025	45.0*	64.3-125	L678902-01	WG702232
Chloroethane	mg/kg	0.0135	0.0	.025	54.0	51.5-136	L678902-01	WG702232
Chloroform	mg/kg	0.0120	0.0	.025	48.0*	63-129	L678902-01	WG702232
Chloromethane	mg/kg	0.0143	0.0	.025	57.0	42.4-135	L678902-01	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0121	0.0	.025	48.0*	59.2-129	L678902-01	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0129	0.0	.025	51.0*	66.4-125	L678902-01	WG702232
Di-isopropyl ether	mg/kg	0.0131	0.0	.025	52.0*	56.9-136	L678902-01	WG702232
Dibromomethane	mg/kg	0.0114	0.0	.025	46.0*	68.2-124	L678902-01	WG702232
Dichlorodifluoromethane	mg/kg	0.0131	0.0	.025	53.0	40.6-144	L678902-01	WG702232
Ethylbenzene	mg/kg	0.0122	0.0	.025	49.0*	61.4-133	L678902-01	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0112	0.0	.025	45.0*	55.1-136	L678902-01	WG702232
Isopropylbenzene	mg/kg	0.0131	0.0	.025	52.0*	66.8-141	L678902-01	WG702232
Methyl tert-butyl ether	mg/kg	0.0118	0.0	.025	47.0*	57.7-134	L678902-01	WG702232
Methylene Chloride	mg/kg	0.0122	0.0	.025	49.0*	58.1-122	L678902-01	WG702232
n-Butylbenzene	mg/kg	0.0127	0.0	.025	51.0*	62.7-140	L678902-01	WG702232
n-Propylbenzene	mg/kg	0.0118	0.0	.025	47.0	10-176	L678902-01	WG702232
Naphthalene	mg/kg	0.0111	0.0	.025	44.0*	58-135	L678902-01	WG702232
p-Isopropyltoluene	mg/kg	0.0119	0.0	.025	47.0*	63.2-139	L678902-01	WG702232
sec-Butylbenzene	mg/kg	0.0116	0.0	.025	46.0*	62.2-136	L678902-01	WG702232
Styrene	mg/kg	0.0119	0.0	.025	48.0*	66.8-133	L678902-01	WG702232
tert-Butylbenzene	mg/kg	0.0120	0.0	.025	48.0*	63.3-134	L678902-01	WG702232
Tetrachloroethene	mg/kg	0.0121	0.0	.025	48.0*	53-139	L678902-01	WG702232
Toluene	mg/kg	0.0124	0.0	.025	50.0*	61.4-130	L678902-01	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0124	0.0	.025	49.0*	56.5-129	L678902-01	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0125	0.0	.025	50.0*	64.1-128	L678902-01	WG702232
Trichloroethene	mg/kg	0.0119	0.0	.025	48.0	44.1-149	L678902-01	WG702232
Trichlorofluoromethane	mg/kg	0.0113	0.0	.025	45.0*	49.6-145	L678902-01	WG702232
Vinyl chloride	mg/kg	0.0136	0.0	.025	54.0	47.8-137	L678902-01	WG702232
Xylenes, Total	mg/kg	0.0361	0.0	.075	48.0*	63.3-131	L678902-01	WG702232
4-Bromofluorobenzene					90.40	71-126		WG702232
Dibromofluoromethane					93.80	78.3-121		WG702232
Toluene-d8					103.0	88.5-111		WG702232
a,a,a-Trifluorotoluene					98.20	85-114		WG702232
Beryllium	mg/l	1.01	0.000302	1	100.	75-125	L678726-01	WG702313
Cadmium	mg/l	1.01	0.000479	1	100.	75-125	L678726-01	WG702313
Chromium	mg/l	1.01	0.000706	1	100.	75-125	L678726-01	WG702313
Copper	mg/l	1.02	0.0000103	1	100.	75-125	L678726-01	WG702313
Nickel	mg/l	0.942	0.00249	1	94.0	75-125	L678726-01	WG702313
Selenium	mg/l	0.997	0.00319	1	99.0	75-125	L678726-01	WG702313
Silver	mg/l	0.156	-0.00307	1	16.0*	75-125	L678726-01	WG702313
Zinc	mg/l	1.03	0.00271	1	100.	75-125	L678726-01	WG702313
1,1,1,2-Tetrachloroethane	mg/l	0.0194	0.0	.025	78.0	64-128	L678787-02	WG702215
1,1,1-Trichloroethane	mg/l	0.0193	0.0	.025	77.0	58.7-134	L678787-02	WG702215
1,1,2,2-Tetrachloroethane	mg/l	0.0196	0.0	.025	78.0	56-132	L678787-02	WG702215
1,1,2-Trichloroethane	mg/l	0.0217	0.0	.025	87.0	66.3-125	L678787-02	WG702215
1,1-Dichloroethane	mg/l	0.0240	0.00382	.025	81.0	58.5-132	L678787-02	WG702215

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Quality Assurance Report
Level II

L678898

January 27, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1-Dichloroethene	mg/l	0.0176	0.00317	.025	58.0	51.1-140	L678787-02	WG702215
1,1-Dichloropropene	mg/l	0.0179	0.0	.025	72.0	57.3-136	L678787-02	WG702215
1,2,3-Trichlorobenzene	mg/l	0.0222	0.0	.025	89.0	59.1-138	L678787-02	WG702215
1,2,3-Trichloropropane	mg/l	0.0189	0.0	.025	75.0	61.4-128	L678787-02	WG702215
1,2,4-Trichlorobenzene	mg/l	0.0235	0.0	.025	94.0	63.6-143	L678787-02	WG702215
1,2,4-Trimethylbenzene	mg/l	0.0185	0.0	.025	74.0	57.4-137	L678787-02	WG702215
1,2-Dibromo-3-Chloropropane	mg/l	0.0206	0.0	.025	82.0	57.3-136	L678787-02	WG702215
1,2-Dibromoethane	mg/l	0.0190	0.0	.025	76.0	67.1-125	L678787-02	WG702215
1,2-Dichlorobenzene	mg/l	0.0207	0.0	.025	83.0	68.2-123	L678787-02	WG702215
1,2-Dichloroethane	mg/l	0.0182	0.0	.025	73.0	60-126	L678787-02	WG702215
1,2-Dichloropropane	mg/l	0.0220	0.0	.025	88.0	64.2-123	L678787-02	WG702215
1,3,5-Trimethylbenzene	mg/l	0.0189	0.0	.025	76.0	63.6-132	L678787-02	WG702215
1,3-Dichlorobenzene	mg/l	0.0188	0.0	.025	75.0	63.1-131	L678787-02	WG702215
1,3-Dichloropropane	mg/l	0.0205	0.0	.025	82.0	67.9-121	L678787-02	WG702215
1,4-Dichlorobenzene	mg/l	0.0202	0.0	.025	81.0	68.6-123	L678787-02	WG702215
2,2-Dichloropropane	mg/l	0.0187	0.0	.025	75.0	50.5-144	L678787-02	WG702215
2-Butanone (MEK)	mg/l	0.0874	0.00217	.125	68.0	22.4-138	L678787-02	WG702215
2-Chloroethyl vinyl ether	mg/l	0.000425	0.0	.125	0.340*	10-155	L678787-02	WG702215
2-Chlorotoluene	mg/l	0.0182	0.0	.025	73.0	63.6-128	L678787-02	WG702215
4-Chlorotoluene	mg/l	0.0192	0.0	.025	77.0	65.7-127	L678787-02	WG702215
4-Methyl-2-pentanone (MIBK)	mg/l	0.106	0.000399	.125	85.0	60.8-140	L678787-02	WG702215
Acetone	mg/l	0.0630	0.0183	.125	36.0	10-130	L678787-02	WG702215
Acrolein	mg/l	0.182	0.0	.125	150.	10-200	L678787-02	WG702215
Acrylonitrile	mg/l	0.116	0.0	.125	93.0	49.4-133	L678787-02	WG702215
Benzene	mg/l	0.0192	0.000645	.025	74.0	54.3-133	L678787-02	WG702215
Bromobenzene	mg/l	0.0194	0.0	.025	78.0	63.9-124	L678787-02	WG702215
Bromodichloromethane	mg/l	0.0181	0.0	.025	72.0	63.9-121	L678787-02	WG702215
Bromoform	mg/l	0.0188	0.0	.025	75.0	59.5-134	L678787-02	WG702215
Bromomethane	mg/l	0.0155	0.0	.025	62.0	41.7-155	L678787-02	WG702215
Carbon tetrachloride	mg/l	0.0181	0.0	.025	72.0	55.7-134	L678787-02	WG702215
Chlorobenzene	mg/l	0.0197	0.0	.025	79.0	67-125	L678787-02	WG702215
Chlorodibromomethane	mg/l	0.0203	0.0	.025	81.0	64.3-125	L678787-02	WG702215
Chloroethane	mg/l	0.0153	0.0	.025	61.0	51.5-136	L678787-02	WG702215
Chloroform	mg/l	0.0210	0.00218	.025	75.0	63-129	L678787-02	WG702215
Chloromethane	mg/l	0.0135	0.0	.025	54.0	42.4-135	L678787-02	WG702215
cis-1,2-Dichloroethene	mg/l	0.318	0.342	.025	0.0*	59.2-129	L678787-02	WG702215
cis-1,3-Dichloropropene	mg/l	0.0207	0.0	.025	83.0	66.4-125	L678787-02	WG702215
Di-isopropyl ether	mg/l	0.0219	0.0	.025	88.0	56.9-136	L678787-02	WG702215
Dibromomethane	mg/l	0.0190	0.0	.025	76.0	68.2-124	L678787-02	WG702215
Dichlorodifluoromethane	mg/l	0.0157	0.0	.025	63.0	40.6-144	L678787-02	WG702215
Ethylbenzene	mg/l	0.0198	0.0	.025	79.0	61.4-133	L678787-02	WG702215
Hexachloro-1,3-butadiene	mg/l	0.0196	0.0	.025	79.0	55.1-136	L678787-02	WG702215
Isopropylbenzene	mg/l	0.0217	0.0	.025	87.0	66.8-141	L678787-02	WG702215
Methyl tert-butyl ether	mg/l	0.0201	0.0	.025	80.0	57.7-134	L678787-02	WG702215
Methylene Chloride	mg/l	0.0190	0.00118	.025	71.0	58.1-122	L678787-02	WG702215
n-Butylbenzene	mg/l	0.0218	0.0	.025	87.0	62.7-140	L678787-02	WG702215
n-Propylbenzene	mg/l	0.0196	0.0	.025	78.0	65.9-131	L678787-02	WG702215
Naphthalene	mg/l	0.0209	0.0	.025	83.0	58-135	L678787-02	WG702215
p-Isopropyltoluene	mg/l	0.0199	0.0	.025	80.0	63.2-139	L678787-02	WG702215
sec-Butylbenzene	mg/l	0.0198	0.0	.025	79.0	62.2-136	L678787-02	WG702215
Styrene	mg/l	0.0201	0.0	.025	80.0	66.8-133	L678787-02	WG702215
tert-Butylbenzene	mg/l	0.0203	0.0	.025	81.0	63.3-134	L678787-02	WG702215
Tetrachloroethene	mg/l	0.0190	0.000675	.025	73.0	53-139	L678787-02	WG702215
Toluene	mg/l	0.0192	0.0	.025	77.0	61.4-130	L678787-02	WG702215
trans-1,2-Dichloroethene	mg/l	0.0204	0.00491	.025	62.0	56.5-129	L678787-02	WG702215
trans-1,3-Dichloropropene	mg/l	0.0197	0.0	.025	79.0	64.1-128	L678787-02	WG702215
Trichloroethene	mg/l	0.225	0.237	.025	0.0*	44.1-149	L678787-02	WG702215
Trichlorofluoromethane	mg/l	0.0149	0.0	.025	59.0	49.6-145	L678787-02	WG702215
Vinyl chloride	mg/l	0.0238	0.0103	.025	54.0	47.8-137	L678787-02	WG702215

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Quality Assurance Report
Level II

L678898

January 27, 2014

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Xylenes, Total	mg/l	0.0579	0.0	.075	77.0	63.3-131	L678787-02	WG702215
4-Bromofluorobenzene					92.30	71-126		WG702215
Dibromofluoromethane					91.40	78.3-121		WG702215
Toluene-d8					102.0	88.5-111		WG702215
a,a,a-Trifluorotoluene					97.50	85-114		WG702215
Mercury	mg/kg	0.339	0.0866	.025	100.	80-120	L678967-01	WG702460
Antimony	mg/l	0.0463	0.0	.05	93.0	75-125	L678603-04	WG702315
Antimony	mg/kg	43.2	-0.0409	50	86.0	75-125	L678662-01	WG702433
Arsenic	mg/kg	46.1	0.360	50	91.0	75-125	L678662-01	WG702433
Beryllium	mg/kg	47.0	0.0810	50	94.0	75-125	L678662-01	WG702433
Cadmium	mg/kg	42.5	0.0199	50	85.0	75-125	L678662-01	WG702433
Chromium	mg/kg	46.3	1.54	50	90.0	75-125	L678662-01	WG702433
Copper	mg/kg	44.7	1.04	50	87.0	75-125	L678662-01	WG702433
Lead	mg/kg	45.7	1.11	50	89.0	75-125	L678662-01	WG702433
Nickel	mg/kg	42.8	1.08	50	83.0	75-125	L678662-01	WG702433
Selenium	mg/kg	46.0	0.147	50	92.0	75-125	L678662-01	WG702433
Silver	mg/kg	45.2	-0.0317	50	90.0	75-125	L678662-01	WG702433
Thallium	mg/kg	45.6	1.35	50	89.0	75-125	L678662-01	WG702433
Zinc	mg/kg	45.9	4.75	50	82.0	75-125	L678662-01	WG702433
Antimony	mg/kg	48.4	0.0187	50	97.0	75-125	L678662-01	WG702433
PCB 1016	mg/kg	0.115	0.0	.167	69.0	23.5-134	L678898-02	WG702937
PCB 1260	mg/kg	0.108	0.0	.167	65.0	16.1-139	L678898-02	WG702937
Decachlorobiphenyl					76.00	10-145		WG702937
Tetrachloro-m-xylene					90.20	21.1-148		WG702937
4,4-DDD	mg/kg	0.0430	0.0	.067	64.0	23.4-145	L678898-02	WG702937
4,4-DDE	mg/kg	0.0425	0.0	.067	63.0	16.4-147	L678898-02	WG702937
4,4-DDT	mg/kg	0.0373	0.0	.067	56.0	26.7-129	L678898-02	WG702937
Aldrin	mg/kg	0.0443	0.0	.067	66.0	40.2-116	L678898-02	WG702937
Alpha BHC	mg/kg	0.0545	0.0	.067	81.0	53.6-109	L678898-02	WG702937
Beta BHC	mg/kg	0.0456	0.0	.067	68.0	38.3-126	L678898-02	WG702937
Delta BHC	mg/kg	0.0432	0.0	.067	64.0	44.8-125	L678898-02	WG702937
Dieldrin	mg/kg	0.0447	0.0	.067	67.0	31.4-137	L678898-02	WG702937
Endosulfan I	mg/kg	0.0443	0.0	.067	66.0	40.3-120	L678898-02	WG702937
Endosulfan II	mg/kg	0.0457	0.0	.067	68.0	29.1-140	L678898-02	WG702937
Endosulfan sulfate	mg/kg	0.0453	0.0	.067	68.0	43.3-129	L678898-02	WG702937
Endrin	mg/kg	0.0457	0.0	.067	68.0	34.9-125	L678898-02	WG702937
Endrin aldehyde	mg/kg	0.0393	0.0	.067	59.0	15.6-139	L678898-02	WG702937
Endrin ketone	mg/kg	0.0444	0.0	.067	66.0	35.4-137	L678898-02	WG702937
Gamma BHC	mg/kg	0.0555	0.0	.067	83.0	55.3-110	L678898-02	WG702937
Heptachlor	mg/kg	0.0445	0.0	.067	66.0	41.6-115	L678898-02	WG702937
Heptachlor epoxide	mg/kg	0.0474	0.0	.067	71.0	34.8-128	L678898-02	WG702937
Hexachlorobenzene	mg/kg	0.0463	0.0	.067	69.0	40.2-119	L678898-02	WG702937
Methoxychlor	mg/kg	0.0395	0.0	.067	59.0	16-134	L678898-02	WG702937
Decachlorobiphenyl					62.70	10-145		WG702937
Tetrachloro-m-xylene					88.50	21.1-148		WG702937

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Beryllium	mg/l	1.04	1.02	103.	75-125	1.00	20	L678898-08	WG702291
Cadmium	mg/l	1.02	1.02	102.	75-125	0.0	20	L678898-08	WG702291

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Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Chromium	mg/l	1.10	1.04	110.	75-125	6.00	20	L678898-08	WG702291
Copper	mg/l	1.04	1.04	104.	75-125	0.0	20	L678898-08	WG702291
Nickel	mg/l	0.966	0.977	96.8	75-125	1.00	20	L678898-08	WG702291
Selenium	mg/l	1.04	1.03	103.	75-125	1.00	20	L678898-08	WG702291
Silver	mg/l	1.04	1.05	104.	75-125	1.00	20	L678898-08	WG702291
Zinc	mg/l	1.03	1.03	103.	75-125	0.0	20	L678898-08	WG702291
Mercury	mg/l	0.00275	0.00291	89.7	80-120	6.00	20	L678913-02	WG702302
Arsenic	mg/l	0.0541	0.0535	105.	75-125	1.12	20	L678603-04	WG702315
Lead	mg/l	0.0488	0.0481	94.4	75-125	1.44	20	L678603-04	WG702315
Thallium	mg/l	0.0492	0.0483	98.4	75-125	1.85	20	L678603-04	WG702315
1,1,1,2-Tetrachloroethane	mg/kg	0.0212	0.0115	84.8	64-128	59.3*	20	L678902-01	WG702232
1,1,1-Trichloroethane	mg/kg	0.0241	0.0122	96.2	58.7-134	65.2*	20	L678902-01	WG702232
1,1,2,2-Tetrachloroethane	mg/kg	0.0216	0.0113	86.4	56-132	62.7*	22.2	L678902-01	WG702232
1,1,2-Trichloroethane	mg/kg	0.0237	0.0123	94.6	66.3-125	62.8*	20	L678902-01	WG702232
1,1-Dichloroethane	mg/kg	0.0259	0.0129	104.	58.5-132	67.1*	20	L678902-01	WG702232
1,1-Dichloroethene	mg/kg	0.0236	0.0115	94.3	51.1-140	69.1*	20.2	L678902-01	WG702232
1,1-Dichloropropene	mg/kg	0.0250	0.0127	100.	57.3-136	65.1*	20	L678902-01	WG702232
1,2,3-Trichlorobenzene	mg/kg	0.0209	0.0116	83.8	59.1-138	57.1*	23.7	L678902-01	WG702232
1,2,3-Trichloropropane	mg/kg	0.0207	0.0112	82.7	61.4-128	59.5*	22.4	L678902-01	WG702232
1,2,4-Trichlorobenzene	mg/kg	0.0216	0.0125	86.6	63.6-143	53.8*	21.9	L678902-01	WG702232
1,2,4-Trimethylbenzene	mg/kg	0.0202	0.0112	81.0	57.4-137	57.8*	20	L678902-01	WG702232
1,2-Dibromo-3-Chloropropane	mg/kg	0.0244	0.0113	97.5	57.3-136	73.5*	27	L678902-01	WG702232
1,2-Dibromoethane	mg/kg	0.0233	0.0120	93.0	67.1-125	63.9*	20	L678902-01	WG702232
1,2-Dichlorobenzene	mg/kg	0.0219	0.0118	87.4	68.2-123	59.6*	20	L678902-01	WG702232
1,2-Dichloroethane	mg/kg	0.0228	0.0112	91.2	60-126	68.1*	20	L678902-01	WG702232
1,2-Dichloropropane	mg/kg	0.0258	0.0130	103.	64.2-123	66.0*	20	L678902-01	WG702232
1,3,5-Trimethylbenzene	mg/kg	0.0206	0.0117	82.3	63.6-132	54.6*	20.5	L678902-01	WG702232
1,3-Dichlorobenzene	mg/kg	0.0194	0.0111	77.6	63.1-131	54.7*	20	L678902-01	WG702232
1,3-Dichloropropane	mg/kg	0.0238	0.0121	95.4	67.9-121	65.4*	20	L678902-01	WG702232
1,4-Dichlorobenzene	mg/kg	0.0210	0.0115	83.8	68.6-123	58.6*	20	L678902-01	WG702232
2,2-Dichloropropane	mg/kg	0.0236	0.0124	94.4	50.5-144	62.0*	21.9	L678902-01	WG702232
2-Butanone (MEK)	mg/kg	0.116	0.0558	92.7	22.4-138	70.0*	27	L678902-01	WG702232
2-Chloroethyl vinyl ether	mg/kg	0.161	0.0784	129.	10-155	68.9*	40	L678902-01	WG702232
2-Chlorotoluene	mg/kg	0.0201	0.0110	80.2	63.6-128	58.7*	20	L678902-01	WG702232
4-Chlorotoluene	mg/kg	0.0205	0.0114	82.1	65.7-127	57.2*	20	L678902-01	WG702232
4-Methyl-2-pentanone (MIBK)	mg/kg	0.129	0.0644	103.	60.8-140	66.8*	25.1	L678902-01	WG702232
Acetone	mg/kg	0.0684	0.0379	50.4	10-130	57.4*	27.9	L678902-01	WG702232
Acrylonitrile	mg/kg	0.143	0.0654	114.	49.4-133	74.4*	25.3	L678902-01	WG702232
Benzene	mg/kg	0.0248	0.0125	99.4	54.3-133	66.0*	20	L678902-01	WG702232
Bromobenzene	mg/kg	0.0212	0.0118	84.7	63.9-124	57.0*	20	L678902-01	WG702232
Bromodichloromethane	mg/kg	0.0209	0.0109	83.6	63.9-121	62.8*	20	L678902-01	WG702232
Bromoform	mg/kg	0.0211	0.0106	84.3	59.5-134	66.3*	20.8	L678902-01	WG702232
Bromomethane	mg/kg	0.0249	0.0129	99.5	41.7-155	63.7*	20.5	L678902-01	WG702232
Carbon tetrachloride	mg/kg	0.0235	0.0119	94.1	55.7-134	65.9*	20.3	L678902-01	WG702232
Chlorobenzene	mg/kg	0.0223	0.0122	89.1	67-125	58.1*	20	L678902-01	WG702232
Chlorodibromomethane	mg/kg	0.0219	0.0113	87.6	64.3-125	63.9*	20	L678902-01	WG702232
Chloroethane	mg/kg	0.0250	0.0135	100.	51.5-136	59.5*	20.8	L678902-01	WG702232
Chloroform	mg/kg	0.0233	0.0120	93.2	63-129	64.0*	20	L678902-01	WG702232
Chloromethane	mg/kg	0.0278	0.0143	111.	42.4-135	64.3*	20	L678902-01	WG702232
cis-1,2-Dichloroethene	mg/kg	0.0248	0.0121	99.4	59.2-129	68.9*	20	L678902-01	WG702232
cis-1,3-Dichloropropene	mg/kg	0.0248	0.0129	99.4	66.4-125	63.6*	20	L678902-01	WG702232
Di-isopropyl ether	mg/kg	0.0261	0.0131	104.	56.9-136	66.6*	20	L678902-01	WG702232
Dibromomethane	mg/kg	0.0234	0.0114	93.6	68.2-124	68.7*	20	L678902-01	WG702232

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Dichlorodifluoromethane	mg/kg	0.0254	0.0131	102.	40.6-144	63.6*	20.2	L678902-01	WG702232
Ethylbenzene	mg/kg	0.0226	0.0122	90.5	61.4-133	59.7*	20	L678902-01	WG702232
Hexachloro-1,3-butadiene	mg/kg	0.0194	0.0112	77.4	55.1-136	53.7*	23.6	L678902-01	WG702232
Isopropylbenzene	mg/kg	0.0235	0.0131	93.8	66.8-141	56.7*	20	L678902-01	WG702232
Methyl tert-butyl ether	mg/kg	0.0240	0.0118	95.8	57.7-134	68.3*	20	L678902-01	WG702232
Methylene Chloride	mg/kg	0.0237	0.0122	94.7	58.1-122	63.8*	20	L678902-01	WG702232
n-Butylbenzene	mg/kg	0.0229	0.0127	91.4	62.7-140	57.3*	20	L678902-01	WG702232
n-Propylbenzene	mg/kg	0.0214	0.0118	85.6	10-176	57.7*	26.6	L678902-01	WG702232
Naphthalene	mg/kg	0.0213	0.0111	85.2	58-135	63.0*	25.5	L678902-01	WG702232
p-Isopropyltoluene	mg/kg	0.0212	0.0119	84.9	63.2-139	56.6*	20.4	L678902-01	WG702232
sec-Butylbenzene	mg/kg	0.0210	0.0116	84.0	62.2-136	58.1*	20.3	L678902-01	WG702232
Styrene	mg/kg	0.0222	0.0119	88.9	66.8-133	60.5*	20	L678902-01	WG702232
tert-Butylbenzene	mg/kg	0.0216	0.0120	86.6	63.3-134	57.2*	20.3	L678902-01	WG702232
Tetrachloroethene	mg/kg	0.0225	0.0121	90.1	53-139	60.5*	20	L678902-01	WG702232
Toluene	mg/kg	0.0236	0.0124	94.2	61.4-130	61.8*	20	L678902-01	WG702232
trans-1,2-Dichloroethene	mg/kg	0.0239	0.0124	95.6	56.5-129	63.8*	20	L678902-01	WG702232
trans-1,3-Dichloropropene	mg/kg	0.0235	0.0125	94.2	64.1-128	61.3*	20	L678902-01	WG702232
Trichloroethene	mg/kg	0.0230	0.0119	91.8	44.1-149	63.2*	20	L678902-01	WG702232
Trichlorofluoromethane	mg/kg	0.0219	0.0113	87.8	49.6-145	64.4*	21.2	L678902-01	WG702232
Vinyl chloride	mg/kg	0.0268	0.0136	107.	47.8-137	65.2*	20	L678902-01	WG702232
Xylenes, Total	mg/kg	0.0658	0.0361	87.8	63.3-131	58.5*	20	L678902-01	WG702232
4-Bromofluorobenzene				90.80	71-126				WG702232
Dibromofluoromethane				96.30	78.3-121				WG702232
Toluene-d8				103.0	88.5-111				WG702232
a,a,a-Trifluorotoluene				97.10	85-114				WG702232
Beryllium	mg/l	1.04	1.01	104.	75-125	3.00	20	L678726-01	WG702313
Cadmium	mg/l	1.04	1.01	104.	75-125	4.00	20	L678726-01	WG702313
Chromium	mg/l	1.02	1.01	102.	75-125	1.00	20	L678726-01	WG702313
Copper	mg/l	1.05	1.02	105.	75-125	2.00	20	L678726-01	WG702313
Nickel	mg/l	0.950	0.942	94.7	75-125	1.00	20	L678726-01	WG702313
Selenium	mg/l	0.993	0.997	98.9	75-125	0.0	20	L678726-01	WG702313
Silver	mg/l	0.546	0.156	54.9*	75-125	111.*	20	L678726-01	WG702313
Zinc	mg/l	1.06	1.03	106.	75-125	3.00	20	L678726-01	WG702313
1,1,1,2-Tetrachloroethane	mg/l	0.0211	0.0194	84.2	64-128	8.19	20	L678787-02	WG702215
1,1,1-Trichloroethane	mg/l	0.0205	0.0193	82.1	58.7-134	6.21	20	L678787-02	WG702215
1,1,2,2-Tetrachloroethane	mg/l	0.0207	0.0196	82.7	56-132	5.60	22.2	L678787-02	WG702215
1,1,2-Trichloroethane	mg/l	0.0227	0.0217	90.9	66.3-125	4.77	20	L678787-02	WG702215
1,1-Dichloroethane	mg/l	0.0248	0.0240	83.9	58.5-132	3.36	20	L678787-02	WG702215
1,1-Dichloroethene	mg/l	0.0187	0.0176	61.9	51.1-140	5.55	20.2	L678787-02	WG702215
1,1-Dichloropropene	mg/l	0.0194	0.0179	77.5	57.3-136	8.03	20	L678787-02	WG702215
1,2,3-Trichlorobenzene	mg/l	0.0235	0.0222	93.8	59.1-138	5.33	23.7	L678787-02	WG702215
1,2,3-Trichloropropane	mg/l	0.0206	0.0189	82.3	61.4-128	8.69	22.4	L678787-02	WG702215
1,2,4-Trichlorobenzene	mg/l	0.0241	0.0235	96.4	63.6-143	2.53	21.9	L678787-02	WG702215
1,2,4-Trimethylbenzene	mg/l	0.0202	0.0185	80.9	57.4-137	8.70	20	L678787-02	WG702215
1,2-Dibromo-3-Chloropropane	mg/l	0.0217	0.0206	86.6	57.3-136	4.86	27	L678787-02	WG702215
1,2-Dibromoethane	mg/l	0.0207	0.0190	83.0	67.1-125	8.69	20	L678787-02	WG702215
1,2-Dichlorobenzene	mg/l	0.0222	0.0207	88.6	68.2-123	6.90	20	L678787-02	WG702215
1,2-Dichloroethane	mg/l	0.0193	0.0182	77.0	60-126	5.85	20	L678787-02	WG702215
1,2-Dichloropropane	mg/l	0.0227	0.0220	90.9	64.2-123	3.30	20	L678787-02	WG702215
1,3,5-Trimethylbenzene	mg/l	0.0206	0.0189	82.4	63.6-132	8.43	20.5	L678787-02	WG702215
1,3-Dichlorobenzene	mg/l	0.0198	0.0188	79.3	63.1-131	5.38	20	L678787-02	WG702215
1,3-Dichloropropane	mg/l	0.0221	0.0205	88.2	67.9-121	7.42	20	L678787-02	WG702215
1,4-Dichlorobenzene	mg/l	0.0212	0.0202	84.8	68.6-123	4.78	20	L678787-02	WG702215
2,2-Dichloropropane	mg/l	0.0197	0.0187	78.9	50.5-144	5.35	21.9	L678787-02	WG702215
2-Butanone (MEK)	mg/l	0.0890	0.0874	69.5	22.4-138	1.90	27	L678787-02	WG702215

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PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
2-Chloroethyl vinyl ether	mg/l	0.000485	0.000425	0.388*	10-155	13.3	20	L678787-02	WG702215
2-Chlorotoluene	mg/l	0.0204	0.0182	81.5	63.6-128	11.5	20	L678787-02	WG702215
4-Chlorotoluene	mg/l	0.0208	0.0192	83.2	65.7-127	8.10	20	L678787-02	WG702215
4-Methyl-2-pentanone (MIBK)	mg/l	0.111	0.106	88.5	60.8-140	4.53	25.1	L678787-02	WG702215
Acetone	mg/l	0.0638	0.0630	36.4	10-130	1.15	27.9	L678787-02	WG702215
Acrolein	mg/l	0.191	0.182	153.	10-200	4.71	27.7	L678787-02	WG702215
Acrylonitrile	mg/l	0.119	0.116	95.4	49.4-133	2.45	25.3	L678787-02	WG702215
Benzene	mg/l	0.0204	0.0192	78.9	54.3-133	5.96	20	L678787-02	WG702215
Bromobenzene	mg/l	0.0211	0.0194	84.4	63.9-124	8.17	20	L678787-02	WG702215
Bromodichloromethane	mg/l	0.0196	0.0181	78.5	63.9-121	8.10	20	L678787-02	WG702215
Bromoform	mg/l	0.0199	0.0188	79.5	59.5-134	5.81	20.5	L678787-02	WG702215
Bromomethane	mg/l	0.0158	0.0155	63.4	41.7-155	2.48	21.9	L678787-02	WG702215
Carbon tetrachloride	mg/l	0.0195	0.0181	78.1	55.7-134	7.57	20	L678787-02	WG702215
Chlorobenzene	mg/l	0.0214	0.0197	85.7	67-125	8.20	20	L678787-02	WG702215
Chlorodibromomethane	mg/l	0.0217	0.0203	86.9	64.3-125	6.79	20.8	L678787-02	WG702215
Chloroethane	mg/l	0.0155	0.0153	61.9	51.5-136	1.01	40	L678787-02	WG702215
Chloroform	mg/l	0.0221	0.0210	79.7	63-129	5.08	20	L678787-02	WG702215
Chloromethane	mg/l	0.0136	0.0135	54.5	42.4-135	0.820	20	L678787-02	WG702215
cis-1,2-Dichloroethene	mg/l	0.303	0.318	0*	59.2-129	4.74	20	L678787-02	WG702215
cis-1,3-Dichloropropene	mg/l	0.0226	0.0207	90.2	66.4-125	8.76	20	L678787-02	WG702215
Di-isopropyl ether	mg/l	0.0229	0.0219	91.4	56.9-136	4.16	20	L678787-02	WG702215
Dibromomethane	mg/l	0.0203	0.0190	81.1	68.2-124	6.52	20	L678787-02	WG702215
Dichlorodifluoromethane	mg/l	0.0150	0.0157	60.1	40.6-144	4.06	20.2	L678787-02	WG702215
Ethylbenzene	mg/l	0.0213	0.0198	85.1	61.4-133	7.21	20	L678787-02	WG702215
Hexachloro-1,3-butadiene	mg/l	0.0214	0.0196	85.5	55.1-136	8.49	23.6	L678787-02	WG702215
Isopropylbenzene	mg/l	0.0233	0.0217	93.2	66.8-141	7.21	20	L678787-02	WG702215
Methyl tert-butyl ether	mg/l	0.0206	0.0201	82.5	57.7-134	2.78	20	L678787-02	WG702215
Methylene Chloride	mg/l	0.0198	0.0190	74.4	58.1-122	3.98	20	L678787-02	WG702215
n-Butylbenzene	mg/l	0.0235	0.0218	93.8	62.7-140	7.53	20.3	L678787-02	WG702215
n-Propylbenzene	mg/l	0.0216	0.0196	86.3	65.9-131	9.78	20	L678787-02	WG702215
Naphthalene	mg/l	0.0219	0.0209	87.5	58-135	4.81	25.5	L678787-02	WG702215
p-Isopropyltoluene	mg/l	0.0215	0.0199	86.0	63.2-139	7.68	20.4	L678787-02	WG702215
sec-Butylbenzene	mg/l	0.0216	0.0198	86.4	62.2-136	8.73	20.3	L678787-02	WG702215
Styrene	mg/l	0.0219	0.0201	87.5	66.8-133	8.43	20	L678787-02	WG702215
tert-Butylbenzene	mg/l	0.0222	0.0203	88.6	63.3-134	8.73	21	L678787-02	WG702215
Tetrachloroethene	mg/l	0.0208	0.0190	80.5	53-139	9.27	20	L678787-02	WG702215
Toluene	mg/l	0.0206	0.0192	82.5	61.4-130	7.29	20	L678787-02	WG702215
trans-1,2-Dichloroethene	mg/l	0.0212	0.0204	65.1	56.5-129	3.62	20	L678787-02	WG702215
trans-1,3-Dichloropropene	mg/l	0.0218	0.0197	87.2	64.1-128	10.1	20	L678787-02	WG702215
Trichloroethene	mg/l	0.215	0.225	0*	44.1-149	4.34	20	L678787-02	WG702215
Trichlorofluoromethane	mg/l	0.0159	0.0149	63.6	49.6-145	6.82	21.2	L678787-02	WG702215
Vinyl chloride	mg/l	0.0227	0.0238	49.6	47.8-137	4.91	20	L678787-02	WG702215
Xylenes, Total	mg/l	0.0634	0.0579	84.5	63.3-131	9.04	20	L678787-02	WG702215
4-Bromofluorobenzene				94.10	71-126				WG702215
Dibromofluoromethane				91.50	78.3-121				WG702215
Toluene-d8				102.0	88.5-111				WG702215
a,a,a-Trifluorotoluene				97.10	85-114				WG702215
Mercury	mg/kg	0.330	0.339	97.2	80-120	3.00	20	L678967-01	WG702460
Antimony	mg/l	0.0473	0.0463	94.6	75-125	2.14	20	L678603-04	WG702315
Antimony	mg/kg	40.0	43.2	80.2	75-125	7.00	20	L678662-01	WG702433
Arsenic	mg/kg	42.8	46.1	84.8	75-125	7.00	20	L678662-01	WG702433
Beryllium	mg/kg	44.0	47.0	87.7	75-125	7.00	20	L678662-01	WG702433
Cadmium	mg/kg	38.8	42.5	77.6	75-125	9.00	20	L678662-01	WG702433

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Quality Assurance Report
Level II

L678898

January 27, 2014

		Matrix Spike Duplicate							
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Chromium	mg/kg	44.1	46.3	85.1	75-125	5.00	20	L678662-01	WG702433
Copper	mg/kg	43.7	44.7	85.3	75-125	2.00	20	L678662-01	WG702433
Lead	mg/kg	42.8	45.7	83.3	75-125	7.00	20	L678662-01	WG702433
Nickel	mg/kg	41.0	42.8	79.9	75-125	4.00	20	L678662-01	WG702433
Selenium	mg/kg	42.8	46.0	85.3	75-125	7.00	20	L678662-01	WG702433
Silver	mg/kg	42.2	45.2	84.4	75-125	7.00	20	L678662-01	WG702433
Thallium	mg/kg	42.7	45.6	82.7	75-125	7.00	20	L678662-01	WG702433
Zinc	mg/kg	47.4	45.9	85.3	75-125	3.00	20	L678662-01	WG702433
Antimony	mg/kg	46.7	48.4	93.4	75-125	4.00	20	L678662-01	WG702433
PCB 1016	mg/kg	0.127	0.115	75.9	23.5-134	9.89	25.8	L678898-02	WG702937
PCB 1260	mg/kg	0.128	0.108	76.7	16.1-139	16.6	25.9	L678898-02	WG702937
Decachlorobiphenyl				82.60	10-145				WG702937
Tetrachloro-m-xylene				96.30	21.1-148				WG702937
4,4-DDD	mg/kg	0.0426	0.0430	63.6	23.4-145	0.860	20	L678898-02	WG702937
4,4-DDE	mg/kg	0.0416	0.0425	62.0	16.4-147	2.15	20	L678898-02	WG702937
4,4-DDT	mg/kg	0.0361	0.0373	53.9	26.7-129	3.28	23.8	L678898-02	WG702937
Aldrin	mg/kg	0.0457	0.0443	68.2	40.2-116	3.08	20	L678898-02	WG702937
Alpha BHC	mg/kg	0.0545	0.0545	81.4	53.6-109	0.0800	20	L678898-02	WG702937
Beta BHC	mg/kg	0.0452	0.0456	67.4	38.3-126	0.900	20	L678898-02	WG702937
Delta BHC	mg/kg	0.0432	0.0432	64.4	44.8-125	0.0600	20	L678898-02	WG702937
Dieldrin	mg/kg	0.0446	0.0447	66.5	31.4-137	0.350	20	L678898-02	WG702937
Endosulfan I	mg/kg	0.0446	0.0443	66.5	40.3-120	0.650	20	L678898-02	WG702937
Endosulfan II	mg/kg	0.0456	0.0457	68.1	29.1-140	0.280	20	L678898-02	WG702937
Endosulfan sulfate	mg/kg	0.0450	0.0453	67.2	43.3-129	0.570	21.5	L678898-02	WG702937
Endrin	mg/kg	0.0456	0.0457	68.0	34.9-125	0.240	21.2	L678898-02	WG702937
Endrin aldehyde	mg/kg	0.0391	0.0393	58.4	15.6-139	0.410	20	L678898-02	WG702937
Endrin ketone	mg/kg	0.0438	0.0444	65.4	35.4-137	1.22	20	L678898-02	WG702937
Gamma BHC	mg/kg	0.0555	0.0555	82.9	55.3-110	0.0100	20	L678898-02	WG702937
Heptachlor	mg/kg	0.0440	0.0445	65.6	41.6-115	1.09	20	L678898-02	WG702937
Heptachlor epoxide	mg/kg	0.0474	0.0474	70.8	34.8-128	0.200	20	L678898-02	WG702937
Hexachlorobenzene	mg/kg	0.0465	0.0463	69.4	40.2-119	0.470	20	L678898-02	WG702937
Methoxychlor	mg/kg	0.0384	0.0395	57.3	16-134	2.70	25.4	L678898-02	WG702937
Decachlorobiphenyl				59.00	10-145				WG702937
Tetrachloro-m-xylene				88.20	21.1-148				WG702937

Post Spike

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

Post Spike

Serial Dilution

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

Serial Dilution

Batch number /Run number / Sample number cross reference

WG702291: R2877742: L678898-01 04 06 08
WG702193: R2877804: L678898-01
WG702313: R2877886 R2878353: L678898-03
WG702274: R2878031 R2878287 R2878365: L678898-01 03 04 06 08
WG702302: R2878087: L678898-01 03 04 06 08
WG702315: R2878172: L678898-01 03 04 06 08
WG702232: R2878186: L678898-02 05 07
WG702527: R2878260: L678898-02 05 07
WG702215: R2878481: L678898-01 03 04 06 08 09
WG702460: R2878605: L678898-02 05 07
WG702802: R2878823 R2878861: L678898-02 05 07
WG702276: R2878923 R2879285: L678898-01 03 04 06 08
WG702433: R2878962 R2879810: L678898-02 05 07
WG702937: R2879313 R2879943: L678898-02 05 07

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L678898

January 27, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project #: **201336**

Lab Project #

Collected by (print): Daphne Jones

Site/Facility ID #

P.O. #

Collected by (signature): Daphne M Jones
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 5 days max

Email? ___No X Yes
FAX? X No ___Yes

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 176890

C164

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Rem./Contaminant	Sample # (lab only)
21-SW-A	G	SW	N/A	1/16/14	1605	7	X	X	X	X	X							-01
21-SED-A	↓	SED	↓	↓	1625	7	↓	↓	↓	↓	↓							-02
21-SW-B	↓	SW	↓	↓	1645	7	↓	↓	↓	↓	↓							-03
DUP-SW	↓	SW	↓	↓	1650	7	↓	↓	↓	↓	↓							-04
21-SED-B	↓	SED	↓	↓	1700	7	↓	↓	↓	↓	↓							-05
21-SW-C	↓	SW	↓	↓	1740	7	↓	↓	↓	↓	↓							-06
21-SED-C	↓	SED	↓	↓	1750	7	↓	↓	↓	↓	↓							-07
SED EQUIP. BLANK	N/A	Lab water	↓	↓	1715	7	↓	↓	↓	↓	↓							-08
TRIP BLANK	↓	↓	↓	↓	NA	1	X											-09
						1216												

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other SW surface water SED Sediment

Remarks: NO TICs for Equip Blank

pH ___ Temp ___
Flow ___ Other ___

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA	Conditions: OK (lab use only)
Daphne M Jones	1/17/14	12:50	[signature]		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1 °C Bottles Received: 58	COC Seal Intact: ___Y ___N ___NA
[signature]	1/17/14	17:55	[signature]	Date: 1-18-14 Time: 1430	pH Checked: <2 NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SW-A

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-01

Date Collected: 1/16/2014

Lab File ID: 0121_54

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SW-A

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-01

Date Collected: 1/16/2014

Lab File ID: 0120B_31

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000301-02-0	9-Octadecenamide, (Z)-	13.69	0.003	90.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SW-B

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-03

Date Collected: 1/16/2014

Lab File ID: 0121_55

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SW-B

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-03

Date Collected: 1/16/2014

Lab File ID: 0121_13

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000301-02-0	9-Octadecenamide, (Z)-	13.69	0.001	99.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: DUP-SW

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-04

Date Collected: 1/16/2014

Lab File ID: 0121_56

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: DUP-SW

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-04

Date Collected: 1/16/2014

Lab File ID: 0121_14

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SW-C

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-06

Date Collected: 1/16/2014

Lab File ID: 0121_57

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SW-C

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-06

Date Collected: 1/16/2014

Lab File ID: 0121_15

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SED-A

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678898-02

Date Collected: 1/16/2014

Lab File ID: 0121_14

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SED-A

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678898-02

Date Collected: 1/16/2014

Lab File ID: 0122B_09

Date Analyzed: 1/23/2014

Dilution Factor: 20.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	1.74	59.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SED-B

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678898-05

Date Collected: 1/16/2014

Lab File ID: 0121_15

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SED-B

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678898-05

Date Collected: 1/16/2014

Lab File ID: 0122A_22

Date Analyzed: 1/23/2014

Dilution Factor: 5.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 3

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000540-97-6	Cyclohexasiloxane, dodecamethyl-	6.40	0.149	91.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.783	78.00	J
000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.151	64.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SED-C

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678898-07

Date Collected: 1/16/2014

Lab File ID: 0121_16

Date Analyzed: 1/21/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 21-SED-C

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: SOIL

ESC Sample No: L678898-07

Date Collected: 1/16/2014

Lab File ID: 0122B_10

Date Analyzed: 1/23/2014

Dilution Factor: 20.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/kg

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000994-05-8	Butane, 2-methoxy-2-methyl-	3.04	1.57	74.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: SED EQUIP BLANK

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-08

Date Collected: 1/16/2014

Lab File ID: 0121_58

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: SED EQUIP BLANK

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678898-08

Date Collected: 1/16/2014

Lab File ID: 0121_16

Date Analyzed: 1/22/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	3.92	0.003	90.00	J

Divider
Page

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Friday January 17, 2014

Report Number: L678486
Samples Received: 01/16/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 17, 2014

ESC Sample # : L678486-01

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18TMW-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 13:35

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	01/16/14	1
Acrolein	BDL	0.050	mg/l	8260B	01/16/14	1
Acrylonitrile	BDL	0.010	mg/l	8260B	01/16/14	1
Benzene	BDL	0.0010	mg/l	8260B	01/16/14	1
Bromobenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	01/16/14	1
Bromoform	BDL	0.0010	mg/l	8260B	01/16/14	1
Bromomethane	BDL	0.0050	mg/l	8260B	01/16/14	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	01/16/14	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	01/16/14	1
Chloroethane	BDL	0.0050	mg/l	8260B	01/16/14	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	01/16/14	1
Chloroform	BDL	0.0050	mg/l	8260B	01/16/14	1
Chloromethane	BDL	0.0025	mg/l	8260B	01/16/14	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	01/16/14	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	01/16/14	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	01/16/14	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	01/16/14	1
Dibromomethane	BDL	0.0010	mg/l	8260B	01/16/14	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	01/16/14	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	01/16/14	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	01/16/14	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	01/16/14	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	01/16/14	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	01/16/14	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	01/16/14	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	01/16/14	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	01/16/14	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	01/16/14	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	01/16/14	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	01/16/14	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	01/16/14	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	01/16/14	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	01/16/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Daphne Jones, Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

January 17, 2014

ESC Sample # : L678486-01

Date Received : January 16, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18TMW-1

Project # : 201336

Collected By : Matt Flinchum
Collection Date : 01/15/14 13:35

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	01/16/14	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	01/16/14	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	01/16/14	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	01/16/14	1
Naphthalene	BDL	0.0050	mg/l	8260B	01/16/14	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
Styrene	BDL	0.0010	mg/l	8260B	01/16/14	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	01/16/14	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	01/16/14	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	01/16/14	1
Toluene	BDL	0.0050	mg/l	8260B	01/16/14	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	01/16/14	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	01/16/14	1
Trichloroethene	BDL	0.0010	mg/l	8260B	01/16/14	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	01/16/14	1
1,2,3-Trichloropropane	BDL	0.0025	mg/l	8260B	01/16/14	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/16/14	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	01/16/14	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	01/16/14	1
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	01/16/14	1
Dibromofluoromethane	103.		% Rec.	8260B	01/16/14	1
a,a,a-Trifluorotoluene	104.		% Rec.	8260B	01/16/14	1
4-Bromofluorobenzene	99.7		% Rec.	8260B	01/16/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 01/17/14 09:29 Printed: 01/17/14 09:49

Summary of Remarks For Samples Printed
01/17/14 at 09:49:36

TSR Signing Reports: 350
R2 - Rush: Next Day

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L678486-01 Account: DUNDUNNC Received: 01/16/14 14:45 Due Date: 01/17/14 00:00 RPT Date: 01/17/14 09:29

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Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678486

January 17, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG701602	01/16/14 20:42
1,1,1-Trichloroethane	< .001	mg/l			WG701602	01/16/14 20:42
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG701602	01/16/14 20:42
1,1,2-Trichloroethane	< .001	mg/l			WG701602	01/16/14 20:42
1,1-Dichloroethane	< .001	mg/l			WG701602	01/16/14 20:42
1,1-Dichloroethene	< .001	mg/l			WG701602	01/16/14 20:42
1,1-Dichloropropene	< .001	mg/l			WG701602	01/16/14 20:42
1,2,3-Trichlorobenzene	< .001	mg/l			WG701602	01/16/14 20:42
1,2,3-Trichloropropane	< .001	mg/l			WG701602	01/16/14 20:42
1,2,4-Trichlorobenzene	< .001	mg/l			WG701602	01/16/14 20:42
1,2,4-Trimethylbenzene	< .001	mg/l			WG701602	01/16/14 20:42
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG701602	01/16/14 20:42
1,2-Dibromoethane	< .001	mg/l			WG701602	01/16/14 20:42
1,2-Dichlorobenzene	< .001	mg/l			WG701602	01/16/14 20:42
1,2-Dichloroethane	< .001	mg/l			WG701602	01/16/14 20:42
1,2-Dichloropropane	< .001	mg/l			WG701602	01/16/14 20:42
1,3,5-Trimethylbenzene	< .001	mg/l			WG701602	01/16/14 20:42
1,3-Dichlorobenzene	< .001	mg/l			WG701602	01/16/14 20:42
1,3-Dichloropropane	< .001	mg/l			WG701602	01/16/14 20:42
1,4-Dichlorobenzene	< .001	mg/l			WG701602	01/16/14 20:42
2,2-Dichloropropane	< .001	mg/l			WG701602	01/16/14 20:42
2-Butanone (MEK)	< .01	mg/l			WG701602	01/16/14 20:42
2-Chloroethyl vinyl ether	< .05	mg/l			WG701602	01/16/14 20:42
2-Chlorotoluene	< .001	mg/l			WG701602	01/16/14 20:42
4-Chlorotoluene	< .001	mg/l			WG701602	01/16/14 20:42
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG701602	01/16/14 20:42
Acetone	< .05	mg/l			WG701602	01/16/14 20:42
Acrolein	< .025	mg/l			WG701602	01/16/14 20:42
Acrylonitrile	< .01	mg/l			WG701602	01/16/14 20:42
Benzene	< .001	mg/l			WG701602	01/16/14 20:42
Bromobenzene	< .001	mg/l			WG701602	01/16/14 20:42
Bromodichloromethane	< .001	mg/l			WG701602	01/16/14 20:42
Bromoform	< .001	mg/l			WG701602	01/16/14 20:42
Bromomethane	< .005	mg/l			WG701602	01/16/14 20:42
Carbon tetrachloride	< .001	mg/l			WG701602	01/16/14 20:42
Chlorobenzene	< .001	mg/l			WG701602	01/16/14 20:42
Chlorodibromomethane	< .001	mg/l			WG701602	01/16/14 20:42
Chloroethane	< .005	mg/l			WG701602	01/16/14 20:42
Chloroform	< .005	mg/l			WG701602	01/16/14 20:42
Chloromethane	< .0025	mg/l			WG701602	01/16/14 20:42
cis-1,2-Dichloroethene	< .001	mg/l			WG701602	01/16/14 20:42
cis-1,3-Dichloropropene	< .001	mg/l			WG701602	01/16/14 20:42
Di-isopropyl ether	< .001	mg/l			WG701602	01/16/14 20:42
Dibromomethane	< .001	mg/l			WG701602	01/16/14 20:42
Dichlorodifluoromethane	< .005	mg/l			WG701602	01/16/14 20:42
Ethylbenzene	< .001	mg/l			WG701602	01/16/14 20:42
Hexachloro-1,3-butadiene	< .001	mg/l			WG701602	01/16/14 20:42
Isopropylbenzene	< .001	mg/l			WG701602	01/16/14 20:42
Methyl tert-butyl ether	< .001	mg/l			WG701602	01/16/14 20:42
Methylene Chloride	< .005	mg/l			WG701602	01/16/14 20:42
n-Butylbenzene	< .001	mg/l			WG701602	01/16/14 20:42
n-Propylbenzene	< .001	mg/l			WG701602	01/16/14 20:42
Naphthalene	< .005	mg/l			WG701602	01/16/14 20:42
p-Isopropyltoluene	< .001	mg/l			WG701602	01/16/14 20:42
sec-Butylbenzene	< .001	mg/l			WG701602	01/16/14 20:42
Styrene	< .001	mg/l			WG701602	01/16/14 20:42
tert-Butylbenzene	< .001	mg/l			WG701602	01/16/14 20:42
Tetrachloroethene	< .001	mg/l			WG701602	01/16/14 20:42
Toluene	< .005	mg/l			WG701602	01/16/14 20:42

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Est. 1970

Duncklee and Dunham
Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678486

January 17, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
trans-1,2-Dichloroethene	< .001	mg/l			WG701602	01/16/14 20:42
trans-1,3-Dichloropropene	< .001	mg/l			WG701602	01/16/14 20:42
Trichloroethene	< .001	mg/l			WG701602	01/16/14 20:42
Trichlorofluoromethane	< .005	mg/l			WG701602	01/16/14 20:42
Vinyl chloride	< .001	mg/l			WG701602	01/16/14 20:42
Xylenes, Total	< .003	mg/l			WG701602	01/16/14 20:42
4-Bromofluorobenzene		% Rec.	103.0	71-126	WG701602	01/16/14 20:42
Dibromofluoromethane		% Rec.	99.20	78.3-121	WG701602	01/16/14 20:42
Toluene-d8		% Rec.	103.0	88.5-111	WG701602	01/16/14 20:42
a,a,a-Trifluorotoluene		% Rec.	101.0	85-114	WG701602	01/16/14 20:42

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0219	87.4	74.2-124	WG701602
1,1,1-Trichloroethane	mg/l	.025	0.0236	94.3	73.2-123	WG701602
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0224	89.4	70.7-122	WG701602
1,1,2-Trichloroethane	mg/l	.025	0.0228	91.3	77.7-118	WG701602
1,1-Dichloroethane	mg/l	.025	0.0249	99.8	70.7-126	WG701602
1,1-Dichloroethene	mg/l	.025	0.0227	90.7	67.8-129	WG701602
1,1-Dichloropropene	mg/l	.025	0.0245	98.0	73.1-125	WG701602
1,2,3-Trichlorobenzene	mg/l	.025	0.0248	99.2	64.9-135	WG701602
1,2,3-Trichloropropane	mg/l	.025	0.0221	88.5	71.8-121	WG701602
1,2,4-Trichlorobenzene	mg/l	.025	0.0267	107.	69.7-136	WG701602
1,2,4-Trimethylbenzene	mg/l	.025	0.0224	89.5	75-123	WG701602
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0235	94.0	65.4-128	WG701602
1,2-Dibromoethane	mg/l	.025	0.0227	90.7	76.6-121	WG701602
1,2-Dichlorobenzene	mg/l	.025	0.0234	93.6	78.4-117	WG701602
1,2-Dichloroethane	mg/l	.025	0.0237	94.7	68.8-124	WG701602
1,2-Dichloropropane	mg/l	.025	0.0246	98.4	76.5-119	WG701602
1,3,5-Trimethylbenzene	mg/l	.025	0.0225	90.1	75.6-124	WG701602
1,3-Dichlorobenzene	mg/l	.025	0.0221	88.4	70.8-128	WG701602
1,3-Dichloropropane	mg/l	.025	0.0228	91.1	77.4-117	WG701602
1,4-Dichlorobenzene	mg/l	.025	0.0227	90.8	78.8-115	WG701602
2,2-Dichloropropane	mg/l	.025	0.0215	85.9	62.4-133	WG701602
2-Butanone (MEK)	mg/l	.125	0.114	91.3	55-149	WG701602
2-Chloroethyl vinyl ether	mg/l	.125	0.133	106.	43.8-150	WG701602
2-Chlorotoluene	mg/l	.025	0.0220	87.8	74.7-122	WG701602
4-Chlorotoluene	mg/l	.025	0.0223	89.2	77.5-120	WG701602
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.133	106.	70.5-133	WG701602
Acetone	mg/l	.125	0.104	83.3	35.6-163	WG701602
Acrolein	mg/l	.125	0.0855	68.4	10-190	WG701602
Acrylonitrile	mg/l	.125	0.129	103.	55.2-130	WG701602
Benzene	mg/l	.025	0.0246	98.3	74.8-121	WG701602
Bromobenzene	mg/l	.025	0.0219	87.6	77.5-116	WG701602
Bromodichloromethane	mg/l	.025	0.0231	92.5	75.1-116	WG701602
Bromoform	mg/l	.025	0.0226	90.6	67.5-130	WG701602
Bromomethane	mg/l	.025	0.0197	78.7	49.9-162	WG701602
Carbon tetrachloride	mg/l	.025	0.0237	94.7	70.2-123	WG701602
Chlorobenzene	mg/l	.025	0.0220	87.9	78.1-119	WG701602
Chlorodibromomethane	mg/l	.025	0.0217	86.9	74-121	WG701602
Chloroethane	mg/l	.025	0.0200	80.1	61.7-135	WG701602
Chloroform	mg/l	.025	0.0244	97.7	76-121	WG701602
Chloromethane	mg/l	.025	0.0235	94.0	61.5-129	WG701602
cis-1,2-Dichloroethene	mg/l	.025	0.0243	97.1	76-119	WG701602
cis-1,3-Dichloropropene	mg/l	.025	0.0249	99.4	78.2-120	WG701602
Di-isopropyl ether	mg/l	.025	0.0255	102.	65.6-132	WG701602
Dibromomethane	mg/l	.025	0.0244	97.7	79.5-118	WG701602
Dichlorodifluoromethane	mg/l	.025	0.0234	93.6	54.8-135	WG701602

* Performance of this Analyte is outside of established criteria.
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1-800-767-5859
Fax (615) 758-5859

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Est. 1970

Duncklee and Dunham
Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678486

January 17, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Ethylbenzene	mg/l	.025	0.0230	92.0	78.8-122	WG701602
Hexachloro-1,3-butadiene	mg/l	.025	0.0229	91.7	64.7-129	WG701602
Isopropylbenzene	mg/l	.025	0.0244	97.7	78.6-132	WG701602
Methyl tert-butyl ether	mg/l	.025	0.0241	96.6	71.2-126	WG701602
Methylene Chloride	mg/l	.025	0.0221	88.2	70.3-120	WG701602
n-Butylbenzene	mg/l	.025	0.0259	104.	76.2-126	WG701602
n-Propylbenzene	mg/l	.025	0.0228	91.4	78.2-122	WG701602
Naphthalene	mg/l	.025	0.0236	94.3	68.4-128	WG701602
p-Isopropyltoluene	mg/l	.025	0.0238	95.1	74-131	WG701602
sec-Butylbenzene	mg/l	.025	0.0232	92.9	74.4-127	WG701602
Styrene	mg/l	.025	0.0248	99.0	80.4-126	WG701602
tert-Butylbenzene	mg/l	.025	0.0232	92.6	75.3-126	WG701602
Tetrachloroethene	mg/l	.025	0.0215	86.2	72.6-126	WG701602
Toluene	mg/l	.025	0.0234	93.5	79.7-116	WG701602
trans-1,2-Dichloroethene	mg/l	.025	0.0239	95.5	72.6-121	WG701602
trans-1,3-Dichloropropene	mg/l	.025	0.0257	103.	74.3-123	WG701602
Trichloroethene	mg/l	.025	0.0231	92.5	77.7-118	WG701602
Trichlorofluoromethane	mg/l	.025	0.0203	81.3	63.5-135	WG701602
Vinyl chloride	mg/l	.025	0.0211	84.3	65.9-128	WG701602
Xylenes, Total	mg/l	.075	0.0665	88.6	78.7-121	WG701602
4-Bromofluorobenzene				95.90	71-126	WG701602
Dibromofluoromethane				100.0	78.3-121	WG701602
Toluene-d8				102.0	88.5-111	WG701602
a,a,a-Trifluorotoluene				104.0	85-114	WG701602

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0230	0.0219	92.0	74.2-124	5.00	20	WG701602
1,1,1-Trichloroethane	mg/l	0.0235	0.0236	94.0	73.2-123	0.520	20	WG701602
1,1,2,2-Tetrachloroethane	mg/l	0.0234	0.0224	94.0	70.7-122	4.52	20	WG701602
1,1,2-Trichloroethane	mg/l	0.0246	0.0228	98.0	77.7-118	7.27	20	WG701602
1,1-Dichloroethane	mg/l	0.0253	0.0249	101.	70.7-126	1.57	20	WG701602
1,1-Dichloroethene	mg/l	0.0221	0.0227	88.0	67.8-129	2.43	20	WG701602
1,1-Dichloropropene	mg/l	0.0246	0.0245	98.0	73.1-125	0.330	20	WG701602
1,2,3-Trichlorobenzene	mg/l	0.0237	0.0248	95.0	64.9-135	4.48	20	WG701602
1,2,3-Trichloropropane	mg/l	0.0224	0.0221	89.0	71.8-121	1.13	20	WG701602
1,2,4-Trichlorobenzene	mg/l	0.0263	0.0267	105.	69.7-136	1.50	20	WG701602
1,2,4-Trimethylbenzene	mg/l	0.0236	0.0224	94.0	75-123	5.23	20	WG701602
1,2-Dibromo-3-Chloropropane	mg/l	0.0219	0.0235	88.0	65.4-128	7.14	20	WG701602
1,2-Dibromoethane	mg/l	0.0247	0.0227	99.0	76.6-121	8.58	20	WG701602
1,2-Dichlorobenzene	mg/l	0.0239	0.0234	95.0	78.4-117	2.04	20	WG701602
1,2-Dichloroethane	mg/l	0.0245	0.0237	98.0	68.8-124	3.54	20	WG701602
1,2-Dichloropropane	mg/l	0.0251	0.0246	100.	76.5-119	1.91	20	WG701602
1,3,5-Trimethylbenzene	mg/l	0.0241	0.0225	96.0	75.6-124	6.82	20	WG701602
1,3-Dichlorobenzene	mg/l	0.0235	0.0221	94.0	70.8-128	6.12	20	WG701602
1,3-Dichloropropane	mg/l	0.0241	0.0228	96.0	77.4-117	5.49	20	WG701602
1,4-Dichlorobenzene	mg/l	0.0242	0.0227	97.0	78.8-115	6.39	20	WG701602
2,2-Dichloropropane	mg/l	0.0218	0.0215	87.0	62.4-133	1.76	20	WG701602
2-Butanone (MEK)	mg/l	0.116	0.114	92.0	55-149	1.38	20	WG701602
2-Chloroethyl vinyl ether	mg/l	0.138	0.133	110.	43.8-150	3.95	20	WG701602
2-Chlorotoluene	mg/l	0.0235	0.0220	94.0	74.7-122	6.74	20	WG701602
4-Chlorotoluene	mg/l	0.0236	0.0223	94.0	77.5-120	5.59	20	WG701602
4-Methyl-2-pentanone (MIBK)	mg/l	0.133	0.133	106.	70.5-133	0.380	20	WG701602
Acetone	mg/l	0.104	0.104	83.0	35.6-163	0.200	23.9	WG701602
Acrolein	mg/l	0.0823	0.0855	66.0	10-190	3.78	28.1	WG701602
Acrylonitrile	mg/l	0.126	0.129	101.	55.2-130	2.51	20	WG701602
Benzene	mg/l	0.0248	0.0246	99.0	74.8-121	0.810	20	WG701602
Bromobenzene	mg/l	0.0233	0.0219	93.0	77.5-116	6.14	20	WG701602

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January 17, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Bromodichloromethane	mg/l	0.0230	0.0231	92.0	75.1-116	0.680	20	WG701602
Bromoform	mg/l	0.0240	0.0226	96.0	67.5-130	5.65	20	WG701602
Bromomethane	mg/l	0.0199	0.0197	79.0	49.9-162	0.980	20	WG701602
Carbon tetrachloride	mg/l	0.0236	0.0237	94.0	70.2-123	0.330	20	WG701602
Chlorobenzene	mg/l	0.0236	0.0220	94.0	78.1-119	7.34	20	WG701602
Chlorodibromomethane	mg/l	0.0231	0.0217	92.0	74-121	6.21	20	WG701602
Chloroethane	mg/l	0.0207	0.0200	83.0	61.7-135	3.53	20	WG701602
Chloroform	mg/l	0.0243	0.0244	97.0	76-121	0.410	20	WG701602
Chloromethane	mg/l	0.0239	0.0235	96.0	61.5-129	1.83	20	WG701602
cis-1,2-Dichloroethene	mg/l	0.0239	0.0243	96.0	76-119	1.54	20	WG701602
cis-1,3-Dichloropropene	mg/l	0.0250	0.0249	100.	78.2-120	0.720	20	WG701602
Di-isopropyl ether	mg/l	0.0254	0.0255	102.	65.6-132	0.460	20	WG701602
Dibromomethane	mg/l	0.0234	0.0244	94.0	79.5-118	4.16	20	WG701602
Dichlorodifluoromethane	mg/l	0.0232	0.0234	93.0	54.8-135	0.670	20	WG701602
Ethylbenzene	mg/l	0.0249	0.0230	100.	78.8-122	7.95	20	WG701602
Hexachloro-1,3-butadiene	mg/l	0.0222	0.0229	89.0	64.7-129	3.18	20	WG701602
Isopropylbenzene	mg/l	0.0259	0.0244	104.	78.6-132	5.96	20	WG701602
Methyl tert-butyl ether	mg/l	0.0232	0.0241	93.0	71.2-126	4.11	20	WG701602
Methylene Chloride	mg/l	0.0221	0.0221	88.0	70.3-120	0.130	20	WG701602
n-Butylbenzene	mg/l	0.0263	0.0259	105.	76.2-126	1.37	20	WG701602
n-Propylbenzene	mg/l	0.0244	0.0228	98.0	78.2-122	6.58	20	WG701602
Naphthalene	mg/l	0.0228	0.0236	91.0	68.4-128	3.16	20	WG701602
p-Isopropyltoluene	mg/l	0.0251	0.0238	100.	74-131	5.62	20	WG701602
sec-Butylbenzene	mg/l	0.0241	0.0232	96.0	74.4-127	3.79	20	WG701602
Styrene	mg/l	0.0266	0.0248	106.	80.4-126	7.05	20	WG701602
tert-Butylbenzene	mg/l	0.0240	0.0232	96.0	75.3-126	3.65	20	WG701602
Tetrachloroethene	mg/l	0.0229	0.0215	92.0	72.6-126	6.28	20	WG701602
Toluene	mg/l	0.0239	0.0234	96.0	79.7-116	2.21	20	WG701602
trans-1,2-Dichloroethene	mg/l	0.0242	0.0239	97.0	72.6-121	1.51	20	WG701602
trans-1,3-Dichloropropene	mg/l	0.0262	0.0257	105.	74.3-123	1.82	20	WG701602
Trichloroethene	mg/l	0.0234	0.0231	94.0	77.7-118	1.27	20	WG701602
Trichlorofluoromethane	mg/l	0.0206	0.0203	82.0	63.5-135	1.17	20	WG701602
Vinyl chloride	mg/l	0.0213	0.0211	85.0	65.9-128	0.950	20	WG701602
Xylenes, Total	mg/l	0.0722	0.0665	96.0	78.7-121	8.28	20	WG701602
4-Bromofluorobenzene				103.0	71-126			WG701602
Dibromofluoromethane				97.60	78.3-121			WG701602
Toluene-d8				102.0	88.5-111			WG701602
a,a,a-Trifluorotoluene				102.0	85-114			WG701602

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0216	0.0	.025	87.0	64-128	L678106-01	WG701602
1,1,1-Trichloroethane	mg/l	0.0232	0.000828	.025	89.0	58.7-134	L678106-01	WG701602
1,1,2,2-Tetrachloroethane	mg/l	0.0240	0.0	.025	96.0	56-132	L678106-01	WG701602
1,1,2-Trichloroethane	mg/l	0.0237	0.0	.025	95.0	66.3-125	L678106-01	WG701602
1,1-Dichloroethane	mg/l	0.0239	0.0	.025	96.0	58.5-132	L678106-01	WG701602
1,1-Dichloroethene	mg/l	0.0210	0.0	.025	84.0	51.1-140	L678106-01	WG701602
1,1-Dichloropropene	mg/l	0.0232	0.0	.025	93.0	57.3-136	L678106-01	WG701602
1,2,3-Trichlorobenzene	mg/l	0.0234	0.0	.025	94.0	59.1-138	L678106-01	WG701602
1,2,3-Trichloropropane	mg/l	0.0241	0.0	.025	97.0	61.4-128	L678106-01	WG701602
1,2,4-Trichlorobenzene	mg/l	0.0252	0.0	.025	100.	63.6-143	L678106-01	WG701602
1,2,4-Trimethylbenzene	mg/l	0.0221	0.0	.025	88.0	57.4-137	L678106-01	WG701602
1,2-Dibromo-3-Chloropropane	mg/l	0.0248	0.0	.025	99.0	57.3-136	L678106-01	WG701602
1,2-Dibromoethane	mg/l	0.0233	0.0	.025	93.0	67.1-125	L678106-01	WG701602
1,2-Dichlorobenzene	mg/l	0.0226	0.0	.025	90.0	68.2-123	L678106-01	WG701602
1,2-Dichloroethane	mg/l	0.0226	0.0	.025	90.0	60-126	L678106-01	WG701602
1,2-Dichloropropane	mg/l	0.0229	0.0	.025	92.0	64.2-123	L678106-01	WG701602
1,3,5-Trimethylbenzene	mg/l	0.0227	0.0	.025	91.0	63.6-132	L678106-01	WG701602

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Quality Assurance Report
Level II

L678486

January 17, 2014

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,3-Dichlorobenzene	mg/l	0.0215	0.0	.025	86.0	63.1-131	L678106-01	WG701602
1,3-Dichloropropane	mg/l	0.0227	0.0	.025	91.0	67.9-121	L678106-01	WG701602
1,4-Dichlorobenzene	mg/l	0.0219	0.0	.025	88.0	68.6-123	L678106-01	WG701602
2,2-Dichloropropane	mg/l	0.0208	0.0	.025	83.0	50.5-144	L678106-01	WG701602
2-Butanone (MEK)	mg/l	0.137	0.0	.125	110.	22.4-138	L678106-01	WG701602
2-Chloroethyl vinyl ether	mg/l	0.000929	0.0	.125	0.740*	10-155	L678106-01	WG701602
2-Chlorotoluene	mg/l	0.0217	0.0	.025	87.0	63.6-128	L678106-01	WG701602
4-Chlorotoluene	mg/l	0.0222	0.0	.025	89.0	65.7-127	L678106-01	WG701602
4-Methyl-2-pentanone (MIBK)	mg/l	0.144	0.0	.125	120.	60.8-140	L678106-01	WG701602
Acetone	mg/l	0.0923	0.00910	.125	67.0	10-130	L678106-01	WG701602
Acrolein	mg/l	0.140	0.0	.125	110.	10-200	L678106-01	WG701602
Acrylonitrile	mg/l	0.144	0.000557	.125	120.	49.4-133	L678106-01	WG701602
Benzene	mg/l	0.0229	0.0	.025	92.0	54.3-133	L678106-01	WG701602
Bromobenzene	mg/l	0.0217	0.0	.025	87.0	63.9-124	L678106-01	WG701602
Bromodichloromethane	mg/l	0.0218	0.0	.025	87.0	63.9-121	L678106-01	WG701602
Bromoform	mg/l	0.0239	0.0	.025	96.0	59.5-134	L678106-01	WG701602
Bromomethane	mg/l	0.0169	0.0	.025	68.0	41.7-155	L678106-01	WG701602
Carbon tetrachloride	mg/l	0.0228	0.0	.025	91.0	55.7-134	L678106-01	WG701602
Chlorobenzene	mg/l	0.0214	0.0	.025	86.0	67-125	L678106-01	WG701602
Chlorodibromomethane	mg/l	0.0216	0.0	.025	86.0	64.3-125	L678106-01	WG701602
Chloroethane	mg/l	0.0187	0.0	.025	75.0	51.5-136	L678106-01	WG701602
Chloroform	mg/l	0.0220	0.0	.025	88.0	63-129	L678106-01	WG701602
Chloromethane	mg/l	0.0206	0.0	.025	82.0	42.4-135	L678106-01	WG701602
cis-1,2-Dichloroethene	mg/l	0.0220	0.0	.025	88.0	59.2-129	L678106-01	WG701602
cis-1,3-Dichloropropene	mg/l	0.0225	0.0	.025	90.0	66.4-125	L678106-01	WG701602
Di-isopropyl ether	mg/l	0.0237	0.0	.025	95.0	56.9-136	L678106-01	WG701602
Dibromomethane	mg/l	0.0229	0.0	.025	92.0	68.2-124	L678106-01	WG701602
Dichlorodifluoromethane	mg/l	0.0220	0.0	.025	88.0	40.6-144	L678106-01	WG701602
Ethylbenzene	mg/l	0.0229	0.0	.025	91.0	61.4-133	L678106-01	WG701602
Hexachloro-1,3-butadiene	mg/l	0.0226	0.0	.025	90.0	55.1-136	L678106-01	WG701602
Isopropylbenzene	mg/l	0.0244	0.0	.025	98.0	66.8-141	L678106-01	WG701602
Methyl tert-butyl ether	mg/l	0.0228	0.0	.025	91.0	57.7-134	L678106-01	WG701602
Methylene Chloride	mg/l	0.0200	0.0	.025	80.0	58.1-122	L678106-01	WG701602
n-Butylbenzene	mg/l	0.0261	0.0	.025	100.	62.7-140	L678106-01	WG701602
n-Propylbenzene	mg/l	0.0231	0.0	.025	92.0	65.9-131	L678106-01	WG701602
Naphthalene	mg/l	0.0242	0.0	.025	97.0	58-135	L678106-01	WG701602
p-Isopropyltoluene	mg/l	0.0237	0.0	.025	95.0	63.2-139	L678106-01	WG701602
sec-Butylbenzene	mg/l	0.0236	0.000305	.025	93.0	62.2-136	L678106-01	WG701602
Styrene	mg/l	0.0238	0.0	.025	95.0	66.8-133	L678106-01	WG701602
tert-Butylbenzene	mg/l	0.0226	0.0	.025	91.0	63.3-134	L678106-01	WG701602
Tetrachloroethene	mg/l	0.0329	0.0127	.025	80.0	53-139	L678106-01	WG701602
Toluene	mg/l	0.0219	0.0	.025	88.0	61.4-130	L678106-01	WG701602
trans-1,2-Dichloroethene	mg/l	0.0219	0.0	.025	88.0	56.5-129	L678106-01	WG701602
trans-1,3-Dichloropropene	mg/l	0.0233	0.0	.025	93.0	64.1-128	L678106-01	WG701602
Trichloroethene	mg/l	0.0224	0.000865	.025	86.0	44.1-149	L678106-01	WG701602
Trichlorofluoromethane	mg/l	0.0194	0.0	.025	78.0	49.6-145	L678106-01	WG701602
Vinyl chloride	mg/l	0.0193	0.0	.025	77.0	47.8-137	L678106-01	WG701602
Xylenes, Total	mg/l	0.0662	0.0	.075	88.0	63.3-131	L678106-01	WG701602
4-Bromofluorobenzene					101.0	71-126		WG701602
Dibromofluoromethane					102.0	78.3-121		WG701602
Toluene-d8					102.0	88.5-111		WG701602
a,a,a-Trifluorotoluene					101.0	85-114		WG701602

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0209	0.0216	83.4	64-128	3.75	20	L678106-01	WG701602
1,1,1-Trichloroethane	mg/l	0.0223	0.0232	85.7	58.7-134	3.98	20	L678106-01	WG701602
1,1,2,2-Tetrachloroethane	mg/l	0.0225	0.0240	89.9	56-132	6.55	22.2	L678106-01	WG701602

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Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1,2-Trichloroethane	mg/l	0.0235	0.0237	94.1	66.3-125	0.870	20	L678106-01	WG701602
1,1-Dichloroethane	mg/l	0.0234	0.0239	93.7	58.5-132	1.97	20	L678106-01	WG701602
1,1-Dichloroethene	mg/l	0.0196	0.0210	78.5	51.1-140	6.72	20.2	L678106-01	WG701602
1,1-Dichloropropene	mg/l	0.0224	0.0232	89.5	57.3-136	3.71	20	L678106-01	WG701602
1,2,3-Trichlorobenzene	mg/l	0.0236	0.0234	94.4	59.1-138	0.830	23.7	L678106-01	WG701602
1,2,3-Trichloropropane	mg/l	0.0229	0.0241	91.7	61.4-128	5.17	22.4	L678106-01	WG701602
1,2,4-Trichlorobenzene	mg/l	0.0257	0.0252	103.	63.6-143	1.95	21.9	L678106-01	WG701602
1,2,4-Trimethylbenzene	mg/l	0.0214	0.0221	85.4	57.4-137	3.41	20	L678106-01	WG701602
1,2-Dibromo-3-Chloropropane	mg/l	0.0229	0.0248	91.7	57.3-136	7.97	27	L678106-01	WG701602
1,2-Dibromoethane	mg/l	0.0225	0.0233	90.0	67.1-125	3.68	20	L678106-01	WG701602
1,2-Dichlorobenzene	mg/l	0.0227	0.0226	91.0	68.2-123	0.510	20	L678106-01	WG701602
1,2-Dichloroethane	mg/l	0.0223	0.0226	89.0	60-126	1.39	20	L678106-01	WG701602
1,2-Dichloropropane	mg/l	0.0227	0.0229	90.9	64.2-123	0.810	20	L678106-01	WG701602
1,3,5-Trimethylbenzene	mg/l	0.0219	0.0227	87.5	63.6-132	3.54	20.5	L678106-01	WG701602
1,3-Dichlorobenzene	mg/l	0.0213	0.0215	85.4	63.1-131	0.910	20	L678106-01	WG701602
1,3-Dichloropropane	mg/l	0.0219	0.0227	87.5	67.9-121	3.80	20	L678106-01	WG701602
1,4-Dichlorobenzene	mg/l	0.0224	0.0219	89.4	68.6-123	2.21	20	L678106-01	WG701602
2,2-Dichloropropane	mg/l	0.0203	0.0208	81.2	50.5-144	2.26	21.9	L678106-01	WG701602
2-Butanone (MEK)	mg/l	0.120	0.137	95.8	22.4-138	13.7	27	L678106-01	WG701602
2-Chloroethyl vinyl ether	mg/l	0.000406	0.000929	0.325*	10-155	78.3*	20	L678106-01	WG701602
2-Chlorotoluene	mg/l	0.0210	0.0217	83.9	63.6-128	3.43	20	L678106-01	WG701602
4-Chlorotoluene	mg/l	0.0216	0.0222	86.5	65.7-127	2.55	20	L678106-01	WG701602
4-Methyl-2-pentanone (MIBK)	mg/l	0.129	0.144	103.	60.8-140	11.0	25.1	L678106-01	WG701602
Acetone	mg/l	0.0777	0.0923	54.9	10-130	17.2	27.9	L678106-01	WG701602
Acrolein	mg/l	0.124	0.140	98.8	10-200	12.2	27.7	L678106-01	WG701602
Acrylonitrile	mg/l	0.129	0.144	103.	49.4-133	11.1	25.3	L678106-01	WG701602
Benzene	mg/l	0.0223	0.0229	89.3	54.3-133	2.65	20	L678106-01	WG701602
Bromobenzene	mg/l	0.0210	0.0217	84.2	63.9-124	3.08	20	L678106-01	WG701602
Bromodichloromethane	mg/l	0.0214	0.0218	85.7	63.9-121	1.77	20	L678106-01	WG701602
Bromoform	mg/l	0.0230	0.0239	92.0	59.5-134	3.92	20.5	L678106-01	WG701602
Bromomethane	mg/l	0.0163	0.0169	65.1	41.7-155	3.57	21.9	L678106-01	WG701602
Carbon tetrachloride	mg/l	0.0217	0.0228	86.6	55.7-134	5.15	20	L678106-01	WG701602
Chlorobenzene	mg/l	0.0213	0.0214	85.2	67-125	0.630	20	L678106-01	WG701602
Chlorodibromomethane	mg/l	0.0212	0.0216	84.6	64.3-125	2.14	20.8	L678106-01	WG701602
Chloroethane	mg/l	0.0178	0.0187	71.0	51.5-136	5.36	40	L678106-01	WG701602
Chloroform	mg/l	0.0221	0.0220	88.4	63-129	0.650	20	L678106-01	WG701602
Chloromethane	mg/l	0.0202	0.0206	80.7	42.4-135	1.86	20	L678106-01	WG701602
cis-1,2-Dichloroethene	mg/l	0.0219	0.0220	87.5	59.2-129	0.800	20	L678106-01	WG701602
cis-1,3-Dichloropropene	mg/l	0.0227	0.0225	90.9	66.4-125	1.08	20	L678106-01	WG701602
Di-isopropyl ether	mg/l	0.0230	0.0237	92.0	56.9-136	2.89	20	L678106-01	WG701602
Dibromomethane	mg/l	0.0228	0.0229	91.2	68.2-124	0.530	20	L678106-01	WG701602
Dichlorodifluoromethane	mg/l	0.0199	0.0220	79.7	40.6-144	9.95	20.2	L678106-01	WG701602
Ethylbenzene	mg/l	0.0223	0.0229	89.0	61.4-133	2.62	20	L678106-01	WG701602
Hexachloro-1,3-butadiene	mg/l	0.0224	0.0226	89.6	55.1-136	0.950	23.6	L678106-01	WG701602
Isopropylbenzene	mg/l	0.0237	0.0244	94.9	66.8-141	2.64	20	L678106-01	WG701602
Methyl tert-butyl ether	mg/l	0.0220	0.0228	88.0	57.7-134	3.43	20	L678106-01	WG701602
Methylene Chloride	mg/l	0.0202	0.0200	80.8	58.1-122	1.02	20	L678106-01	WG701602
n-Butylbenzene	mg/l	0.0251	0.0261	100.	62.7-140	3.88	20.3	L678106-01	WG701602
n-Propylbenzene	mg/l	0.0219	0.0231	87.6	65.9-131	5.36	20	L678106-01	WG701602
Naphthalene	mg/l	0.0235	0.0242	94.0	58-135	2.68	25.5	L678106-01	WG701602
p-Isopropyltoluene	mg/l	0.0227	0.0237	91.0	63.2-139	4.21	20.4	L678106-01	WG701602
sec-Butylbenzene	mg/l	0.0225	0.0236	88.8	62.2-136	4.60	20.3	L678106-01	WG701602
Styrene	mg/l	0.0238	0.0238	95.2	66.8-133	0.110	20	L678106-01	WG701602
tert-Butylbenzene	mg/l	0.0218	0.0226	87.4	63.3-134	3.61	21	L678106-01	WG701602
Tetrachloroethene	mg/l	0.0309	0.0329	72.6	53-139	6.24	20	L678106-01	WG701602
Toluene	mg/l	0.0213	0.0219	85.4	61.4-130	2.53	20	L678106-01	WG701602
trans-1,2-Dichloroethene	mg/l	0.0210	0.0219	83.8	56.5-129	4.28	20	L678106-01	WG701602
trans-1,3-Dichloropropene	mg/l	0.0249	0.0233	99.7	64.1-128	6.80	20	L678106-01	WG701602
Trichloroethene	mg/l	0.0215	0.0224	82.7	44.1-149	3.77	20	L678106-01	WG701602

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Duncklee and Dunham
Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678486

January 17, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Trichlorofluoromethane	mg/l	0.0191	0.0194	76.2	49.6-145	1.98	21.2	L678106-01	WG701602
Vinyl chloride	mg/l	0.0184	0.0193	73.6	47.8-137	4.87	20	L678106-01	WG701602
Xylenes, Total	mg/l	0.0645	0.0662	86.0	63.3-131	2.68	20	L678106-01	WG701602
4-Bromofluorobenzene				98.10	71-126				WG701602
Dibromofluoromethane				99.40	78.3-121				WG701602
Toluene-d8				102.0	88.5-111				WG701602
a,a,a-Trifluorotoluene				102.0	85-114				WG701602

Batch number /Run number / Sample number cross reference

WG701602: R2877033: L678486-01

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Duncklee and Dunham
Daphne Jones, Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L678486

January 17, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print): Matt Flinchum

Site/Facility ID #

P.O. #

Collected by (signature): William Mfl

Immediately Packed on ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
✓ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 1/17/2014

Email? ___No ✓ Yes
FAX? ✓ No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Organochlorine Pesticides x 8081B	PCBs x 8082A	TPH DRO	TPH GRO	MADEP EPH	MADEP VPH		Item/Container#	Sample # (lab only)
18TMW-1	G	GW		1/15/14	1335	2	X											-01

Chain of Custody Page 1 of 1

ESC LABS SCIENCES
YOUR LAB OF CHOICE
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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

LA 678456

C126

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks: RUSH (1 DAY)

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Daphne M Jones	1/15/14	17:30	[illegible]
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
[illegible]	1/15/14	18:11	[illegible]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☒ Client

Temp: 3.1 °C Bottles Received: 2 vg

Date: 1-16-14 Time: 1445

Condition: (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 18TMW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L678486-01

Date Collected: 1/15/2014

Lab File ID: 0116_41

Date Analyzed: 1/16/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Divider
Page

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Thursday February 06, 2014

Report Number: L680831
Samples Received: 02/01/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-01

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 18:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	U	0.21	1.0	ug/l		6020	02/05/14	1
Arsenic	0.62	0.25	1.0	ug/l	J	6020	02/05/14	1
Lead	U	0.24	1.0	ug/l		6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/03/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/03/14	1
Cadmium	U	0.70	5.0	ug/l		6010C	02/03/14	1
Chromium	U	1.4	10.	ug/l		6010C	02/03/14	1
Copper	U	5.3	20.	ug/l		6010C	02/03/14	1
Nickel	U	4.9	20.	ug/l		6010C	02/03/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/03/14	1
Silver	U	2.8	10.	ug/l		6010C	02/03/14	1
Zinc	U	5.9	30.	ug/l		6010C	02/03/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/03/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/03/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/03/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/03/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/03/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/03/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/03/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/03/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/03/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/03/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/03/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/03/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/03/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	02/03/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/03/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/03/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/03/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/03/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/03/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
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.
Reported: 02/06/14 10:22 Printed: 02/06/14 10:42

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-01

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 18:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/03/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/03/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/03/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/03/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/03/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/03/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/03/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/03/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/03/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/03/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/03/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/03/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/03/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/03/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/03/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/03/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/03/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/03/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/03/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/03/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/03/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/03/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/03/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/03/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/03/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/03/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/03/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/03/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/03/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	02/03/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/03/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/03/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/03/14	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	02/03/14	1
Dibromofluoromethane	98.6			% Rec.		8260B	02/03/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-01

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 18:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	103.			% Rec.		8260B	02/03/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/04/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/04/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/04/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/04/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/04/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/04/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/04/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/04/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/04/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/04/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/04/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/04/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/04/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/04/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/04/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/04/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/04/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/04/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/04/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/04/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/04/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/04/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/04/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/04/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/04/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Bis(2-ethylhexyl)phthalate	1.0	0.71	3.0	ug/l	J	8270 D	02/04/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	02/04/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Di-n-octyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-01

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : EB-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 18:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/04/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/04/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/04/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/04/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l	J	8270 D	02/04/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/04/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/04/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/04/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	02/04/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/04/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/04/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/04/14	1
Surrogate Recovery								
2-Fluorophenol	33.2			% Rec.		8270 D	02/04/14	1
Phenol-d5	22.3			% Rec.		8270 D	02/04/14	1
Nitrobenzene-d5	47.0			% Rec.		8270 D	02/04/14	1
2-Fluorobiphenyl	73.5			% Rec.		8270 D	02/04/14	1
2,4,6-Tribromophenol	86.7			% Rec.		8270 D	02/04/14	1
p-Terphenyl-d14	68.8			% Rec.		8270 D	02/04/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-02

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 16:08

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	3.3	0.21	1.0	ug/l		6020	02/05/14	1
Arsenic	0.85	0.25	1.0	ug/l	J	6020	02/05/14	1
Lead	0.60	0.24	1.0	ug/l	J	6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/03/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/03/14	1
Cadmium	1.3	0.70	5.0	ug/l	J	6010C	02/03/14	1
Chromium	U	1.4	10.	ug/l		6010C	02/03/14	1
Copper	U	5.3	20.	ug/l		6010C	02/03/14	1
Nickel	U	4.9	20.	ug/l		6010C	02/03/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/03/14	1
Silver	U	2.8	10.	ug/l		6010C	02/03/14	1
Zinc	11.	5.9	30.	ug/l	J	6010C	02/03/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/03/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/03/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/03/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/03/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/03/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/03/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/03/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/03/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/03/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/03/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/03/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/03/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/03/14	1
Chloroform	3.3	0.32	5.0	ug/l	J	8260B	02/03/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/03/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/03/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/03/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/03/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/03/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-02

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 16:08

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/03/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/03/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/03/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/03/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/03/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/03/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/03/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/03/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/03/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/03/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/03/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/03/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/03/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/03/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/03/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/03/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/03/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/03/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/03/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/03/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/03/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/03/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/03/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/03/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/03/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/03/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/03/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/03/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/03/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/03/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/03/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/03/14	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	02/03/14	1
Dibromofluoromethane	100.			% Rec.		8260B	02/03/14	1
a,a,a-Trifluorotoluene	104.			% Rec.		8260B	02/03/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-02

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 16:08

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	104.			% Rec.		8260B	02/03/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/04/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/04/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/04/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/04/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/04/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/04/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/04/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/04/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/04/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/04/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/04/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/04/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/04/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/04/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/04/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/04/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/04/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/04/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/04/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/04/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/04/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/04/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/04/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/04/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/04/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Bis(2-ethylhexyl)phthalate	1.3	0.71	3.0	ug/l	J	8270 D	02/04/14	1
Di-n-butyl phthalate	0.51	0.27	3.0	ug/l	J	8270 D	02/04/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/04/14	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-02

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 16:08

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/04/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/04/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/04/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/04/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l	J	8270 D	02/04/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/04/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/04/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/04/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	02/04/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/04/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/04/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/04/14	1
Surrogate Recovery								
2-Fluorophenol	17.5			% Rec.		8270 D	02/04/14	1
Phenol-d5	12.8			% Rec.		8270 D	02/04/14	1
Nitrobenzene-d5	30.5			% Rec.		8270 D	02/04/14	1
2-Fluorobiphenyl	57.4			% Rec.		8270 D	02/04/14	1
2,4,6-Tribromophenol	79.0			% Rec.		8270 D	02/04/14	1
p-Terphenyl-d14	68.7			% Rec.		8270 D	02/04/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-03

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 19MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 14:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.64	0.21	1.0	ug/l	J	6020	02/05/14	1
Arsenic	2.7	0.25	1.0	ug/l		6020	02/05/14	1
Lead	U	0.24	1.0	ug/l		6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/03/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/03/14	1
Cadmium	1.3	0.70	5.0	ug/l	J	6010C	02/03/14	1
Chromium	U	1.4	10.	ug/l		6010C	02/03/14	1
Copper	U	5.3	20.	ug/l		6010C	02/03/14	1
Nickel	13.	4.9	20.	ug/l	J	6010C	02/03/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/03/14	1
Silver	U	2.8	10.	ug/l		6010C	02/03/14	1
Zinc	7.8	5.9	30.	ug/l	J	6010C	02/03/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/03/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/03/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/03/14	1
Benzene	0.48	0.33	1.0	ug/l	J	8260B	02/03/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/03/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/03/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/03/14	1
sec-Butylbenzene	0.46	0.36	1.0	ug/l	J	8260B	02/03/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/03/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/03/14	1
Chlorobenzene	13.	0.35	1.0	ug/l		8260B	02/03/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/03/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/03/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/03/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	02/03/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/03/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/03/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/03/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,2-Dichlorobenzene	0.47	0.35	1.0	ug/l	J	8260B	02/03/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/03/14	1
1,4-Dichlorobenzene	3.7	0.27	1.0	ug/l		8260B	02/03/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-03

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 19MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 14:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/03/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/03/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/03/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/03/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/03/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/03/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/03/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/03/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/03/14	1
Di-isopropyl ether	0.36	0.32	1.0	ug/l	J	8260B	02/03/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/03/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/03/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/03/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/03/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/03/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/03/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/03/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/03/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/03/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/03/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/03/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/03/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/03/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/03/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/03/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/03/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/03/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/03/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/03/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/03/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/03/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/03/14	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	02/03/14	1
Dibromofluoromethane	102.			% Rec.		8260B	02/03/14	1
a,a,a-Trifluorotoluene	104.			% Rec.		8260B	02/03/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-03

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 19MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 14:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	103.			% Rec.		8260B	02/03/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/04/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/04/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/04/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/04/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/04/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/04/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/04/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/04/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/04/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/04/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/04/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/04/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/04/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/04/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/04/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/04/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/04/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/04/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/04/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/04/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/04/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/04/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/04/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/04/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/04/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Bis(2-ethylhexyl)phthalate	0.78	0.71	3.0	ug/l	J	8270 D	02/04/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	02/04/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/04/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-03

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 19MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 14:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/04/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/04/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/04/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/04/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l	J	8270 D	02/04/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/04/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/04/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/04/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	02/04/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/04/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/04/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/04/14	1
Surrogate Recovery								
2-Fluorophenol	26.7			% Rec.		8270 D	02/04/14	1
Phenol-d5	19.9			% Rec.		8270 D	02/04/14	1
Nitrobenzene-d5	40.9			% Rec.		8270 D	02/04/14	1
2-Fluorobiphenyl	65.4			% Rec.		8270 D	02/04/14	1
2,4,6-Tribromophenol	73.3			% Rec.		8270 D	02/04/14	1
p-Terphenyl-d14	57.1			% Rec.		8270 D	02/04/14	1

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Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-04

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17MW-4

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 17:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	1.4	0.21	1.0	ug/l		6020	02/05/14	1
Arsenic	1.1	0.25	1.0	ug/l		6020	02/05/14	1
Lead	0.86	0.24	1.0	ug/l	J	6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/03/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/03/14	1
Cadmium	U	0.70	5.0	ug/l		6010C	02/03/14	1
Chromium	U	1.4	10.	ug/l		6010C	02/03/14	1
Copper	10.	5.3	20.	ug/l	J	6010C	02/03/14	1
Nickel	U	4.9	20.	ug/l		6010C	02/03/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/03/14	1
Silver	U	2.8	10.	ug/l		6010C	02/03/14	1
Zinc	8.5	5.9	30.	ug/l	J	6010C	02/03/14	1
Volatile Organics								
Acetone	14.	10.	50.	ug/l	J	8260B	02/03/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/03/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/03/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/03/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/03/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/03/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/03/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/03/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/03/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/03/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/03/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/03/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/03/14	1
Chloroform	1.6	0.32	5.0	ug/l	J	8260B	02/03/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/03/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/03/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/03/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/03/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/03/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-04

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17MW-4

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 17:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/03/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/03/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/03/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/03/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/03/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/03/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/03/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/03/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/03/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/03/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/03/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/03/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/03/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/03/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/03/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/03/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/03/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/03/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/03/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/03/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/03/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/03/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/03/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/03/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/03/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/03/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/03/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/03/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/03/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/03/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/03/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/03/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/03/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/03/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/03/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/03/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	02/03/14	1
Dibromofluoromethane	99.3			% Rec.		8260B	02/03/14	1
a,a,a-Trifluorotoluene	105.			% Rec.		8260B	02/03/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 06, 2014

ESC Sample # : L680831-04

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17MW-4

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 17:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	105.			% Rec.		8260B	02/03/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/04/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/04/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/04/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/04/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/04/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/04/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/04/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/04/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/04/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/04/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/04/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/04/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/04/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/04/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/04/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/04/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/04/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/04/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/04/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/04/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/04/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/04/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/04/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/04/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/04/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/04/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/04/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Bis(2-ethylhexyl)phthalate	0.95	0.71	3.0	ug/l	J	8270 D	02/04/14	1
Di-n-butyl phthalate	0.39	0.27	3.0	ug/l	J	8270 D	02/04/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/04/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/04/14	1

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February 06, 2014

ESC Sample # : L680831-04

Date Received : February 01, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17MW-4

Project # : 201336

Collected By : Phillip Jones
Collection Date : 01/31/14 17:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/04/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/04/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/04/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/04/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/04/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l	J	8270 D	02/04/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/04/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/04/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/04/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	02/04/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/04/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/04/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/04/14	1
Surrogate Recovery								
2-Fluorophenol	33.1			% Rec.		8270 D	02/04/14	1
Phenol-d5	21.3			% Rec.		8270 D	02/04/14	1
Nitrobenzene-d5	49.9			% Rec.		8270 D	02/04/14	1
2-Fluorobiphenyl	73.7			% Rec.		8270 D	02/04/14	1
2,4,6-Tribromophenol	90.8			% Rec.		8270 D	02/04/14	1
p-Terphenyl-d14	66.8			% Rec.		8270 D	02/04/14	1

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L680831-01	WG704465	SAMP	Arsenic	R2882494	J
	WG704421	SAMP	Bis(2-ethylhexyl)phthalate	R2882150	J
	WG704421	SAMP	2,4-Dimethylphenol	R2882150	J
L680831-02	WG704421	SAMP	Bis(2-ethylhexyl)phthalate	R2882150	J
	WG704421	SAMP	Di-n-butyl phthalate	R2882150	J
	WG704421	SAMP	2,4-Dimethylphenol	R2882150	J
	WG704465	SAMP	Arsenic	R2882494	J
	WG704465	SAMP	Lead	R2882494	J
	WG704384	SAMP	Chloroform	R2882026	J
	WG704500	SAMP	Cadmium	R2881848	J
	WG704500	SAMP	Zinc	R2881848	J
L680831-03	WG704421	SAMP	Bis(2-ethylhexyl)phthalate	R2882150	J
	WG704421	SAMP	2,4-Dimethylphenol	R2882150	J
	WG704465	SAMP	Antimony	R2882494	J
	WG704384	SAMP	Benzene	R2882026	J
	WG704384	SAMP	sec-Butylbenzene	R2882026	J
	WG704384	SAMP	1,2-Dichlorobenzene	R2882026	J
	WG704384	SAMP	Di-isopropyl ether	R2882026	J
	WG704500	SAMP	Cadmium	R2881848	J
	WG704500	SAMP	Nickel	R2881848	J
	WG704500	SAMP	Zinc	R2881848	J
L680831-04	WG704421	SAMP	Bis(2-ethylhexyl)phthalate	R2882150	J
	WG704421	SAMP	Di-n-butyl phthalate	R2882150	J
	WG704421	SAMP	2,4-Dimethylphenol	R2882150	J
	WG704465	SAMP	Lead	R2882494	J
	WG704384	SAMP	Acetone	R2882026	J
	WG704384	SAMP	Chloroform	R2882026	J
	WG704500	SAMP	Copper	R2881848	J
	WG704500	SAMP	Zinc	R2881848	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/06/14 at 10:42:43

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L680831-01 Account: DUNDUNNC Received: 02/01/14 14:00 Due Date: 02/07/14 00:00 RPT Date: 02/06/14 10:22

Sample: L680831-02 Account: DUNDUNNC Received: 02/01/14 14:00 Due Date: 02/07/14 00:00 RPT Date: 02/06/14 10:22

Sample: L680831-03 Account: DUNDUNNC Received: 02/01/14 14:00 Due Date: 02/07/14 00:00 RPT Date: 02/06/14 10:22

Sample: L680831-04 Account: DUNDUNNC Received: 02/01/14 14:00 Due Date: 02/07/14 00:00 RPT Date: 02/06/14 10:22

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L680831

February 06, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Mercury	< .0002	mg/l			WG704348	02/03/14 10:03
Beryllium	< .002	mg/l			WG704500	02/03/14 19:14
Cadmium	< .005	mg/l			WG704500	02/03/14 19:14
Chromium	< .01	mg/l			WG704500	02/03/14 19:14
Copper	< .02	mg/l			WG704500	02/03/14 19:14
Nickel	< .02	mg/l			WG704500	02/03/14 19:14
Selenium	< .02	mg/l			WG704500	02/03/14 19:14
Silver	< .01	mg/l			WG704500	02/03/14 19:14
Zinc	< .03	mg/l			WG704500	02/03/14 19:14
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG704384	02/03/14 13:29
1,1,1-Trichloroethane	< .001	mg/l			WG704384	02/03/14 13:29
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG704384	02/03/14 13:29
1,1,2-Trichloroethane	< .001	mg/l			WG704384	02/03/14 13:29
1,1-Dichloroethane	< .001	mg/l			WG704384	02/03/14 13:29
1,1-Dichloroethene	< .001	mg/l			WG704384	02/03/14 13:29
1,1-Dichloropropene	< .001	mg/l			WG704384	02/03/14 13:29
1,2,3-Trichlorobenzene	< .001	mg/l			WG704384	02/03/14 13:29
1,2,3-Trichloropropane	< .001	mg/l			WG704384	02/03/14 13:29
1,2,3-Trimethylbenzene	< .001	mg/l			WG704384	02/03/14 13:29
1,2,4-Trichlorobenzene	< .001	mg/l			WG704384	02/03/14 13:29
1,2,4-Trimethylbenzene	< .001	mg/l			WG704384	02/03/14 13:29
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG704384	02/03/14 13:29
1,2-Dibromoethane	< .001	mg/l			WG704384	02/03/14 13:29
1,2-Dichlorobenzene	< .001	mg/l			WG704384	02/03/14 13:29
1,2-Dichloroethane	< .001	mg/l			WG704384	02/03/14 13:29
1,2-Dichloropropane	< .001	mg/l			WG704384	02/03/14 13:29
1,3,5-Trimethylbenzene	< .001	mg/l			WG704384	02/03/14 13:29
1,3-Dichlorobenzene	< .001	mg/l			WG704384	02/03/14 13:29
1,3-Dichloropropane	< .001	mg/l			WG704384	02/03/14 13:29
1,4-Dichlorobenzene	< .001	mg/l			WG704384	02/03/14 13:29
2,2-Dichloropropane	< .001	mg/l			WG704384	02/03/14 13:29
2-Butanone (MEK)	< .01	mg/l			WG704384	02/03/14 13:29
2-Chloroethyl vinyl ether	< .05	mg/l			WG704384	02/03/14 13:29
2-Chlorotoluene	< .001	mg/l			WG704384	02/03/14 13:29
4-Chlorotoluene	< .001	mg/l			WG704384	02/03/14 13:29
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG704384	02/03/14 13:29
Acetone	< .05	mg/l			WG704384	02/03/14 13:29
Acrolein	< .025	mg/l			WG704384	02/03/14 13:29
Acrylonitrile	< .01	mg/l			WG704384	02/03/14 13:29
Benzene	< .001	mg/l			WG704384	02/03/14 13:29
Bromobenzene	< .001	mg/l			WG704384	02/03/14 13:29
Bromodichloromethane	< .001	mg/l			WG704384	02/03/14 13:29
Bromoform	< .001	mg/l			WG704384	02/03/14 13:29
Bromomethane	< .005	mg/l			WG704384	02/03/14 13:29
Carbon tetrachloride	< .001	mg/l			WG704384	02/03/14 13:29
Chlorobenzene	< .001	mg/l			WG704384	02/03/14 13:29
Chlorodibromomethane	< .001	mg/l			WG704384	02/03/14 13:29
Chloroethane	< .005	mg/l			WG704384	02/03/14 13:29
Chloroform	< .005	mg/l			WG704384	02/03/14 13:29
Chloromethane	< .0025	mg/l			WG704384	02/03/14 13:29
cis-1,2-Dichloroethene	< .001	mg/l			WG704384	02/03/14 13:29
cis-1,3-Dichloropropene	< .001	mg/l			WG704384	02/03/14 13:29
Di-isopropyl ether	< .001	mg/l			WG704384	02/03/14 13:29
Dibromomethane	< .001	mg/l			WG704384	02/03/14 13:29
Dichlorodifluoromethane	< .005	mg/l			WG704384	02/03/14 13:29

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Quality Assurance Report
Level II

L680831

February 06, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Ethylbenzene	< .001	mg/l			WG704384	02/03/14 13:29
Hexachloro-1,3-butadiene	< .001	mg/l			WG704384	02/03/14 13:29
Isopropylbenzene	< .001	mg/l			WG704384	02/03/14 13:29
Methyl tert-butyl ether	< .001	mg/l			WG704384	02/03/14 13:29
Methylene Chloride	< .005	mg/l			WG704384	02/03/14 13:29
n-Butylbenzene	< .001	mg/l			WG704384	02/03/14 13:29
n-Propylbenzene	< .001	mg/l			WG704384	02/03/14 13:29
Naphthalene	< .005	mg/l			WG704384	02/03/14 13:29
p-Isopropyltoluene	< .001	mg/l			WG704384	02/03/14 13:29
sec-Butylbenzene	< .001	mg/l			WG704384	02/03/14 13:29
Styrene	< .001	mg/l			WG704384	02/03/14 13:29
tert-Butylbenzene	< .001	mg/l			WG704384	02/03/14 13:29
Tetrachloroethene	< .001	mg/l			WG704384	02/03/14 13:29
Toluene	< .005	mg/l			WG704384	02/03/14 13:29
trans-1,2-Dichloroethene	< .001	mg/l			WG704384	02/03/14 13:29
trans-1,3-Dichloropropene	< .001	mg/l			WG704384	02/03/14 13:29
Trichloroethene	< .001	mg/l			WG704384	02/03/14 13:29
Trichlorofluoromethane	< .005	mg/l			WG704384	02/03/14 13:29
Vinyl chloride	< .001	mg/l			WG704384	02/03/14 13:29
Xylenes, Total	< .003	mg/l			WG704384	02/03/14 13:29
4-Bromofluorobenzene		% Rec.	104.0	71-126	WG704384	02/03/14 13:29
Dibromofluoromethane		% Rec.	98.80	78.3-121	WG704384	02/03/14 13:29
Toluene-d8		% Rec.	102.0	88.5-111	WG704384	02/03/14 13:29
a,a,a-Trifluorotoluene		% Rec.	105.0	85-114	WG704384	02/03/14 13:29
1,2,4-Trichlorobenzene	< .01	mg/l			WG704421	02/04/14 08:59
2,4,6-Trichlorophenol	< .01	mg/l			WG704421	02/04/14 08:59
2,4-Dichlorophenol	< .01	mg/l			WG704421	02/04/14 08:59
2,4-Dimethylphenol	< .01	mg/l			WG704421	02/04/14 08:59
2,4-Dinitrophenol	< .01	mg/l			WG704421	02/04/14 08:59
2,4-Dinitrotoluene	< .01	mg/l			WG704421	02/04/14 08:59
2,6-Dinitrotoluene	< .01	mg/l			WG704421	02/04/14 08:59
2-Chloronaphthalene	< .001	mg/l			WG704421	02/04/14 08:59
2-Chlorophenol	< .01	mg/l			WG704421	02/04/14 08:59
2-Nitrophenol	< .01	mg/l			WG704421	02/04/14 08:59
3,3-Dichlorobenzidine	< .01	mg/l			WG704421	02/04/14 08:59
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG704421	02/04/14 08:59
4-Bromophenyl-phenylether	< .01	mg/l			WG704421	02/04/14 08:59
4-Chloro-3-methylphenol	< .01	mg/l			WG704421	02/04/14 08:59
4-Chlorophenyl-phenylether	< .01	mg/l			WG704421	02/04/14 08:59
4-Nitrophenol	< .01	mg/l			WG704421	02/04/14 08:59
Acenaphthene	< .001	mg/l			WG704421	02/04/14 08:59
Acenaphthylene	< .001	mg/l			WG704421	02/04/14 08:59
Anthracene	< .001	mg/l			WG704421	02/04/14 08:59
Benzidine	< .01	mg/l			WG704421	02/04/14 08:59
Benzo(a)anthracene	< .001	mg/l			WG704421	02/04/14 08:59
Benzo(a)pyrene	< .001	mg/l			WG704421	02/04/14 08:59
Benzo(b)fluoranthene	< .001	mg/l			WG704421	02/04/14 08:59
Benzo(g,h,i)perylene	< .001	mg/l			WG704421	02/04/14 08:59
Benzo(k)fluoranthene	< .001	mg/l			WG704421	02/04/14 08:59
Benzylbutyl phthalate	< .003	mg/l			WG704421	02/04/14 08:59
Bis(2-chlorethoxy)methane	< .01	mg/l			WG704421	02/04/14 08:59
Bis(2-chloroethyl)ether	< .01	mg/l			WG704421	02/04/14 08:59
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG704421	02/04/14 08:59
Bis(2-ethylhexyl)phthalate	< .003	mg/l			WG704421	02/04/14 08:59
Chrysene	< .001	mg/l			WG704421	02/04/14 08:59
Di-n-butyl phthalate	< .003	mg/l			WG704421	02/04/14 08:59
Di-n-octyl phthalate	< .003	mg/l			WG704421	02/04/14 08:59

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Quality Assurance Report
Level II

L680831

February 06, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Dibenz(a,h)anthracene	< .001	mg/l			WG704421	02/04/14 08:59
Diethyl phthalate	< .003	mg/l			WG704421	02/04/14 08:59
Dimethyl phthalate	< .003	mg/l			WG704421	02/04/14 08:59
Fluoranthene	< .001	mg/l			WG704421	02/04/14 08:59
Fluorene	< .001	mg/l			WG704421	02/04/14 08:59
Hexachloro-1,3-butadiene	< .01	mg/l			WG704421	02/04/14 08:59
Hexachlorobenzene	< .001	mg/l			WG704421	02/04/14 08:59
Hexachlorocyclopentadiene	< .01	mg/l			WG704421	02/04/14 08:59
Hexachloroethane	< .01	mg/l			WG704421	02/04/14 08:59
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG704421	02/04/14 08:59
Isophorone	< .01	mg/l			WG704421	02/04/14 08:59
n-Nitrosodi-n-propylamine	< .01	mg/l			WG704421	02/04/14 08:59
n-Nitrosodimethylamine	< .01	mg/l			WG704421	02/04/14 08:59
n-Nitrosodiphenylamine	< .01	mg/l			WG704421	02/04/14 08:59
Naphthalene	< .001	mg/l			WG704421	02/04/14 08:59
Nitrobenzene	< .01	mg/l			WG704421	02/04/14 08:59
Pentachlorophenol	< .001	mg/l			WG704421	02/04/14 08:59
Phenanthrene	< .001	mg/l			WG704421	02/04/14 08:59
Phenol	< .01	mg/l			WG704421	02/04/14 08:59
Pyrene	< .001	mg/l			WG704421	02/04/14 08:59
2,4,6-Tribromophenol		% Rec.	81.90	11.2-130	WG704421	02/04/14 08:59
2-Fluorobiphenyl		% Rec.	68.10	29.5-131	WG704421	02/04/14 08:59
2-Fluorophenol		% Rec.	28.10	10-77.9	WG704421	02/04/14 08:59
Nitrobenzene-d5		% Rec.	39.40	21.8-123	WG704421	02/04/14 08:59
Phenol-d5		% Rec.	20.70	5-70.1	WG704421	02/04/14 08:59
p-Terphenyl-d14		% Rec.	63.80	29.3-137	WG704421	02/04/14 08:59
Antimony	< .001	mg/l			WG704465	02/05/14 13:23
Arsenic	< .001	mg/l			WG704465	02/05/14 13:23
Lead	< .001	mg/l			WG704465	02/05/14 13:23
Thallium	< .001	mg/l			WG704465	02/05/14 13:23

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Mercury	mg/l	0.0	0.0000285	16.0	20	L680824-01	WG704348
Beryllium	mg/l	0.0	0.000184	105.*	20	L680831-01	WG704500
Cadmium	mg/l	0.0	0.000324	64.0*	20	L680831-01	WG704500
Chromium	mg/l	0.0	-0.0000548	286.*	20	L680831-01	WG704500
Copper	mg/l	0.0	0.00117	65.0*	20	L680831-01	WG704500
Nickel	mg/l	0.0	-0.000496	78.0*	20	L680831-01	WG704500
Selenium	mg/l	0.0	-0.00174	48.0*	20	L680831-01	WG704500
Silver	mg/l	0.0	-0.000811	41.0*	20	L680831-01	WG704500
Zinc	mg/l	0.0	-0.000357	766.*	20	L680831-01	WG704500
Antimony	mg/l	0.0	0.0	0.0	20	L680824-02	WG704465
Arsenic	mg/l	0.00590	0.00290	68.2*	20	L680824-02	WG704465
Lead	mg/l	0.0	0.0	0.0	20	L680824-02	WG704465
Thallium	mg/l	0.0	0.0	0.0	20	L680824-02	WG704465

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Mercury	mg/l	.003	0.00268	89.0	85-115	WG704348

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Quality Assurance Report
Level II

L680831

February 06, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Beryllium	mg/l	1	1.00	100.	85-115	WG704500
Cadmium	mg/l	1	0.965	97.0	85-115	WG704500
Chromium	mg/l	1	0.985	99.0	85-115	WG704500
Copper	mg/l	1	1.01	101.	85-115	WG704500
Nickel	mg/l	1	0.964	96.0	85-115	WG704500
Selenium	mg/l	1	0.997	100.	85-115	WG704500
Silver	mg/l	1	1.01	101.	85-115	WG704500
Zinc	mg/l	1	0.991	99.0	85-115	WG704500
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0265	106.	74.2-124	WG704384
1,1,1-Trichloroethane	mg/l	.025	0.0240	95.8	73.2-123	WG704384
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0235	93.9	70.7-122	WG704384
1,1,2-Trichloroethane	mg/l	.025	0.0244	97.6	77.7-118	WG704384
1,1-Dichloroethane	mg/l	.025	0.0244	97.5	70.7-126	WG704384
1,1-Dichloroethene	mg/l	.025	0.0254	102.	67.8-129	WG704384
1,1-Dichloropropene	mg/l	.025	0.0246	98.5	73.1-125	WG704384
1,2,3-Trichlorobenzene	mg/l	.025	0.0272	109.	64.9-135	WG704384
1,2,3-Trichloropropane	mg/l	.025	0.0245	98.1	71.8-121	WG704384
1,2,3-Trimethylbenzene	mg/l	.025	0.0212	84.8	72.3-116	WG704384
1,2,4-Trichlorobenzene	mg/l	.025	0.0281	112.	69.7-136	WG704384
1,2,4-Trimethylbenzene	mg/l	.025	0.0262	105.	75-123	WG704384
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0242	96.6	65.4-128	WG704384
1,2-Dibromoethane	mg/l	.025	0.0260	104.	76.6-121	WG704384
1,2-Dichlorobenzene	mg/l	.025	0.0253	101.	78.4-117	WG704384
1,2-Dichloroethane	mg/l	.025	0.0238	95.0	68.8-124	WG704384
1,2-Dichloropropane	mg/l	.025	0.0248	99.1	76.5-119	WG704384
1,3,5-Trimethylbenzene	mg/l	.025	0.0274	110.	75.6-124	WG704384
1,3-Dichlorobenzene	mg/l	.025	0.0276	110.	70.8-128	WG704384
1,3-Dichloropropane	mg/l	.025	0.0253	101.	77.4-117	WG704384
1,4-Dichlorobenzene	mg/l	.025	0.0248	99.3	78.8-115	WG704384
2,2-Dichloropropane	mg/l	.025	0.0242	96.7	62.4-133	WG704384
2-Butanone (MEK)	mg/l	.125	0.119	95.6	55-149	WG704384
2-Chloroethyl vinyl ether	mg/l	.125	0.124	99.0	43.8-150	WG704384
2-Chlorotoluene	mg/l	.025	0.0266	106.	74.7-122	WG704384
4-Chlorotoluene	mg/l	.025	0.0258	103.	77.5-120	WG704384
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.124	99.2	70.5-133	WG704384
Acetone	mg/l	.125	0.125	100.	35.6-163	WG704384
Acrolein	mg/l	.125	0.131	105.	10-190	WG704384
Acrylonitrile	mg/l	.125	0.111	88.9	55.2-130	WG704384
Benzene	mg/l	.025	0.0241	96.5	74.8-121	WG704384
Bromobenzene	mg/l	.025	0.0247	98.7	77.5-116	WG704384
Bromodichloromethane	mg/l	.025	0.0223	89.3	75.1-116	WG704384
Bromoform	mg/l	.025	0.0261	104.	67.5-130	WG704384
Bromomethane	mg/l	.025	0.0252	101.	49.9-162	WG704384
Carbon tetrachloride	mg/l	.025	0.0247	98.9	70.2-123	WG704384
Chlorobenzene	mg/l	.025	0.0266	106.	78.1-119	WG704384
Chlorodibromomethane	mg/l	.025	0.0259	104.	74-121	WG704384
Chloroethane	mg/l	.025	0.0235	94.2	61.7-135	WG704384
Chloroform	mg/l	.025	0.0232	92.8	76-121	WG704384
Chloromethane	mg/l	.025	0.0248	99.2	61.5-129	WG704384
cis-1,2-Dichloroethene	mg/l	.025	0.0238	95.0	76-119	WG704384
cis-1,3-Dichloropropene	mg/l	.025	0.0247	99.0	78.2-120	WG704384
Di-isopropyl ether	mg/l	.025	0.0234	93.7	65.6-132	WG704384
Dibromomethane	mg/l	.025	0.0246	98.3	79.5-118	WG704384
Dichlorodifluoromethane	mg/l	.025	0.0261	104.	54.8-135	WG704384
Ethylbenzene	mg/l	.025	0.0267	107.	78.8-122	WG704384
Hexachloro-1,3-butadiene	mg/l	.025	0.0261	105.	64.7-129	WG704384

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Quality Assurance Report
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L680831

February 06, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Isopropylbenzene	mg/l	.025	0.0285	114.	78.6-132	WG704384
Methyl tert-butyl ether	mg/l	.025	0.0220	88.0	71.2-126	WG704384
Methylene Chloride	mg/l	.025	0.0238	95.3	70.3-120	WG704384
n-Butylbenzene	mg/l	.025	0.0256	102.	76.2-126	WG704384
n-Propylbenzene	mg/l	.025	0.0266	107.	78.2-122	WG704384
Naphthalene	mg/l	.025	0.0243	97.1	68.4-128	WG704384
p-Isopropyltoluene	mg/l	.025	0.0285	114.	74-131	WG704384
sec-Butylbenzene	mg/l	.025	0.0274	110.	74.4-127	WG704384
Styrene	mg/l	.025	0.0273	109.	80.4-126	WG704384
tert-Butylbenzene	mg/l	.025	0.0285	114.	75.3-126	WG704384
Tetrachloroethene	mg/l	.025	0.0273	109.	72.6-126	WG704384
Toluene	mg/l	.025	0.0240	96.1	79.7-116	WG704384
trans-1,2-Dichloroethene	mg/l	.025	0.0241	96.4	72.6-121	WG704384
trans-1,3-Dichloropropene	mg/l	.025	0.0256	102.	74.3-123	WG704384
Trichloroethene	mg/l	.025	0.0254	102.	77.7-118	WG704384
Trichlorofluoromethane	mg/l	.025	0.0252	101.	63.5-135	WG704384
Vinyl chloride	mg/l	.025	0.0258	103.	65.9-128	WG704384
Xylenes, Total	mg/l	.075	0.0780	104.	78.7-121	WG704384
4-Bromofluorobenzene				104.0	71-126	WG704384
Dibromofluoromethane				98.10	78.3-121	WG704384
Toluene-d8				103.0	88.5-111	WG704384
a,a,a-Trifluorotoluene				106.0	85-114	WG704384
1,2,4-Trichlorobenzene	mg/l	.025	0.0184	73.8	22.9-96.1	WG704421
2,4,6-Trichlorophenol	mg/l	.025	0.0203	81.2	29.8-107	WG704421
2,4-Dichlorophenol	mg/l	.025	0.0194	77.5	31.4-103	WG704421
2,4-Dimethylphenol	mg/l	.025	0.0162	64.6	31.9-107	WG704421
2,4-Dinitrophenol	mg/l	.025	0.0164	65.5	24.2-128	WG704421
2,4-Dinitrotoluene	mg/l	.025	0.0198	79.2	31.2-105	WG704421
2,6-Dinitrotoluene	mg/l	.025	0.0200	79.8	30.6-106	WG704421
2-Chloronaphthalene	mg/l	.025	0.0225	89.8	33.6-105	WG704421
2-Chlorophenol	mg/l	.025	0.0150	60.0	26.2-91.5	WG704421
2-Nitrophenol	mg/l	.025	0.0182	72.9	25.9-106	WG704421
3,3-Dichlorobenzidine	mg/l	.025	0.0210	84.0	27.2-142	WG704421
4,6-Dinitro-2-methylphenol	mg/l	.025	0.0228	91.1	18.4-148	WG704421
4-Bromophenyl-phenylether	mg/l	.025	0.0251	100.	40.7-116	WG704421
4-Chloro-3-methylphenol	mg/l	.025	0.0164	65.8	35.7-100	WG704421
4-Chlorophenyl-phenylether	mg/l	.025	0.0223	89.3	39-113	WG704421
4-Nitrophenol	mg/l	.025	0.0107	42.7	10-52.7	WG704421
Acenaphthene	mg/l	.025	0.0213	85.2	38.7-109	WG704421
Acenaphthylene	mg/l	.025	0.0230	91.8	36-106	WG704421
Anthracene	mg/l	.025	0.0222	88.7	43.6-113	WG704421
Benzidine	mg/l	.025	0.0250	100.	10-165.2	WG704421
Benzo(a)anthracene	mg/l	.025	0.0211	84.4	51.2-112	WG704421
Benzo(a)pyrene	mg/l	.025	0.0197	78.9	45.6-106	WG704421
Benzo(b)fluoranthene	mg/l	.025	0.0215	85.9	47.6-111	WG704421
Benzo(g,h,i)perylene	mg/l	.025	0.0248	99.2	45.2-117	WG704421
Benzo(k)fluoranthene	mg/l	.025	0.0223	89.1	49.4-114	WG704421
Benzylbutyl phthalate	mg/l	.025	0.0199	79.5	31.8-123	WG704421
Bis(2-chlorethoxy)methane	mg/l	.025	0.0179	71.4	37.2-111	WG704421
Bis(2-chloroethyl)ether	mg/l	.025	0.0147	58.9	22.6-108	WG704421
Bis(2-chloroisopropyl)ether	mg/l	.025	0.0171	68.3	32.9-100	WG704421
Bis(2-ethylhexyl)phthalate	mg/l	.025	0.0200	80.1	36.9-134	WG704421
Chrysene	mg/l	.025	0.0208	83.4	54.6-120	WG704421
Di-n-butyl phthalate	mg/l	.025	0.0218	87.1	41.8-120	WG704421
Di-n-octyl phthalate	mg/l	.025	0.0183	73.1	39.7-112	WG704421
Dibenz(a,h)anthracene	mg/l	.025	0.0240	95.9	42.8-118	WG704421
Diethyl phthalate	mg/l	.025	0.0216	86.5	36.5-129	WG704421

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Quality Assurance Report
Level II

L680831

February 06, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Dimethyl phthalate	mg/l	.025	0.0223	89.2	35.3-128	WG704421
Fluoranthene	mg/l	.025	0.0230	91.9	45.9-115	WG704421
Fluorene	mg/l	.025	0.0219	87.5	41-112	WG704421
Hexachloro-1,3-butadiene	mg/l	.025	0.0176	70.2	16.1-104	WG704421
Hexachlorobenzene	mg/l	.025	0.0246	98.5	38.5-116	WG704421
Hexachlorocyclopentadiene	mg/l	.025	0.0123	49.4	10-121	WG704421
Hexachloroethane	mg/l	.025	0.0149	59.8	16.5-89.8	WG704421
Indeno(1,2,3-cd)pyrene	mg/l	.025	0.0246	98.6	45-116	WG704421
Isophorone	mg/l	.025	0.0189	75.5	35.4-112	WG704421
n-Nitrosodi-n-propylamine	mg/l	.025	0.0178	71.1	33.2-106	WG704421
n-Nitrosodimethylamine	mg/l	.025	0.00915	36.6	10-80.1	WG704421
n-Nitrosodiphenylamine	mg/l	.025	0.0233	93.2	44.4-113	WG704421
Naphthalene	mg/l	.025	0.0181	72.5	32.2-101	WG704421
Nitrobenzene	mg/l	.025	0.0175	69.8	31.4-106	WG704421
Pentachlorophenol	mg/l	.025	0.0159	63.5	10-97.4	WG704421
Phenanthrene	mg/l	.025	0.0219	87.5	46.4-113	WG704421
Phenol	mg/l	.025	0.00713	28.5	10-57.9	WG704421
Pyrene	mg/l	.025	0.0221	88.3	46.3-117	WG704421
2,4,6-Tribromophenol				91.70	11.2-130	WG704421
2-Fluorobiphenyl				89.90	29.5-131	WG704421
2-Fluorophenol				34.40	10-77.9	WG704421
Nitrobenzene-d5				61.60	21.8-123	WG704421
Phenol-d5				24.00	5-70.1	WG704421
p-Terphenyl-d14				69.60	29.3-137	WG704421
Antimony	mg/l	.05	0.0499	99.8	85-115	WG704465
Arsenic	mg/l	.05	0.0486	97.2	85-115	WG704465
Lead	mg/l	.05	0.0485	97.0	85-115	WG704465
Thallium	mg/l	.05	0.0487	97.4	85-115	WG704465

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0261	0.0265	104.	74.2-124	1.45	20	WG704384
1,1,1-Trichloroethane	mg/l	0.0242	0.0240	97.0	73.2-123	1.12	20	WG704384
1,1,2,2-Tetrachloroethane	mg/l	0.0242	0.0235	97.0	70.7-122	2.98	20	WG704384
1,1,2-Trichloroethane	mg/l	0.0251	0.0244	100.	77.7-118	2.80	20	WG704384
1,1-Dichloroethane	mg/l	0.0249	0.0244	100.	70.7-126	2.21	20	WG704384
1,1-Dichloroethene	mg/l	0.0249	0.0254	100.	67.8-129	2.23	20	WG704384
1,1-Dichloropropene	mg/l	0.0251	0.0246	100.	73.1-125	1.89	20	WG704384
1,2,3-Trichlorobenzene	mg/l	0.0277	0.0272	111.	64.9-135	2.00	20	WG704384
1,2,3-Trichloropropane	mg/l	0.0259	0.0245	103.	71.8-121	5.26	20	WG704384
1,2,3-Trimethylbenzene	mg/l	0.0212	0.0212	85.0	72.3-116	0.0700	20	WG704384
1,2,4-Trichlorobenzene	mg/l	0.0281	0.0281	112.	69.7-136	0.0	20	WG704384
1,2,4-Trimethylbenzene	mg/l	0.0262	0.0262	105.	75-123	0.140	20	WG704384
1,2-Dibromo-3-Chloropropane	mg/l	0.0257	0.0242	103.	65.4-128	6.39	20	WG704384
1,2-Dibromoethane	mg/l	0.0265	0.0260	106.	76.6-121	2.15	20	WG704384
1,2-Dichlorobenzene	mg/l	0.0255	0.0253	102.	78.4-117	0.620	20	WG704384
1,2-Dichloroethane	mg/l	0.0249	0.0238	100.	68.8-124	4.84	20	WG704384
1,2-Dichloropropane	mg/l	0.0253	0.0248	101.	76.5-119	2.28	20	WG704384
1,3,5-Trimethylbenzene	mg/l	0.0267	0.0274	107.	75.6-124	2.63	20	WG704384
1,3-Dichlorobenzene	mg/l	0.0275	0.0276	110.	70.8-128	0.290	20	WG704384
1,3-Dichloropropane	mg/l	0.0258	0.0253	103.	77.4-117	2.04	20	WG704384
1,4-Dichlorobenzene	mg/l	0.0248	0.0248	99.0	78.8-115	0.250	20	WG704384
2,2-Dichloropropane	mg/l	0.0249	0.0242	100.	62.4-133	2.95	20	WG704384
2-Butanone (MEK)	mg/l	0.137	0.119	110.	55-149	13.7	20	WG704384
2-Chloroethyl vinyl ether	mg/l	0.127	0.124	101.	43.8-150	2.51	20	WG704384
2-Chlorotoluene	mg/l	0.0263	0.0266	105.	74.7-122	0.960	20	WG704384

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Quality Assurance Report
Level II

L680831

February 06, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
4-Chlorotoluene	mg/l	0.0256	0.0258	102.	77.5-120	0.860	20	WG704384
4-Methyl-2-pentanone (MIBK)	mg/l	0.133	0.124	106.	70.5-133	6.81	20	WG704384
Acetone	mg/l	0.147	0.125	117.	35.6-163	15.6	23.9	WG704384
Acrolein	mg/l	0.170	0.131	136.	10-190	26.4	28.1	WG704384
Acrylonitrile	mg/l	0.116	0.111	93.0	55.2-130	4.44	20	WG704384
Benzene	mg/l	0.0241	0.0241	96.0	74.8-121	0.0200	20	WG704384
Bromobenzene	mg/l	0.0247	0.0247	99.0	77.5-116	0.0300	20	WG704384
Bromodichloromethane	mg/l	0.0223	0.0223	89.0	75.1-116	0.110	20	WG704384
Bromoform	mg/l	0.0271	0.0261	108.	67.5-130	3.58	20	WG704384
Bromomethane	mg/l	0.0247	0.0252	99.0	49.9-162	1.95	20	WG704384
Carbon tetrachloride	mg/l	0.0248	0.0247	99.0	70.2-123	0.260	20	WG704384
Chlorobenzene	mg/l	0.0261	0.0266	104.	78.1-119	1.76	20	WG704384
Chlorodibromomethane	mg/l	0.0258	0.0259	103.	74-121	0.430	20	WG704384
Chloroethane	mg/l	0.0234	0.0235	94.0	61.7-135	0.610	20	WG704384
Chloroform	mg/l	0.0239	0.0232	96.0	76-121	3.00	20	WG704384
Chloromethane	mg/l	0.0243	0.0248	97.0	61.5-129	1.87	20	WG704384
cis-1,2-Dichloroethene	mg/l	0.0242	0.0238	97.0	76-119	1.67	20	WG704384
cis-1,3-Dichloropropene	mg/l	0.0253	0.0247	101.	78.2-120	2.14	20	WG704384
Di-isopropyl ether	mg/l	0.0242	0.0234	97.0	65.6-132	3.13	20	WG704384
Dibromomethane	mg/l	0.0252	0.0246	101.	79.5-118	2.66	20	WG704384
Dichlorodifluoromethane	mg/l	0.0256	0.0261	102.	54.8-135	1.71	20	WG704384
Ethylbenzene	mg/l	0.0263	0.0267	105.	78.8-122	1.61	20	WG704384
Hexachloro-1,3-butadiene	mg/l	0.0256	0.0261	102.	64.7-129	2.00	20	WG704384
Isopropylbenzene	mg/l	0.0284	0.0285	114.	78.6-132	0.210	20	WG704384
Methyl tert-butyl ether	mg/l	0.0236	0.0220	94.0	71.2-126	7.00	20	WG704384
Methylene Chloride	mg/l	0.0245	0.0238	98.0	70.3-120	2.72	20	WG704384
n-Butylbenzene	mg/l	0.0254	0.0256	102.	76.2-126	0.590	20	WG704384
n-Propylbenzene	mg/l	0.0263	0.0266	105.	78.2-122	1.39	20	WG704384
Naphthalene	mg/l	0.0252	0.0243	101.	68.4-128	3.83	20	WG704384
p-Isopropyltoluene	mg/l	0.0282	0.0285	113.	74-131	0.980	20	WG704384
sec-Butylbenzene	mg/l	0.0273	0.0274	109.	74.4-127	0.420	20	WG704384
Styrene	mg/l	0.0273	0.0273	109.	80.4-126	0.170	20	WG704384
tert-Butylbenzene	mg/l	0.0281	0.0285	112.	75.3-126	1.44	20	WG704384
Tetrachloroethene	mg/l	0.0270	0.0273	108.	72.6-126	1.31	20	WG704384
Toluene	mg/l	0.0243	0.0240	97.0	79.7-116	1.33	20	WG704384
trans-1,2-Dichloroethene	mg/l	0.0245	0.0241	98.0	72.6-121	1.71	20	WG704384
trans-1,3-Dichloropropene	mg/l	0.0257	0.0256	103.	74.3-123	0.320	20	WG704384
Trichloroethene	mg/l	0.0259	0.0254	104.	77.7-118	1.75	20	WG704384
Trichlorofluoromethane	mg/l	0.0253	0.0252	101.	63.5-135	0.350	20	WG704384
Vinyl chloride	mg/l	0.0254	0.0258	102.	65.9-128	1.48	20	WG704384
Xylenes, Total	mg/l	0.0772	0.0780	103.	78.7-121	1.05	20	WG704384
4-Bromofluorobenzene				103.0	71-126			WG704384
Dibromofluoromethane				101.0	78.3-121			WG704384
Toluene-d8				104.0	88.5-111			WG704384
a,a,a-Trifluorotoluene				106.0	85-114			WG704384
1,2,4-Trichlorobenzene	mg/l	0.0155	0.0184	62.0	22.9-96.1	17.1	27.5	WG704421
2,4,6-Trichlorophenol	mg/l	0.0208	0.0203	83.0	29.8-107	2.37	24.1	WG704421
2,4-Dichlorophenol	mg/l	0.0204	0.0194	82.0	31.4-103	4.99	24.9	WG704421
2,4-Dimethylphenol	mg/l	0.0172	0.0162	69.0	31.9-107	6.20	25.7	WG704421
2,4-Dinitrophenol	mg/l	0.0177	0.0164	71.0	24.2-128	7.56	20.5	WG704421
2,4-Dinitrotoluene	mg/l	0.0182	0.0198	73.0	31.2-105	8.28	22	WG704421
2,6-Dinitrotoluene	mg/l	0.0183	0.0200	73.0	30.6-106	8.75	23.1	WG704421
2-Chloronaphthalene	mg/l	0.0204	0.0225	81.0	33.6-105	9.82	23	WG704421
2-Chlorophenol	mg/l	0.0151	0.0150	60.0	26.2-91.5	0.440	26.5	WG704421
2-Nitrophenol	mg/l	0.0186	0.0182	74.0	25.9-106	1.79	26.9	WG704421
3,3-Dichlorobenzidine	mg/l	0.0189	0.0210	76.0	27.2-142	10.5	22.3	WG704421
4,6-Dinitro-2-methylphenol	mg/l	0.0240	0.0228	96.0	18.4-148	5.45	24.4	WG704421

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Quality Assurance Report
Level II

L680831

February 06, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
4-Bromophenyl-phenylether	mg/l	0.0219	0.0251	87.0	40.7-116	13.6	21	WG704421
4-Chloro-3-methylphenol	mg/l	0.0168	0.0164	67.0	35.7-100	1.97	22.9	WG704421
4-Chlorophenyl-phenylether	mg/l	0.0203	0.0223	81.0	39-113	9.68	20.9	WG704421
4-Nitrophenol	mg/l	0.0111	0.0107	44.0	10-52.7	3.98	40	WG704421
Acenaphthene	mg/l	0.0187	0.0213	75.0	38.7-109	13.0	21.5	WG704421
Acenaphthylene	mg/l	0.0207	0.0230	83.0	36-106	10.3	21	WG704421
Anthracene	mg/l	0.0196	0.0222	78.0	43.6-113	12.1	18.8	WG704421
Benzidine	mg/l	0.0215	0.0250	86.0	10-165.2	14.9	40	WG704421
Benzo(a)anthracene	mg/l	0.0193	0.0211	77.0	51.2-112	8.94	20	WG704421
Benzo(a)pyrene	mg/l	0.0179	0.0197	72.0	45.6-106	9.62	20	WG704421
Benzo(b)fluoranthene	mg/l	0.0194	0.0215	78.0	47.6-111	10.1	20	WG704421
Benzo(g,h,i)perylene	mg/l	0.0225	0.0248	90.0	45.2-117	9.48	20	WG704421
Benzo(k)fluoranthene	mg/l	0.0203	0.0223	81.0	49.4-114	9.32	20	WG704421
Benzylbutyl phthalate	mg/l	0.0189	0.0199	76.0	31.8-123	5.07	20.7	WG704421
Bis(2-chlorethoxy)methane	mg/l	0.0152	0.0179	61.0	37.2-111	16.0	24.1	WG704421
Bis(2-chloroethyl)ether	mg/l	0.0132	0.0147	53.0	22.6-108	11.1	27.9	WG704421
Bis(2-chloroisopropyl)ether	mg/l	0.0152	0.0171	61.0	32.9-100	11.6	25.1	WG704421
Bis(2-ethylhexyl)phthalate	mg/l	0.0187	0.0200	75.0	36.9-134	6.66	23.6	WG704421
Chrysene	mg/l	0.0190	0.0208	76.0	54.6-120	9.25	20	WG704421
Di-n-butyl phthalate	mg/l	0.0197	0.0218	79.0	41.8-120	9.82	20.2	WG704421
Di-n-octyl phthalate	mg/l	0.0169	0.0183	68.0	39.7-112	7.58	21.1	WG704421
Dibenz(a,h)anthracene	mg/l	0.0217	0.0240	87.0	42.8-118	10.1	20	WG704421
Diethyl phthalate	mg/l	0.0194	0.0216	78.0	36.5-129	10.6	20	WG704421
Dimethyl phthalate	mg/l	0.0203	0.0223	81.0	35.3-128	9.45	20.8	WG704421
Fluoranthene	mg/l	0.0203	0.0230	81.0	45.9-115	12.3	20	WG704421
Fluorene	mg/l	0.0195	0.0219	78.0	41-112	11.7	20.2	WG704421
Hexachloro-1,3-butadiene	mg/l	0.0150	0.0176	60.0	16.1-104	15.9	31.2	WG704421
Hexachlorobenzene	mg/l	0.0219	0.0246	88.0	38.5-116	11.8	20.1	WG704421
Hexachlorocyclopentadiene	mg/l	0.0108	0.0123	43.0	10-121	13.3	27.9	WG704421
Hexachloroethane	mg/l	0.0129	0.0149	52.0	16.5-89.8	14.6	30.7	WG704421
Indeno(1,2,3-cd)pyrene	mg/l	0.0220	0.0246	88.0	45-116	11.2	20	WG704421
Isophorone	mg/l	0.0163	0.0189	65.0	35.4-112	14.7	21.5	WG704421
n-Nitrosodi-n-propylamine	mg/l	0.0153	0.0178	61.0	33.2-106	14.8	23.7	WG704421
n-Nitrosodimethylamine	mg/l	0.00851	0.00915	34.0	10-80.1	7.35	37.5	WG704421
n-Nitrosodiphenylamine	mg/l	0.0205	0.0233	82.0	44.4-113	12.9	20	WG704421
Naphthalene	mg/l	0.0155	0.0181	62.0	32.2-101	15.3	23.8	WG704421
Nitrobenzene	mg/l	0.0148	0.0175	59.0	31.4-106	16.2	25.7	WG704421
Pentachlorophenol	mg/l	0.0169	0.0159	67.0	10-97.4	6.02	35.1	WG704421
Phenanthrene	mg/l	0.0196	0.0219	78.0	46.4-113	10.9	20	WG704421
Phenol	mg/l	0.00733	0.00713	29.0	10-57.9	2.68	35	WG704421
Pyrene	mg/l	0.0202	0.0221	81.0	46.3-117	8.74	20	WG704421
2,4,6-Tribromophenol				88.30	11.2-130			WG704421
2-Fluorobiphenyl				76.70	29.5-131			WG704421
2-Fluorophenol				36.20	10-77.9			WG704421
Nitrobenzene-d5				49.30	21.8-123			WG704421
Phenol-d5				25.60	5-70.1			WG704421
p-Terphenyl-d14				64.20	29.3-137			WG704421

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/l	0.00291	0.0000285	.003	96.0	80-120	L680824-01	WG704348
Beryllium	mg/l	0.994	0.000184	1	99.0	75-125	L680831-01	WG704500
Cadmium	mg/l	0.936	0.000324	1	94.0	75-125	L680831-01	WG704500
Chromium	mg/l	0.956	-0.000054	1	96.0	75-125	L680831-01	WG704500
Copper	mg/l	0.985	0.00117	1	98.0	75-125	L680831-01	WG704500
Nickel	mg/l	0.941	-0.000496	1	94.0	75-125	L680831-01	WG704500

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Quality Assurance Report
Level II

L680831

February 06, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Selenium	mg/l	0.970	-0.00174	1	97.0	75-125	L680831-01	WG704500
Silver	mg/l	0.983	-0.000811	1	98.0	75-125	L680831-01	WG704500
Zinc	mg/l	0.962	-0.000357	1	96.0	75-125	L680831-01	WG704500
1,1,1,2-Tetrachloroethane	mg/l	0.0260	0.0	.025	100.	64-128	L680828-01	WG704384
1,1,1-Trichloroethane	mg/l	0.0225	0.0	.025	90.0	58.7-134	L680828-01	WG704384
1,1,2,2-Tetrachloroethane	mg/l	0.0241	0.0	.025	96.0	56-132	L680828-01	WG704384
1,1,2-Trichloroethane	mg/l	0.0247	0.0	.025	99.0	66.3-125	L680828-01	WG704384
1,1-Dichloroethane	mg/l	0.0235	0.0	.025	94.0	58.5-132	L680828-01	WG704384
1,1-Dichloroethene	mg/l	0.0228	0.0	.025	91.0	51.1-140	L680828-01	WG704384
1,1-Dichloropropene	mg/l	0.0222	0.0	.025	89.0	57.3-136	L680828-01	WG704384
1,2,3-Trichlorobenzene	mg/l	0.0235	0.0	.025	94.0	59.1-138	L680828-01	WG704384
1,2,3-Trichloropropane	mg/l	0.0251	0.0	.025	100.	61.4-128	L680828-01	WG704384
1,2,3-Trimethylbenzene	mg/l	0.0199	0.0	.025	80.0	61.3-122	L680828-01	WG704384
1,2,4-Trichlorobenzene	mg/l	0.0235	0.0	.025	94.0	63.6-143	L680828-01	WG704384
1,2,4-Trimethylbenzene	mg/l	0.0235	0.0	.025	94.0	57.4-137	L680828-01	WG704384
1,2-Dibromo-3-Chloropropane	mg/l	0.0264	0.0	.025	110.	57.3-136	L680828-01	WG704384
1,2-Dibromoethane	mg/l	0.0251	0.0	.025	100.	67.1-125	L680828-01	WG704384
1,2-Dichlorobenzene	mg/l	0.0240	0.0	.025	96.0	68.2-123	L680828-01	WG704384
1,2-Dichloroethane	mg/l	0.0238	0.0	.025	95.0	60-126	L680828-01	WG704384
1,2-Dichloropropane	mg/l	0.0239	0.0	.025	96.0	64.2-123	L680828-01	WG704384
1,3,5-Trimethylbenzene	mg/l	0.0245	0.0	.025	98.0	63.6-132	L680828-01	WG704384
1,3-Dichlorobenzene	mg/l	0.0244	0.0	.025	98.0	63.1-131	L680828-01	WG704384
1,3-Dichloropropane	mg/l	0.0246	0.0	.025	98.0	67.9-121	L680828-01	WG704384
1,4-Dichlorobenzene	mg/l	0.0222	0.0	.025	89.0	68.6-123	L680828-01	WG704384
2,2-Dichloropropane	mg/l	0.0224	0.0	.025	90.0	50.5-144	L680828-01	WG704384
2-Butanone (MEK)	mg/l	0.0933	0.0	.125	75.0	22.4-138	L680828-01	WG704384
2-Chloroethyl vinyl ether	mg/l	0.000387	0.0	.125	0.310*	10-155	L680828-01	WG704384
2-Chlorotoluene	mg/l	0.0246	0.0	.025	98.0	63.6-128	L680828-01	WG704384
4-Chlorotoluene	mg/l	0.0230	0.0	.025	92.0	65.7-127	L680828-01	WG704384
4-Methyl-2-pentanone (MIBK)	mg/l	0.125	0.0	.125	100.	60.8-140	L680828-01	WG704384
Acetone	mg/l	0.0590	0.00134	.125	46.0	10-130	L680828-01	WG704384
Acrolein	mg/l	0.217	0.0	.125	170.	10-200	L680828-01	WG704384
Acrylonitrile	mg/l	0.118	0.0	.125	94.0	49.4-133	L680828-01	WG704384
Benzene	mg/l	0.0224	0.0	.025	90.0	54.3-133	L680828-01	WG704384
Bromobenzene	mg/l	0.0231	0.0	.025	92.0	63.9-124	L680828-01	WG704384
Bromodichloromethane	mg/l	0.0218	0.0	.025	87.0	63.9-121	L680828-01	WG704384
Bromoform	mg/l	0.0265	0.0	.025	110.	59.5-134	L680828-01	WG704384
Bromomethane	mg/l	0.0223	0.0	.025	89.0	41.7-155	L680828-01	WG704384
Carbon tetrachloride	mg/l	0.0233	0.0	.025	93.0	55.7-134	L680828-01	WG704384
Chlorobenzene	mg/l	0.0243	0.0	.025	97.0	67-125	L680828-01	WG704384
Chlorodibromomethane	mg/l	0.0256	0.0	.025	100.	64.3-125	L680828-01	WG704384
Chloroethane	mg/l	0.0214	0.0	.025	86.0	51.5-136	L680828-01	WG704384
Chloroform	mg/l	0.0226	0.0	.025	90.0	63-129	L680828-01	WG704384
Chloromethane	mg/l	0.0207	0.0	.025	83.0	42.4-135	L680828-01	WG704384
cis-1,2-Dichloroethene	mg/l	0.0225	0.0	.025	90.0	59.2-129	L680828-01	WG704384
cis-1,3-Dichloropropene	mg/l	0.0235	0.0	.025	94.0	66.4-125	L680828-01	WG704384
Di-isopropyl ether	mg/l	0.0242	0.00118	.025	92.0	56.9-136	L680828-01	WG704384
Dibromomethane	mg/l	0.0243	0.0	.025	97.0	68.2-124	L680828-01	WG704384
Dichlorodifluoromethane	mg/l	0.0240	0.0	.025	96.0	40.6-144	L680828-01	WG704384
Ethylbenzene	mg/l	0.0239	0.0	.025	95.0	61.4-133	L680828-01	WG704384
Hexachloro-1,3-butadiene	mg/l	0.0229	0.0	.025	92.0	55.1-136	L680828-01	WG704384
Isopropylbenzene	mg/l	0.0267	0.0	.025	110.	66.8-141	L680828-01	WG704384
Methyl tert-butyl ether	mg/l	0.0264	0.00327	.025	93.0	57.7-134	L680828-01	WG704384
Methylene Chloride	mg/l	0.0223	0.000422	.025	87.0	58.1-122	L680828-01	WG704384
n-Butylbenzene	mg/l	0.0217	0.0	.025	87.0	62.7-140	L680828-01	WG704384
n-Propylbenzene	mg/l	0.0236	0.0	.025	94.0	65.9-131	L680828-01	WG704384
Naphthalene	mg/l	0.0239	0.0	.025	96.0	58-135	L680828-01	WG704384

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Quality Assurance Report
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February 06, 2014

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
p-Isopropyltoluene	mg/l	0.0250	0.0	.025	100.	63.2-139	L680828-01	WG704384
sec-Butylbenzene	mg/l	0.0252	0.0	.025	100.	62.2-136	L680828-01	WG704384
Styrene	mg/l	0.0254	0.0	.025	100.	66.8-133	L680828-01	WG704384
tert-Butylbenzene	mg/l	0.0268	0.0	.025	110.	63.3-134	L680828-01	WG704384
Tetrachloroethene	mg/l	0.0238	0.0	.025	95.0	53-139	L680828-01	WG704384
Toluene	mg/l	0.0222	0.0	.025	89.0	61.4-130	L680828-01	WG704384
trans-1,2-Dichloroethene	mg/l	0.0213	0.0	.025	85.0	56.5-129	L680828-01	WG704384
trans-1,3-Dichloropropene	mg/l	0.0235	0.0	.025	94.0	64.1-128	L680828-01	WG704384
Trichloroethene	mg/l	0.0237	0.0	.025	95.0	44.1-149	L680828-01	WG704384
Trichlorofluoromethane	mg/l	0.0246	0.0	.025	98.0	49.6-145	L680828-01	WG704384
Vinyl chloride	mg/l	0.0229	0.0	.025	92.0	47.8-137	L680828-01	WG704384
Xylenes, Total	mg/l	0.0708	0.0	.075	94.0	63.3-131	L680828-01	WG704384
4-Bromofluorobenzene					103.0	71-126		WG704384
Dibromofluoromethane					99.70	78.3-121		WG704384
Toluene-d8					104.0	88.5-111		WG704384
a,a,a-Trifluorotoluene					106.0	85-114		WG704384
Antimony	mg/l	0.0536	0.0	.05	110.	75-125	L680824-02	WG704465
Arsenic	mg/l	0.0590	0.00290	.05	110.	75-125	L680824-02	WG704465
Lead	mg/l	0.0491	0.0	.05	98.0	75-125	L680824-02	WG704465
Thallium	mg/l	0.0498	0.0	.05	100.	75-125	L680824-02	WG704465

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/l	0.00282	0.00291	93.0	80-120	3.00	20	L680824-01	WG704348
Beryllium	mg/l	1.02	0.994	102.	75-125	2.00	20	L680831-01	WG704500
Cadmium	mg/l	0.984	0.936	98.4	75-125	5.00	20	L680831-01	WG704500
Chromium	mg/l	1.00	0.956	100.	75-125	5.00	20	L680831-01	WG704500
Copper	mg/l	1.03	0.985	103.	75-125	5.00	20	L680831-01	WG704500
Nickel	mg/l	0.975	0.941	97.5	75-125	4.00	20	L680831-01	WG704500
Selenium	mg/l	1.00	0.970	100.	75-125	3.00	20	L680831-01	WG704500
Silver	mg/l	1.03	0.983	103.	75-125	5.00	20	L680831-01	WG704500
Zinc	mg/l	1.01	0.962	101.	75-125	5.00	20	L680831-01	WG704500
1,1,1,2-Tetrachloroethane	mg/l	0.0260	0.0260	104.	64-128	0.0600	20	L680828-01	WG704384
1,1,1-Trichloroethane	mg/l	0.0230	0.0225	92.2	58.7-134	2.39	20	L680828-01	WG704384
1,1,2,2-Tetrachloroethane	mg/l	0.0238	0.0241	95.0	56-132	1.21	22.2	L680828-01	WG704384
1,1,2-Trichloroethane	mg/l	0.0249	0.0247	99.7	66.3-125	1.08	20	L680828-01	WG704384
1,1-Dichloroethane	mg/l	0.0241	0.0235	96.6	58.5-132	2.81	20	L680828-01	WG704384
1,1-Dichloroethene	mg/l	0.0237	0.0228	94.9	51.1-140	4.18	20.2	L680828-01	WG704384
1,1-Dichloropropene	mg/l	0.0227	0.0222	90.8	57.3-136	2.14	20	L680828-01	WG704384
1,2,3-Trichlorobenzene	mg/l	0.0227	0.0235	90.8	59.1-138	3.26	23.7	L680828-01	WG704384
1,2,3-Trichloropropane	mg/l	0.0256	0.0251	102.	61.4-128	2.00	22.4	L680828-01	WG704384
1,2,3-Trimethylbenzene	mg/l	0.0197	0.0199	78.9	61.3-122	0.730	20	L680828-01	WG704384
1,2,4-Trichlorobenzene	mg/l	0.0217	0.0235	86.6	63.6-143	8.29	21.9	L680828-01	WG704384
1,2,4-Trimethylbenzene	mg/l	0.0231	0.0235	92.3	57.4-137	1.65	20	L680828-01	WG704384
1,2-Dibromo-3-Chloropropane	mg/l	0.0248	0.0264	99.0	57.3-136	6.59	27	L680828-01	WG704384
1,2-Dibromoethane	mg/l	0.0256	0.0251	102.	67.1-125	1.61	20	L680828-01	WG704384
1,2-Dichlorobenzene	mg/l	0.0242	0.0240	96.8	68.2-123	0.760	20	L680828-01	WG704384
1,2-Dichloroethane	mg/l	0.0244	0.0238	97.7	60-126	2.44	20	L680828-01	WG704384
1,2-Dichloropropane	mg/l	0.0243	0.0239	97.4	64.2-123	1.76	20	L680828-01	WG704384
1,3,5-Trimethylbenzene	mg/l	0.0243	0.0245	97.1	63.6-132	1.06	20.5	L680828-01	WG704384
1,3-Dichlorobenzene	mg/l	0.0243	0.0244	97.1	63.1-131	0.620	20	L680828-01	WG704384
1,3-Dichloropropane	mg/l	0.0255	0.0246	102.	67.9-121	3.51	20	L680828-01	WG704384

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Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,4-Dichlorobenzene	mg/l	0.0219	0.0222	87.7	68.6-123	1.44	20	L680828-01	WG704384
2,2-Dichloropropane	mg/l	0.0224	0.0224	89.6	50.5-144	0.100	21.9	L680828-01	WG704384
2-Butanone (MEK)	mg/l	0.0985	0.0933	78.8	22.4-138	5.37	27	L680828-01	WG704384
2-Chloroethyl vinyl ether	mg/l	0.000509	0.000387	0.407*	10-155	27.1*	20	L680828-01	WG704384
2-Chlorotoluene	mg/l	0.0246	0.0246	98.4	63.6-128	0.220	20	L680828-01	WG704384
4-Chlorotoluene	mg/l	0.0229	0.0230	91.4	65.7-127	0.490	20	L680828-01	WG704384
4-Methyl-2-pentanone (MIBK)	mg/l	0.129	0.125	103.	60.8-140	3.16	25.1	L680828-01	WG704384
Acetone	mg/l	0.0635	0.0590	49.7	10-130	7.38	27.9	L680828-01	WG704384
Acrolein	mg/l	0.243	0.217	194.	10-200	11.3	27.7	L680828-01	WG704384
Acrylonitrile	mg/l	0.117	0.118	93.5	49.4-133	0.530	25.3	L680828-01	WG704384
Benzene	mg/l	0.0231	0.0224	92.4	54.3-133	3.14	20	L680828-01	WG704384
Bromobenzene	mg/l	0.0235	0.0231	94.1	63.9-124	1.78	20	L680828-01	WG704384
Bromodichloromethane	mg/l	0.0223	0.0218	89.1	63.9-121	2.38	20	L680828-01	WG704384
Bromoform	mg/l	0.0267	0.0265	107.	59.5-134	1.01	20.5	L680828-01	WG704384
Bromomethane	mg/l	0.0227	0.0223	90.6	41.7-155	1.68	21.9	L680828-01	WG704384
Carbon tetrachloride	mg/l	0.0236	0.0233	94.4	55.7-134	1.42	20	L680828-01	WG704384
Chlorobenzene	mg/l	0.0246	0.0243	98.4	67-125	1.41	20	L680828-01	WG704384
Chlorodibromomethane	mg/l	0.0261	0.0256	104.	64.3-125	1.90	20.8	L680828-01	WG704384
Chloroethane	mg/l	0.0212	0.0214	84.8	51.5-136	1.01	40	L680828-01	WG704384
Chloroform	mg/l	0.0233	0.0226	93.2	63-129	3.07	20	L680828-01	WG704384
Chloromethane	mg/l	0.0211	0.0207	84.2	42.4-135	1.60	20	L680828-01	WG704384
cis-1,2-Dichloroethene	mg/l	0.0232	0.0225	92.9	59.2-129	3.12	20	L680828-01	WG704384
cis-1,3-Dichloropropene	mg/l	0.0239	0.0235	95.8	66.4-125	1.87	20	L680828-01	WG704384
Di-isopropyl ether	mg/l	0.0251	0.0242	95.8	56.9-136	3.76	20	L680828-01	WG704384
Dibromomethane	mg/l	0.0242	0.0243	96.8	68.2-124	0.280	20	L680828-01	WG704384
Dichlorodifluoromethane	mg/l	0.0245	0.0240	98.1	40.6-144	2.04	20.2	L680828-01	WG704384
Ethylbenzene	mg/l	0.0241	0.0239	96.2	61.4-133	0.860	20	L680828-01	WG704384
Hexachloro-1,3-butadiene	mg/l	0.0221	0.0229	88.4	55.1-136	3.63	23.6	L680828-01	WG704384
Isopropylbenzene	mg/l	0.0263	0.0267	105.	66.8-141	1.56	20	L680828-01	WG704384
Methyl tert-butyl ether	mg/l	0.0273	0.0264	96.1	57.7-134	3.30	20	L680828-01	WG704384
Methylene Chloride	mg/l	0.0230	0.0223	90.2	58.1-122	3.12	20	L680828-01	WG704384
n-Butylbenzene	mg/l	0.0208	0.0217	83.2	62.7-140	4.32	20.3	L680828-01	WG704384
n-Propylbenzene	mg/l	0.0234	0.0236	93.4	65.9-131	0.910	20	L680828-01	WG704384
Naphthalene	mg/l	0.0232	0.0239	92.7	58-135	3.07	25.5	L680828-01	WG704384
p-Isopropyltoluene	mg/l	0.0243	0.0250	97.4	63.2-139	2.71	20.4	L680828-01	WG704384
sec-Butylbenzene	mg/l	0.0247	0.0252	98.6	62.2-136	2.18	20.3	L680828-01	WG704384
Styrene	mg/l	0.0256	0.0254	102.	66.8-133	0.590	20	L680828-01	WG704384
tert-Butylbenzene	mg/l	0.0268	0.0268	107.	63.3-134	0.0200	21	L680828-01	WG704384
Tetrachloroethene	mg/l	0.0238	0.0238	95.3	53-139	0.130	20	L680828-01	WG704384
Toluene	mg/l	0.0224	0.0222	89.6	61.4-130	0.670	20	L680828-01	WG704384
trans-1,2-Dichloroethene	mg/l	0.0219	0.0213	87.6	56.5-129	2.71	20	L680828-01	WG704384
trans-1,3-Dichloropropene	mg/l	0.0245	0.0235	97.8	64.1-128	4.01	20	L680828-01	WG704384
Trichloroethene	mg/l	0.0236	0.0237	94.5	44.1-149	0.240	20	L680828-01	WG704384
Trichlorofluoromethane	mg/l	0.0248	0.0246	99.3	49.6-145	1.09	21.2	L680828-01	WG704384
Vinyl chloride	mg/l	0.0235	0.0229	94.0	47.8-137	2.73	20	L680828-01	WG704384
Xylenes, Total	mg/l	0.0715	0.0708	95.3	63.3-131	0.850	20	L680828-01	WG704384
4-Bromofluorobenzene				104.0	71-126				WG704384
Dibromofluoromethane				102.0	78.3-121				WG704384
Toluene-d8				103.0	88.5-111				WG704384
a,a,a-Trifluorotoluene				104.0	85-114				WG704384
Antimony	mg/l	0.0540	0.0536	108.	75-125	0.743	20	L680824-02	WG704465
Arsenic	mg/l	0.0572	0.0590	109.	75-125	3.10	20	L680824-02	WG704465
Lead	mg/l	0.0494	0.0491	98.8	75-125	0.609	20	L680824-02	WG704465
Thallium	mg/l	0.0499	0.0498	99.8	75-125	0.201	20	L680824-02	WG704465

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L680831

February 06, 2014

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

WG704348: R2881765: L680831-01 02 03 04
WG704500: R2881848: L680831-01 02 03 04
WG704384: R2882026: L680831-01 02 03 04
WG704421: R2882150: L680831-01 02 03 04
WG704465: R2882494: L680831-01 02 03 04

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L680831

February 06, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: Daphne Jones; Matt Flinchum

Email To: daphne; matt@dunkleedunham.com

Project Description: Dorothea Dix Campus

City/State Collected: Raleigh, NC

Phone: 919-858-9898
Fax: 919-858-9899

Client Project # 201336

Lab Project #

Collected by (print): Phillip Jones

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1680831
A124

Acctnum: DUNDUNNC
Template:
Prelogin:
TSR: Hunt
Cooler:
Shipped Via: Raleigh Serv

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)	Rem./Contaminant	Sample # (lab only)
EB-1	G	GW		1/31/14	1820	5	X	X	X		01
17MW-1	↓	↓		1/31/14	1608	5	X	X	X		02
14MW-1	↓	↓		1/31/14	1405	5	X	X	X		03
17MW-4	↓	↓		1/31/14	1720	5	X	X	X		04

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks: NOTICs for EB-1

Relinquished by: (Signature)	Date: 1/31/14	Time: 18:30	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA

Temp: 3.1 °C Bottles Received: 20

Date: 2-1-14 Time: 0900

Hold #

Condition: (lab use only) OK

COC Seal Intact: ___Y ___N ___NA

pH Checked: L2

NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 17MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L680831-02

Date Collected: 1/31/2014

Lab File ID: 0203_20

Date Analyzed: 2/3/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 17MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L680831-02

Date Collected: 1/31/2014

Lab File ID: 0204_18

Date Analyzed: 2/4/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 17MW-4

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L680831-04

Date Collected: 1/31/2014

Lab File ID: 0203_22

Date Analyzed: 2/3/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 17MW-4

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L680831-04

Date Collected: 1/31/2014

Lab File ID: 0204_20

Date Analyzed: 2/4/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000105-87-3	2,6-Octadien-1-ol, 3,7-dimethyl-,	13.66	0.018	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 19MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L680831-03

Date Collected: 1/31/2014

Lab File ID: 0203_21

Date Analyzed: 2/3/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 19MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L680831-03

Date Collected: 1/31/2014

Lab File ID: 0204_19

Date Analyzed: 2/4/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000934-34-9	2(3H)-Benzothiazolone	9.26	0.022	95.00	J

Divider
Page

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Tuesday February 11, 2014

Report Number: L681090
Samples Received: 02/04/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-01

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 09:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	1.3	0.21	1.0	ug/l		6020	02/05/14	1
Arsenic	U	1.2	5.0	ug/l	O	6020	02/05/14	5
Lead	1.6	0.24	1.0	ug/l		6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/05/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/05/14	1
Cadmium	1.6	0.70	5.0	ug/l	J	6010C	02/05/14	1
Chromium	16.	1.4	10.	ug/l		6010C	02/05/14	1
Copper	39.	5.3	20.	ug/l		6010C	02/05/14	1
Nickel	14.	4.9	20.	ug/l	J	6010C	02/05/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/05/14	1
Silver	6.2	2.8	10.	ug/l	J	6010C	02/05/14	1
Zinc	37.	5.9	30.	ug/l		6010C	02/05/14	1
Volatile Organics								
Acetone	10.	10.	50.	ug/l	J	8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
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.
Reported: 02/11/14 14:43 Printed: 02/11/14 14:45

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-01

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 09:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	02/05/14	1
Dibromofluoromethane	94.1			% Rec.		8260B	02/05/14	1
a,a,a-Trifluorotoluene	97.5			% Rec.		8260B	02/05/14	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-01

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : DUP-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 09:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	92.2			% Rec.		8260B	02/05/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/06/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/06/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/06/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/06/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/06/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/06/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/06/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/06/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/06/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/06/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/06/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/06/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/06/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/06/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/06/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/06/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/06/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/06/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/06/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/06/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/06/14	1
Isophorone	0.38	0.27	10.	ug/l	J	8270 D	02/06/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/06/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/06/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/06/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Bis(2-ethylhexyl)phthalate	1.8	0.71	3.0	ug/l	J	8270 D	02/06/14	1
Di-n-butyl phthalate	0.83	0.27	3.0	ug/l	J	8270 D	02/06/14	1
Diethyl phthalate	0.34	0.28	3.0	ug/l	J	8270 D	02/06/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Di-n-octyl phthalate	1.1	0.28	1.0	ug/l		8270 D	02/06/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-01

Site ID : RALEIGH, NC

Project # : 201336

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Sample ID : DUP-MW-1

Collected By : Phillip Jones
Collection Date : 02/03/14 09:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/06/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/06/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/06/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/06/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	02/06/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/06/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/06/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/06/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	02/06/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/06/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/06/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/06/14	1
Surrogate Recovery								
2-Fluorophenol	33.8			% Rec.		8270 D	02/06/14	1
Phenol-d5	22.1			% Rec.		8270 D	02/06/14	1
Nitrobenzene-d5	69.2			% Rec.		8270 D	02/06/14	1
2-Fluorobiphenyl	105.			% Rec.		8270 D	02/06/14	1
2,4,6-Tribromophenol	103.			% Rec.		8270 D	02/06/14	1
p-Terphenyl-d14	84.0			% Rec.		8270 D	02/06/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-02

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 16-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 09:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	1.5	0.21	1.0	ug/l		6020	02/05/14	1
Arsenic	U	1.2	5.0	ug/l	O	6020	02/05/14	5
Lead	1.7	0.24	1.0	ug/l		6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/05/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/05/14	1
Cadmium	1.2	0.70	5.0	ug/l	J	6010C	02/05/14	1
Chromium	13.	1.4	10.	ug/l		6010C	02/05/14	1
Copper	32.	5.3	20.	ug/l		6010C	02/05/14	1
Nickel	11.	4.9	20.	ug/l	J	6010C	02/05/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/05/14	1
Silver	3.3	2.8	10.	ug/l	J	6010C	02/05/14	1
Zinc	34.	5.9	30.	ug/l		6010C	02/05/14	1
Volatile Organics								
Acetone	10.	10.	50.	ug/l	J	8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-02

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 16-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 09:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	02/05/14	1
Dibromofluoromethane	95.4			% Rec.		8260B	02/05/14	1
a,a,a-Trifluorotoluene	97.6			% Rec.		8260B	02/05/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-02

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 16-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 09:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	93.6			% Rec.		8260B	02/05/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/06/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/06/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/06/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/06/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/06/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/06/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/06/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/06/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/06/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/06/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/06/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/06/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/06/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/06/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/06/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/06/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/06/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/06/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/06/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/06/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/06/14	1
Isophorone	0.41	0.27	10.	ug/l	J	8270 D	02/06/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/06/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/06/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/06/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Bis(2-ethylhexyl)phthalate	0.91	0.71	3.0	ug/l	J	8270 D	02/06/14	1
Di-n-butyl phthalate	0.38	0.27	3.0	ug/l	J	8270 D	02/06/14	1
Diethyl phthalate	0.32	0.28	3.0	ug/l	J	8270 D	02/06/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/06/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-02

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 16-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 09:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/06/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/06/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/06/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/06/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	02/06/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/06/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/06/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/06/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	02/06/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/06/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/06/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/06/14	1
Surrogate Recovery								
2-Fluorophenol	34.2			% Rec.		8270 D	02/06/14	1
Phenol-d5	22.2			% Rec.		8270 D	02/06/14	1
Nitrobenzene-d5	74.0			% Rec.		8270 D	02/06/14	1
2-Fluorobiphenyl	103.			% Rec.		8270 D	02/06/14	1
2,4,6-Tribromophenol	94.5			% Rec.		8270 D	02/06/14	1
p-Terphenyl-d14	81.4			% Rec.		8270 D	02/06/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-03

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17-MW-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 12:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	1.7	0.21	1.0	ug/l		6020	02/05/14	1
Arsenic	1.3	0.25	1.0	ug/l		6020	02/05/14	1
Lead	1.5	0.24	1.0	ug/l		6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/05/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/05/14	1
Cadmium	4.9	0.70	5.0	ug/l	J	6010C	02/05/14	1
Chromium	2.7	1.4	10.	ug/l	J	6010C	02/05/14	1
Copper	6.0	5.3	20.	ug/l	J	6010C	02/05/14	1
Nickel	U	4.9	20.	ug/l		6010C	02/05/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/05/14	1
Silver	U	2.8	10.	ug/l		6010C	02/05/14	1
Zinc	16.	5.9	30.	ug/l	J	6010C	02/05/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	4.1	0.32	5.0	ug/l	J	8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-03

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17-MW-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 12:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	8.4	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	02/05/14	1
Dibromofluoromethane	95.7			% Rec.		8260B	02/05/14	1
a,a,a-Trifluorotoluene	98.3			% Rec.		8260B	02/05/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-03

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17-MW-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 12:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	91.4			% Rec.		8260B	02/05/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/07/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/07/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/07/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/07/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/07/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/07/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/07/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/07/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/07/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/07/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/07/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/07/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/07/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/07/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Bis(2-ethylhexyl)phthalate	1.0	0.71	3.0	ug/l	J	8270 D	02/07/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	02/07/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/07/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-03

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17-MW-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 12:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/07/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/07/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/07/14	1
4-Nitrophenol	U	2.0	10.	ug/l	J4	8270 D	02/07/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/07/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/07/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/07/14	1
Surrogate Recovery								
2-Fluorophenol	26.1			% Rec.		8270 D	02/07/14	1
Phenol-d5	13.9			% Rec.		8270 D	02/07/14	1
Nitrobenzene-d5	59.7			% Rec.		8270 D	02/07/14	1
2-Fluorobiphenyl	81.2			% Rec.		8270 D	02/07/14	1
2,4,6-Tribromophenol	93.9			% Rec.		8270 D	02/07/14	1
p-Terphenyl-d14	68.4			% Rec.		8270 D	02/07/14	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-04

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17-MW-3

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 11:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	1.6	0.21	1.0	ug/l		6020	02/05/14	1
Arsenic	1.2	0.25	1.0	ug/l		6020	02/05/14	1
Lead	0.55	0.24	1.0	ug/l	J	6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/05/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/05/14	1
Cadmium	U	0.70	5.0	ug/l		6010C	02/05/14	1
Chromium	U	1.4	10.	ug/l		6010C	02/05/14	1
Copper	5.8	5.3	20.	ug/l	J	6010C	02/05/14	1
Nickel	5.6	4.9	20.	ug/l	J	6010C	02/05/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/05/14	1
Silver	U	2.8	10.	ug/l		6010C	02/05/14	1
Zinc	15.	5.9	30.	ug/l	J	6010C	02/05/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	13.	0.32	5.0	ug/l		8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-04

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17-MW-3

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 11:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	02/05/14	1
Dibromofluoromethane	101.			% Rec.		8260B	02/05/14	1
a,a,a-Trifluorotoluene	104.			% Rec.		8260B	02/05/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-04

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17-MW-3

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 11:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	98.0			% Rec.		8260B	02/05/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/07/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/07/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/07/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/07/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/07/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/07/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/07/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/07/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/07/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/07/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/07/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/07/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/07/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/07/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Bis(2-ethylhexyl)phthalate	0.97	0.71	3.0	ug/l	J	8270 D	02/07/14	1
Di-n-butyl phthalate	0.30	0.27	3.0	ug/l	J	8270 D	02/07/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/07/14	1

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Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-04

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 17-MW-3

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 11:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/07/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/07/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/07/14	1
4-Nitrophenol	U	2.0	10.	ug/l	J4	8270 D	02/07/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/07/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/07/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/07/14	1
Surrogate Recovery								
2-Fluorophenol	26.2			% Rec.		8270 D	02/07/14	1
Phenol-d5	13.6			% Rec.		8270 D	02/07/14	1
Nitrobenzene-d5	57.5			% Rec.		8270 D	02/07/14	1
2-Fluorobiphenyl	80.7			% Rec.		8270 D	02/07/14	1
2,4,6-Tribromophenol	92.9			% Rec.		8270 D	02/07/14	1
p-Terphenyl-d14	69.2			% Rec.		8270 D	02/07/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-05

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 17:07

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.34	0.21	1.0	ug/l	J	6020	02/05/14	1
Arsenic	0.76	0.25	1.0	ug/l	J	6020	02/05/14	1
Lead	0.93	0.24	1.0	ug/l	J	6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/05/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/05/14	1
Cadmium	U	0.70	5.0	ug/l		6010C	02/05/14	1
Chromium	U	1.4	10.	ug/l		6010C	02/05/14	1
Copper	U	5.3	20.	ug/l		6010C	02/05/14	1
Nickel	U	4.9	20.	ug/l		6010C	02/05/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/05/14	1
Silver	U	2.8	10.	ug/l		6010C	02/05/14	1
Zinc	10.	5.9	30.	ug/l	J	6010C	02/05/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1

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February 11, 2014

ESC Sample # : L681090-05

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 17:07

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	02/05/14	1
Dibromofluoromethane	95.3			% Rec.		8260B	02/05/14	1
a,a,a-Trifluorotoluene	96.5			% Rec.		8260B	02/05/14	1

U = ND (Not Detected)
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-05

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 17:07

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	91.7			% Rec.		8260B	02/05/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/06/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/06/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/06/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/06/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/06/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/06/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/06/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/06/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/06/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/06/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/06/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/06/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/06/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/06/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/06/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/06/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/06/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/06/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/06/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/06/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/06/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/06/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/06/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/06/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/06/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Bis(2-ethylhexyl)phthalate	U	0.71	3.0	ug/l		8270 D	02/06/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	02/06/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/06/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-05

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-1

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 17:07

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/06/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/06/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/06/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/06/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	02/06/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/06/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/06/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/06/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	02/06/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/06/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/06/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/06/14	1
Surrogate Recovery								
2-Fluorophenol	36.8			% Rec.		8270 D	02/06/14	1
Phenol-d5	22.8			% Rec.		8270 D	02/06/14	1
Nitrobenzene-d5	67.5			% Rec.		8270 D	02/06/14	1
2-Fluorobiphenyl	98.8			% Rec.		8270 D	02/06/14	1
2,4,6-Tribromophenol	101.			% Rec.		8270 D	02/06/14	1
p-Terphenyl-d14	83.9			% Rec.		8270 D	02/06/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-06

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 13:57

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.78	0.21	1.0	ug/l	J	6020	02/05/14	1
Arsenic	1.3	0.25	1.0	ug/l		6020	02/05/14	1
Lead	0.40	0.24	1.0	ug/l	J	6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/05/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/05/14	1
Cadmium	U	0.70	5.0	ug/l		6010C	02/05/14	1
Chromium	5.5	1.4	10.	ug/l	J	6010C	02/05/14	1
Copper	U	5.3	20.	ug/l		6010C	02/05/14	1
Nickel	U	4.9	20.	ug/l		6010C	02/05/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/05/14	1
Silver	U	2.8	10.	ug/l		6010C	02/05/14	1
Zinc	8.9	5.9	30.	ug/l	J	6010C	02/05/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1

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PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-06

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 13:57

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	02/05/14	1
Dibromofluoromethane	94.2			% Rec.		8260B	02/05/14	1
a,a,a-Trifluorotoluene	96.7			% Rec.		8260B	02/05/14	1

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Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-06

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 13:57

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	89.6			% Rec.		8260B	02/05/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/06/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/06/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/06/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/06/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/06/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/06/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/06/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/06/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/06/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/06/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/06/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/06/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/06/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/06/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/06/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/06/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/06/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/06/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/06/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/06/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/06/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/06/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/06/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/06/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/06/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/06/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/06/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Bis(2-ethylhexyl)phthalate	0.92	0.71	3.0	ug/l	J	8270 D	02/06/14	1
Di-n-butyl phthalate	0.30	0.27	3.0	ug/l	J	8270 D	02/06/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/06/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/06/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-06

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 13:57

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/06/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/06/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/06/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/06/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/06/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	02/06/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/06/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/06/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/06/14	1
4-Nitrophenol	U	2.0	10.	ug/l		8270 D	02/06/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/06/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/06/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/06/14	1
Surrogate Recovery								
2-Fluorophenol	18.5			% Rec.		8270 D	02/06/14	1
Phenol-d5	12.6			% Rec.		8270 D	02/06/14	1
Nitrobenzene-d5	62.4			% Rec.		8270 D	02/06/14	1
2-Fluorobiphenyl	98.5			% Rec.		8270 D	02/06/14	1
2,4,6-Tribromophenol	98.6			% Rec.		8270 D	02/06/14	1
p-Terphenyl-d14	86.7			% Rec.		8270 D	02/06/14	1

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PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-07

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-3

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 14:55

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.58	0.21	1.0	ug/l	J	6020	02/05/14	1
Arsenic	3.3	0.25	1.0	ug/l		6020	02/05/14	1
Lead	0.40	0.24	1.0	ug/l	J	6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/05/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/05/14	1
Cadmium	U	0.70	5.0	ug/l		6010C	02/05/14	1
Chromium	U	1.4	10.	ug/l		6010C	02/05/14	1
Copper	U	5.3	20.	ug/l		6010C	02/05/14	1
Nickel	11.	4.9	20.	ug/l	JO1	6010C	02/05/14	1
Selenium	U	7.4	20.	ug/l		6010C	02/05/14	1
Silver	U	2.8	10.	ug/l	J6J3	6010C	02/05/14	1
Zinc	11.	5.9	30.	ug/l	JP1	6010C	02/05/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1

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Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-07

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-3

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 14:55

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	02/05/14	1
Dibromofluoromethane	97.3			% Rec.		8260B	02/05/14	1
a,a,a-Trifluorotoluene	98.6			% Rec.		8260B	02/05/14	1

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February 11, 2014

ESC Sample # : L681090-07

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-3

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 14:55

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	93.5			% Rec.		8260B	02/05/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/07/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/07/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/07/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/07/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/07/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/07/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/07/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/07/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/07/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/07/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/07/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/07/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/07/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/07/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Bis(2-ethylhexyl)phthalate	0.94	0.71	3.0	ug/l	J	8270 D	02/07/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	02/07/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/07/14	1

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-07

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-3

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 14:55

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/07/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/07/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/07/14	1
4-Nitrophenol	U	2.0	10.	ug/l	J4	8270 D	02/07/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/07/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/07/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/07/14	1
Surrogate Recovery								
2-Fluorophenol	41.7			% Rec.		8270 D	02/07/14	1
Phenol-d5	25.1			% Rec.		8270 D	02/07/14	1
Nitrobenzene-d5	57.1			% Rec.		8270 D	02/07/14	1
2-Fluorobiphenyl	82.1			% Rec.		8270 D	02/07/14	1
2,4,6-Tribromophenol	92.2			% Rec.		8270 D	02/07/14	1
p-Terphenyl-d14	64.7			% Rec.		8270 D	02/07/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-08

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-4

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 16:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	1.7	0.21	1.0	ug/l		6020	02/05/14	1
Arsenic	1.6	0.25	1.0	ug/l		6020	02/05/14	1
Lead	0.58	0.24	1.0	ug/l	J	6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/05/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/05/14	1
Cadmium	U	0.70	5.0	ug/l		6010C	02/05/14	1
Chromium	2.7	1.4	10.	ug/l	J	6010C	02/05/14	1
Copper	12.	5.3	20.	ug/l	J	6010C	02/05/14	1
Nickel	U	4.9	20.	ug/l		6010C	02/05/14	1
Selenium	13.	7.4	20.	ug/l	J	6010C	02/05/14	1
Silver	U	2.8	10.	ug/l		6010C	02/05/14	1
Zinc	9.2	5.9	30.	ug/l	J	6010C	02/05/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	2.0	0.32	5.0	ug/l	J	8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-08

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-4

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 16:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	02/05/14	1
Dibromofluoromethane	95.9			% Rec.		8260B	02/05/14	1
a,a,a-Trifluorotoluene	97.7			% Rec.		8260B	02/05/14	1

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REPORT OF ANALYSIS

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Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-08

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-4

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 16:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	96.7			% Rec.		8260B	02/05/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/07/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/07/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/07/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/07/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/07/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/07/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/07/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/07/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/07/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/07/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/07/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/07/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/07/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/07/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Bis(2-ethylhexyl)phthalate	0.81	0.71	3.0	ug/l	J	8270 D	02/07/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	02/07/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270 D	02/07/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-08

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 18-MW-4

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 16:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/07/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/07/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/07/14	1
4-Nitrophenol	U	2.0	10.	ug/l	J4	8270 D	02/07/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/07/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/07/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/07/14	1
Surrogate Recovery								
2-Fluorophenol	34.4			% Rec.		8270 D	02/07/14	1
Phenol-d5	21.2			% Rec.		8270 D	02/07/14	1
Nitrobenzene-d5	53.2			% Rec.		8270 D	02/07/14	1
2-Fluorobiphenyl	78.6			% Rec.		8270 D	02/07/14	1
2,4,6-Tribromophenol	91.1			% Rec.		8270 D	02/07/14	1
p-Terphenyl-d14	65.5			% Rec.		8270 D	02/07/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-09

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : GW-EB-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 17:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.26	0.21	1.0	ug/l	JP1	6020	02/05/14	1
Arsenic	0.77	0.25	1.0	ug/l	JP1	6020	02/05/14	1
Lead	U	0.24	1.0	ug/l		6020	02/05/14	1
Thallium	U	0.19	1.0	ug/l		6020	02/05/14	1
Mercury	U	0.049	0.20	ug/l		7470A	02/05/14	1
Beryllium	U	0.70	2.0	ug/l		6010C	02/05/14	1
Cadmium	2.7	0.70	5.0	ug/l	J	6010C	02/05/14	1
Chromium	U	1.4	10.	ug/l		6010C	02/05/14	1
Copper	U	5.3	20.	ug/l		6010C	02/05/14	1
Nickel	U	4.9	20.	ug/l		6010C	02/05/14	1
Selenium	9.4	7.4	20.	ug/l	J	6010C	02/05/14	1
Silver	U	2.8	10.	ug/l		6010C	02/05/14	1
Zinc	U	5.9	30.	ug/l		6010C	02/05/14	1
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-09

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : GW-EB-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 17:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	02/05/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-09

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : GW-EB-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 17:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Dibromofluoromethane	95.8			% Rec.		8260B	02/05/14	1
4-Bromofluorobenzene	91.7			% Rec.		8260B	02/05/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Acenaphthylene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Anthracene	U	0.29	1.0	ug/l		8270 D	02/07/14	1
Benzidine	U	4.3	10.	ug/l		8270 D	02/07/14	1
Benzo(a)anthracene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Benzo(b)fluoranthene	U	0.27	1.0	ug/l		8270 D	02/07/14	1
Benzo(k)fluoranthene	U	0.36	1.0	ug/l		8270 D	02/07/14	1
Benzo(g,h,i)perylene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Benzo(a)pyrene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Bis(2-chlorethoxy)methane	U	0.33	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroethyl)ether	U	1.6	10.	ug/l		8270 D	02/07/14	1
Bis(2-chloroisopropyl)ether	U	0.44	10.	ug/l		8270 D	02/07/14	1
4-Bromophenyl-phenylether	U	0.34	10.	ug/l		8270 D	02/07/14	1
2-Chloronaphthalene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
4-Chlorophenyl-phenylether	U	0.30	10.	ug/l		8270 D	02/07/14	1
Chrysene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
Dibenz(a,h)anthracene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
3,3-Dichlorobenzidine	U	2.0	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrotoluene	U	1.6	10.	ug/l		8270 D	02/07/14	1
2,6-Dinitrotoluene	U	0.28	10.	ug/l		8270 D	02/07/14	1
Fluoranthene	U	0.31	1.0	ug/l		8270 D	02/07/14	1
Fluorene	U	0.32	1.0	ug/l		8270 D	02/07/14	1
Hexachlorobenzene	U	0.34	1.0	ug/l		8270 D	02/07/14	1
Hexachloro-1,3-butadiene	U	0.33	10.	ug/l		8270 D	02/07/14	1
Hexachlorocyclopentadiene	U	2.3	10.	ug/l		8270 D	02/07/14	1
Hexachloroethane	U	0.36	10.	ug/l		8270 D	02/07/14	1
Indeno(1,2,3-cd)pyrene	U	0.28	1.0	ug/l		8270 D	02/07/14	1
Isophorone	U	0.27	10.	ug/l		8270 D	02/07/14	1
Naphthalene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Nitrobenzene	U	0.37	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodimethylamine	U	1.3	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodiphenylamine	U	0.30	10.	ug/l		8270 D	02/07/14	1
n-Nitrosodi-n-propylamine	U	0.40	10.	ug/l		8270 D	02/07/14	1
Phenanthrene	U	0.37	1.0	ug/l		8270 D	02/07/14	1
Benzylbutyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Bis(2-ethylhexyl)phthalate	1.5	0.71	3.0	ug/l	J	8270 D	02/07/14	1
Di-n-butyl phthalate	U	0.27	3.0	ug/l		8270 D	02/07/14	1
Diethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Dimethyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-09

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : GW-EB-2

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 17:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Di-n-octyl phthalate	U	0.28	3.0	ug/l		8270 D	02/07/14	1
Pyrene	U	0.33	1.0	ug/l		8270 D	02/07/14	1
1,2,4-Trichlorobenzene	U	0.36	10.	ug/l		8270 D	02/07/14	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
2-Chlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dichlorophenol	U	0.28	10.	ug/l		8270 D	02/07/14	1
2,4-Dimethylphenol	U	0.26	10.	ug/l		8270 D	02/07/14	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270 D	02/07/14	1
2,4-Dinitrophenol	U	3.2	10.	ug/l		8270 D	02/07/14	1
2-Nitrophenol	U	0.32	10.	ug/l		8270 D	02/07/14	1
4-Nitrophenol	U	2.0	10.	ug/l	J4	8270 D	02/07/14	1
Pentachlorophenol	U	0.31	10.	ug/l		8270 D	02/07/14	1
Phenol	U	0.33	10.	ug/l		8270 D	02/07/14	1
2,4,6-Trichlorophenol	U	0.30	10.	ug/l		8270 D	02/07/14	1
Surrogate Recovery								
2-Fluorophenol	41.9			% Rec.		8270 D	02/07/14	1
Phenol-d5	29.9			% Rec.		8270 D	02/07/14	1
Nitrobenzene-d5	60.5			% Rec.		8270 D	02/07/14	1
2-Fluorobiphenyl	82.9			% Rec.		8270 D	02/07/14	1
2,4,6-Tribromophenol	93.4			% Rec.		8270 D	02/07/14	1
p-Terphenyl-d14	72.1			% Rec.		8270 D	02/07/14	1

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-10

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	10.	50.	ug/l		8260B	02/05/14	1
Acrolein	U	8.9	50.	ug/l		8260B	02/05/14	1
Acrylonitrile	U	1.9	10.	ug/l		8260B	02/05/14	1
Benzene	U	0.33	1.0	ug/l		8260B	02/05/14	1
Bromobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Bromodichloromethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Bromoform	U	0.47	1.0	ug/l		8260B	02/05/14	1
Bromomethane	U	0.87	5.0	ug/l		8260B	02/05/14	1
n-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
sec-Butylbenzene	U	0.36	1.0	ug/l		8260B	02/05/14	1
tert-Butylbenzene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	02/05/14	1
Chlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Chlorodibromomethane	U	0.33	1.0	ug/l		8260B	02/05/14	1
Chloroethane	U	0.45	5.0	ug/l		8260B	02/05/14	1
2-Chloroethyl vinyl ether	U	3.0	50.	ug/l		8260B	02/05/14	1
Chloroform	U	0.32	5.0	ug/l		8260B	02/05/14	1
Chloromethane	U	0.28	2.5	ug/l		8260B	02/05/14	1
2-Chlorotoluene	U	0.38	1.0	ug/l		8260B	02/05/14	1
4-Chlorotoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l		8260B	02/05/14	1
1,2-Dibromoethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Dibromomethane	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,2-Dichlorobenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichlorobenzene	U	0.22	1.0	ug/l		8260B	02/05/14	1
1,4-Dichlorobenzene	U	0.27	1.0	ug/l		8260B	02/05/14	1
Dichlorodifluoromethane	U	0.55	5.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethane	U	0.26	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloroethane	U	0.36	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	02/05/14	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
1,2-Dichloropropane	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1-Dichloropropene	U	0.35	1.0	ug/l		8260B	02/05/14	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	02/05/14	1
cis-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
trans-1,3-Dichloropropene	U	0.42	1.0	ug/l		8260B	02/05/14	1
2,2-Dichloropropane	U	0.32	1.0	ug/l		8260B	02/05/14	1
Di-isopropyl ether	U	0.32	1.0	ug/l		8260B	02/05/14	1
Ethylbenzene	U	0.38	1.0	ug/l		8260B	02/05/14	1
Hexachloro-1,3-butadiene	U	0.26	1.0	ug/l		8260B	02/05/14	1
Isopropylbenzene	U	0.33	1.0	ug/l		8260B	02/05/14	1

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REPORT OF ANALYSIS

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PO Box 639
Cary, NC 27512

February 11, 2014

ESC Sample # : L681090-10

Date Received : February 04, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : TRIP BLANK

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/03/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.35	1.0	ug/l		8260B	02/05/14	1
2-Butanone (MEK)	U	3.9	10.	ug/l		8260B	02/05/14	1
Methylene Chloride	U	1.0	5.0	ug/l		8260B	02/05/14	1
4-Methyl-2-pentanone (MIBK)	U	2.1	10.	ug/l		8260B	02/05/14	1
Methyl tert-butyl ether	U	0.37	1.0	ug/l		8260B	02/05/14	1
Naphthalene	U	1.0	5.0	ug/l		8260B	02/05/14	1
n-Propylbenzene	U	0.35	1.0	ug/l		8260B	02/05/14	1
Styrene	U	0.31	1.0	ug/l		8260B	02/05/14	1
1,1,1,2-Tetrachloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
1,1,2,2-Tetrachloroethane	U	0.58	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichlorotrifluoroethane	U	0.30	1.0	ug/l		8260B	02/05/14	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	02/05/14	1
Toluene	U	0.78	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichlorobenzene	U	0.23	1.0	ug/l		8260B	02/05/14	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	02/05/14	1
1,1,1-Trichloroethane	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	02/05/14	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	02/05/14	1
Trichlorofluoromethane	U	1.2	5.0	ug/l		8260B	02/05/14	1
1,2,3-Trichloropropane	U	0.81	2.5	ug/l		8260B	02/05/14	1
1,2,4-Trimethylbenzene	U	0.37	1.0	ug/l		8260B	02/05/14	1
1,2,3-Trimethylbenzene	U	0.32	1.0	ug/l		8260B	02/05/14	1
1,3,5-Trimethylbenzene	U	0.39	1.0	ug/l		8260B	02/05/14	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	02/05/14	1
Xylenes, Total	U	1.1	3.0	ug/l		8260B	02/05/14	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	02/05/14	1
Dibromofluoromethane	95.1			% Rec.		8260B	02/05/14	1
4-Bromofluorobenzene	93.2			% Rec.		8260B	02/05/14	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
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Reported: 02/11/14 14:43 Printed: 02/11/14 14:45

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L681090-01	WG704789	SAMP	Isophorone	R2882528	J
	WG704789	SAMP	Bis(2-ethylhexyl)phthalate	R2882528	J
	WG704789	SAMP	Di-n-butyl phthalate	R2882528	J
	WG704789	SAMP	Diethyl phthalate	R2882528	J
	WG704800	SAMP	Arsenic	R2883810	O
	WG704695	SAMP	Acetone	R2882330	J
	WG704676	SAMP	Cadmium	R2882156	J
	WG704676	SAMP	Nickel	R2882156	J
	WG704676	SAMP	Silver	R2882156	J
L681090-02	WG704789	SAMP	Isophorone	R2882528	J
	WG704789	SAMP	Bis(2-ethylhexyl)phthalate	R2882528	J
	WG704789	SAMP	Di-n-butyl phthalate	R2882528	J
	WG704789	SAMP	Diethyl phthalate	R2882528	J
	WG704800	SAMP	Arsenic	R2883810	O
	WG704695	SAMP	Acetone	R2882330	J
	WG704676	SAMP	Cadmium	R2882156	J
	WG704676	SAMP	Nickel	R2882156	J
	WG704676	SAMP	Silver	R2882156	J
L681090-03	WG705187	SAMP	Bis(2-ethylhexyl)phthalate	R2883405	J
	WG705187	SAMP	4-Nitrophenol	R2883405	J4
	WG704695	SAMP	Chloroform	R2882330	J
	WG704676	SAMP	Cadmium	R2882156	J
	WG704676	SAMP	Chromium	R2882156	J
	WG704676	SAMP	Copper	R2882156	J
	WG704676	SAMP	Zinc	R2882156	J
L681090-04	WG705187	SAMP	Bis(2-ethylhexyl)phthalate	R2883405	J
	WG705187	SAMP	Di-n-butyl phthalate	R2883405	J
	WG705187	SAMP	4-Nitrophenol	R2883405	J4
	WG704800	SAMP	Lead	R2883810	J
	WG704676	SAMP	Copper	R2882156	J
	WG704676	SAMP	Nickel	R2882156	J
	WG704676	SAMP	Zinc	R2882156	J
L681090-05	WG704800	SAMP	Antimony	R2883810	J
	WG704800	SAMP	Arsenic	R2883810	J
	WG704800	SAMP	Lead	R2883810	J
	WG704676	SAMP	Zinc	R2882156	J
L681090-06	WG704789	SAMP	Bis(2-ethylhexyl)phthalate	R2882528	J
	WG704789	SAMP	Di-n-butyl phthalate	R2882528	J
	WG704800	SAMP	Antimony	R2883810	J
	WG704800	SAMP	Lead	R2883810	J
	WG704676	SAMP	Chromium	R2882156	J
	WG704676	SAMP	Zinc	R2882156	J
L681090-07	WG705187	SAMP	Bis(2-ethylhexyl)phthalate	R2883405	J
	WG705187	SAMP	4-Nitrophenol	R2883405	J4
	WG704800	SAMP	Antimony	R2883810	J
	WG704800	SAMP	Lead	R2883810	J
	WG704676	SAMP	Nickel	R2882156	JO1
	WG704676	SAMP	Silver	R2882156	J6J3
	WG704676	SAMP	Zinc	R2882156	JP1
L681090-08	WG705187	SAMP	Bis(2-ethylhexyl)phthalate	R2883405	J
	WG705187	SAMP	4-Nitrophenol	R2883405	J4
	WG704800	SAMP	Lead	R2883810	J
	WG704695	SAMP	Chloroform	R2882330	J
	WG704676	SAMP	Chromium	R2882156	J
	WG704676	SAMP	Copper	R2882156	J
	WG704676	SAMP	Selenium	R2882156	J
	WG704676	SAMP	Zinc	R2882156	J
L681090-09	WG704800	SAMP	Antimony	R2883810	JP1
	WG704800	SAMP	Arsenic	R2883810	JP1
	WG705187	SAMP	Bis(2-ethylhexyl)phthalate	R2883405	J
	WG705187	SAMP	4-Nitrophenol	R2883405	J4
	WG704676	SAMP	Cadmium	R2882156	J
	WG704676	SAMP	Selenium	R2882156	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/11/14 at 14:45:51

TSR Signing Reports: 350
RX - Priority Rush

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L681090-01 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

Sample: L681090-02 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

Sample: L681090-03 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

Sample: L681090-04 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

Sample: L681090-05 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

Sample: L681090-06 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

Sample: L681090-07 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

Sample: L681090-08 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

Sample: L681090-09 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

Sample: L681090-10 Account: DUNDUNNC Received: 02/04/14 13:30 Due Date: 02/11/14 00:00 RPT Date: 02/11/14 14:43

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Quality Assurance Report
Level II

L681090

February 11, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Beryllium	< .002	mg/l			WG704676	02/05/14 00:04
Cadmium	< .005	mg/l			WG704676	02/05/14 00:04
Chromium	< .01	mg/l			WG704676	02/05/14 00:04
Copper	< .02	mg/l			WG704676	02/05/14 00:04
Nickel	< .02	mg/l			WG704676	02/05/14 00:04
Selenium	< .02	mg/l			WG704676	02/05/14 00:04
Silver	< .01	mg/l			WG704676	02/05/14 00:04
Zinc	< .03	mg/l			WG704676	02/05/14 00:04
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG704695	02/05/14 12:55
1,1,1-Trichloroethane	< .001	mg/l			WG704695	02/05/14 12:55
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG704695	02/05/14 12:55
1,1,2-Trichloroethane	< .001	mg/l			WG704695	02/05/14 12:55
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG704695	02/05/14 12:55
1,1-Dichloroethane	< .001	mg/l			WG704695	02/05/14 12:55
1,1-Dichloroethene	< .001	mg/l			WG704695	02/05/14 12:55
1,1-Dichloropropene	< .001	mg/l			WG704695	02/05/14 12:55
1,2,3-Trichlorobenzene	< .001	mg/l			WG704695	02/05/14 12:55
1,2,3-Trichloropropane	< .001	mg/l			WG704695	02/05/14 12:55
1,2,3-Trimethylbenzene	< .001	mg/l			WG704695	02/05/14 12:55
1,2,4-Trichlorobenzene	< .001	mg/l			WG704695	02/05/14 12:55
1,2,4-Trimethylbenzene	< .001	mg/l			WG704695	02/05/14 12:55
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG704695	02/05/14 12:55
1,2-Dibromoethane	< .001	mg/l			WG704695	02/05/14 12:55
1,2-Dichlorobenzene	< .001	mg/l			WG704695	02/05/14 12:55
1,2-Dichloroethane	< .001	mg/l			WG704695	02/05/14 12:55
1,2-Dichloropropane	< .001	mg/l			WG704695	02/05/14 12:55
1,3,5-Trimethylbenzene	< .001	mg/l			WG704695	02/05/14 12:55
1,3-Dichlorobenzene	< .001	mg/l			WG704695	02/05/14 12:55
1,3-Dichloropropane	< .001	mg/l			WG704695	02/05/14 12:55
1,4-Dichlorobenzene	< .001	mg/l			WG704695	02/05/14 12:55
2,2-Dichloropropane	< .001	mg/l			WG704695	02/05/14 12:55
2-Butanone (MEK)	< .01	mg/l			WG704695	02/05/14 12:55
2-Chloroethyl vinyl ether	< .05	mg/l			WG704695	02/05/14 12:55
2-Chlorotoluene	< .001	mg/l			WG704695	02/05/14 12:55
4-Chlorotoluene	< .001	mg/l			WG704695	02/05/14 12:55
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG704695	02/05/14 12:55
Acetone	< .05	mg/l			WG704695	02/05/14 12:55
Acrolein	< .025	mg/l			WG704695	02/05/14 12:55
Acrylonitrile	< .01	mg/l			WG704695	02/05/14 12:55
Benzene	< .001	mg/l			WG704695	02/05/14 12:55
Bromobenzene	< .001	mg/l			WG704695	02/05/14 12:55
Bromodichloromethane	< .001	mg/l			WG704695	02/05/14 12:55
Bromoform	< .001	mg/l			WG704695	02/05/14 12:55
Bromomethane	< .005	mg/l			WG704695	02/05/14 12:55
Carbon tetrachloride	< .001	mg/l			WG704695	02/05/14 12:55
Chlorobenzene	< .001	mg/l			WG704695	02/05/14 12:55
Chlorodibromomethane	< .001	mg/l			WG704695	02/05/14 12:55
Chloroethane	< .005	mg/l			WG704695	02/05/14 12:55
Chloroform	< .005	mg/l			WG704695	02/05/14 12:55
Chloromethane	< .0025	mg/l			WG704695	02/05/14 12:55
cis-1,2-Dichloroethene	< .001	mg/l			WG704695	02/05/14 12:55
cis-1,3-Dichloropropene	< .001	mg/l			WG704695	02/05/14 12:55
Di-isopropyl ether	< .001	mg/l			WG704695	02/05/14 12:55
Dibromomethane	< .001	mg/l			WG704695	02/05/14 12:55
Dichlorodifluoromethane	< .005	mg/l			WG704695	02/05/14 12:55
Ethylbenzene	< .001	mg/l			WG704695	02/05/14 12:55
Hexachloro-1,3-butadiene	< .001	mg/l			WG704695	02/05/14 12:55

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L681090

February 11, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Isopropylbenzene	< .001	mg/l			WG704695	02/05/14 12:55
Methyl tert-butyl ether	< .001	mg/l			WG704695	02/05/14 12:55
Methylene Chloride	< .005	mg/l			WG704695	02/05/14 12:55
n-Butylbenzene	< .001	mg/l			WG704695	02/05/14 12:55
n-Propylbenzene	< .001	mg/l			WG704695	02/05/14 12:55
Naphthalene	< .005	mg/l			WG704695	02/05/14 12:55
p-Isopropyltoluene	< .001	mg/l			WG704695	02/05/14 12:55
sec-Butylbenzene	< .001	mg/l			WG704695	02/05/14 12:55
Styrene	< .001	mg/l			WG704695	02/05/14 12:55
tert-Butylbenzene	< .001	mg/l			WG704695	02/05/14 12:55
Tetrachloroethene	< .001	mg/l			WG704695	02/05/14 12:55
Toluene	< .005	mg/l			WG704695	02/05/14 12:55
trans-1,2-Dichloroethene	< .001	mg/l			WG704695	02/05/14 12:55
trans-1,3-Dichloropropene	< .001	mg/l			WG704695	02/05/14 12:55
Trichloroethene	< .001	mg/l			WG704695	02/05/14 12:55
Trichlorofluoromethane	< .005	mg/l			WG704695	02/05/14 12:55
Vinyl chloride	< .001	mg/l			WG704695	02/05/14 12:55
Xylenes, Total	< .003	mg/l			WG704695	02/05/14 12:55
4-Bromofluorobenzene		% Rec.	96.80	71-126	WG704695	02/05/14 12:55
Dibromofluoromethane		% Rec.	94.00	78.3-121	WG704695	02/05/14 12:55
Toluene-d8		% Rec.	105.0	88.5-111	WG704695	02/05/14 12:55
a,a,a-Trifluorotoluene		% Rec.	94.50	85-114	WG704695	02/05/14 12:55
Mercury	< .0002	mg/l			WG704741	02/05/14 19:01
1,2,4-Trichlorobenzene	< .01	mg/l			WG704789	02/06/14 00:57
2,4,6-Trichlorophenol	< .01	mg/l			WG704789	02/06/14 00:57
2,4-Dichlorophenol	< .01	mg/l			WG704789	02/06/14 00:57
2,4-Dimethylphenol	< .01	mg/l			WG704789	02/06/14 00:57
2,4-Dinitrophenol	< .01	mg/l			WG704789	02/06/14 00:57
2,4-Dinitrotoluene	< .01	mg/l			WG704789	02/06/14 00:57
2,6-Dinitrotoluene	< .01	mg/l			WG704789	02/06/14 00:57
2-Chloronaphthalene	< .001	mg/l			WG704789	02/06/14 00:57
2-Chlorophenol	< .01	mg/l			WG704789	02/06/14 00:57
2-Nitrophenol	< .01	mg/l			WG704789	02/06/14 00:57
3,3-Dichlorobenzidine	< .01	mg/l			WG704789	02/06/14 00:57
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG704789	02/06/14 00:57
4-Bromophenyl-phenylether	< .01	mg/l			WG704789	02/06/14 00:57
4-Chloro-3-methylphenol	< .01	mg/l			WG704789	02/06/14 00:57
4-Chlorophenyl-phenylether	< .01	mg/l			WG704789	02/06/14 00:57
4-Nitrophenol	< .01	mg/l			WG704789	02/06/14 00:57
Acenaphthene	< .001	mg/l			WG704789	02/06/14 00:57
Acenaphthylene	< .001	mg/l			WG704789	02/06/14 00:57
Anthracene	< .001	mg/l			WG704789	02/06/14 00:57
Benzidine	< .01	mg/l			WG704789	02/06/14 00:57
Benzo(a)anthracene	< .001	mg/l			WG704789	02/06/14 00:57
Benzo(a)pyrene	< .001	mg/l			WG704789	02/06/14 00:57
Benzo(b)fluoranthene	< .001	mg/l			WG704789	02/06/14 00:57
Benzo(g,h,i)perylene	< .001	mg/l			WG704789	02/06/14 00:57
Benzo(k)fluoranthene	< .001	mg/l			WG704789	02/06/14 00:57
Benzylbutyl phthalate	< .003	mg/l			WG704789	02/06/14 00:57
Bis(2-chlorethoxy)methane	< .01	mg/l			WG704789	02/06/14 00:57
Bis(2-chloroethyl)ether	< .01	mg/l			WG704789	02/06/14 00:57
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG704789	02/06/14 00:57
Bis(2-ethylhexyl)phthalate	< .003	mg/l			WG704789	02/06/14 00:57
Chrysene	< .001	mg/l			WG704789	02/06/14 00:57
Di-n-butyl phthalate	< .003	mg/l			WG704789	02/06/14 00:57

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For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L681090

February 11, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Di-n-octyl phthalate	< .003	mg/l			WG704789	02/06/14 00:57
Dibenz(a,h)anthracene	< .001	mg/l			WG704789	02/06/14 00:57
Diethyl phthalate	< .003	mg/l			WG704789	02/06/14 00:57
Dimethyl phthalate	< .003	mg/l			WG704789	02/06/14 00:57
Fluoranthene	< .001	mg/l			WG704789	02/06/14 00:57
Fluorene	< .001	mg/l			WG704789	02/06/14 00:57
Hexachloro-1,3-butadiene	< .01	mg/l			WG704789	02/06/14 00:57
Hexachlorobenzene	< .001	mg/l			WG704789	02/06/14 00:57
Hexachlorocyclopentadiene	< .01	mg/l			WG704789	02/06/14 00:57
Hexachloroethane	< .01	mg/l			WG704789	02/06/14 00:57
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG704789	02/06/14 00:57
Isophorone	< .01	mg/l			WG704789	02/06/14 00:57
n-Nitrosodi-n-propylamine	< .01	mg/l			WG704789	02/06/14 00:57
n-Nitrosodimethylamine	< .01	mg/l			WG704789	02/06/14 00:57
n-Nitrosodiphenylamine	< .01	mg/l			WG704789	02/06/14 00:57
Naphthalene	< .001	mg/l			WG704789	02/06/14 00:57
Nitrobenzene	< .01	mg/l			WG704789	02/06/14 00:57
Pentachlorophenol	< .001	mg/l			WG704789	02/06/14 00:57
Phenanthrene	< .001	mg/l			WG704789	02/06/14 00:57
Phenol	< .01	mg/l			WG704789	02/06/14 00:57
Pyrene	< .001	mg/l			WG704789	02/06/14 00:57
2,4,6-Tribromophenol		% Rec.	97.90	11.2-130	WG704789	02/06/14 00:57
2-Fluorobiphenyl		% Rec.	85.30	29.5-131	WG704789	02/06/14 00:57
2-Fluorophenol		% Rec.	44.60	10-77.9	WG704789	02/06/14 00:57
Nitrobenzene-d5		% Rec.	59.80	21.8-123	WG704789	02/06/14 00:57
Phenol-d5		% Rec.	28.50	5-70.1	WG704789	02/06/14 00:57
p-Terphenyl-d14		% Rec.	79.80	29.3-137	WG704789	02/06/14 00:57
1,2,4-Trichlorobenzene	< .01	mg/l			WG705187	02/07/14 15:39
2,4,6-Trichlorophenol	< .01	mg/l			WG705187	02/07/14 15:39
2,4-Dichlorophenol	< .01	mg/l			WG705187	02/07/14 15:39
2,4-Dimethylphenol	< .01	mg/l			WG705187	02/07/14 15:39
2,4-Dinitrophenol	< .01	mg/l			WG705187	02/07/14 15:39
2,4-Dinitrotoluene	< .01	mg/l			WG705187	02/07/14 15:39
2,6-Dinitrotoluene	< .01	mg/l			WG705187	02/07/14 15:39
2-Chloronaphthalene	< .001	mg/l			WG705187	02/07/14 15:39
2-Chlorophenol	< .01	mg/l			WG705187	02/07/14 15:39
2-Nitrophenol	< .01	mg/l			WG705187	02/07/14 15:39
3,3-Dichlorobenzidine	< .01	mg/l			WG705187	02/07/14 15:39
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG705187	02/07/14 15:39
4-Bromophenyl-phenylether	< .01	mg/l			WG705187	02/07/14 15:39
4-Chloro-3-methylphenol	< .01	mg/l			WG705187	02/07/14 15:39
4-Chlorophenyl-phenylether	< .01	mg/l			WG705187	02/07/14 15:39
4-Nitrophenol	< .01	mg/l			WG705187	02/07/14 15:39
Acenaphthene	< .001	mg/l			WG705187	02/07/14 15:39
Acenaphthylene	< .001	mg/l			WG705187	02/07/14 15:39
Anthracene	< .001	mg/l			WG705187	02/07/14 15:39
Benzidine	< .01	mg/l			WG705187	02/07/14 15:39
Benzo(a)anthracene	< .001	mg/l			WG705187	02/07/14 15:39
Benzo(a)pyrene	< .001	mg/l			WG705187	02/07/14 15:39
Benzo(b)fluoranthene	< .001	mg/l			WG705187	02/07/14 15:39
Benzo(g,h,i)perylene	< .001	mg/l			WG705187	02/07/14 15:39
Benzo(k)fluoranthene	< .001	mg/l			WG705187	02/07/14 15:39
Benzylbutyl phthalate	< .003	mg/l			WG705187	02/07/14 15:39
Bis(2-chlorethoxy)methane	< .01	mg/l			WG705187	02/07/14 15:39
Bis(2-chloroethyl)ether	< .01	mg/l			WG705187	02/07/14 15:39
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG705187	02/07/14 15:39
Bis(2-ethylhexyl)phthalate	< .003	mg/l			WG705187	02/07/14 15:39

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Quality Assurance Report
Level II

L681090

February 11, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Chrysene	< .001	mg/l			WG705187	02/07/14 15:39
Di-n-butyl phthalate	< .003	mg/l			WG705187	02/07/14 15:39
Di-n-octyl phthalate	< .003	mg/l			WG705187	02/07/14 15:39
Dibenz(a,h)anthracene	< .001	mg/l			WG705187	02/07/14 15:39
Diethyl phthalate	< .003	mg/l			WG705187	02/07/14 15:39
Dimethyl phthalate	< .003	mg/l			WG705187	02/07/14 15:39
Fluoranthene	< .001	mg/l			WG705187	02/07/14 15:39
Fluorene	< .001	mg/l			WG705187	02/07/14 15:39
Hexachloro-1,3-butadiene	< .01	mg/l			WG705187	02/07/14 15:39
Hexachlorobenzene	< .001	mg/l			WG705187	02/07/14 15:39
Hexachlorocyclopentadiene	< .01	mg/l			WG705187	02/07/14 15:39
Hexachloroethane	< .01	mg/l			WG705187	02/07/14 15:39
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG705187	02/07/14 15:39
Isophorone	< .01	mg/l			WG705187	02/07/14 15:39
n-Nitrosodi-n-propylamine	< .01	mg/l			WG705187	02/07/14 15:39
n-Nitrosodimethylamine	< .01	mg/l			WG705187	02/07/14 15:39
n-Nitrosodiphenylamine	< .01	mg/l			WG705187	02/07/14 15:39
Naphthalene	< .001	mg/l			WG705187	02/07/14 15:39
Nitrobenzene	< .01	mg/l			WG705187	02/07/14 15:39
Pentachlorophenol	< .001	mg/l			WG705187	02/07/14 15:39
Phenanthrene	< .001	mg/l			WG705187	02/07/14 15:39
Phenol	< .01	mg/l			WG705187	02/07/14 15:39
Pyrene	< .001	mg/l			WG705187	02/07/14 15:39
2,4,6-Tribromophenol		% Rec.	88.50	11.2-130	WG705187	02/07/14 15:39
2-Fluorobiphenyl		% Rec.	74.10	29.5-131	WG705187	02/07/14 15:39
2-Fluorophenol		% Rec.	39.30	10-77.9	WG705187	02/07/14 15:39
Nitrobenzene-d5		% Rec.	48.60	21.8-123	WG705187	02/07/14 15:39
Phenol-d5		% Rec.	26.80	5-70.1	WG705187	02/07/14 15:39
p-Terphenyl-d14		% Rec.	67.40	29.3-137	WG705187	02/07/14 15:39
Antimony	< .001	mg/l			WG704800	02/05/14 13:18
Arsenic	< .001	mg/l			WG704800	02/05/14 13:18
Lead	< .001	mg/l			WG704800	02/05/14 13:18
Thallium	< .001	mg/l			WG704800	02/05/14 13:18

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Beryllium	mg/l	0.0	-0.0000645	85.0*	20	L681090-07	WG704676
Cadmium	mg/l	0.0	0.000617	48.0*	20	L681090-07	WG704676
Chromium	mg/l	0.0	0.00122	3.00	20	L681090-07	WG704676
Copper	mg/l	0.0	0.000514	1010*	20	L681090-07	WG704676
Nickel	mg/l	0.0	0.0106	1.00	20	L681090-07	WG704676
Selenium	mg/l	0.0	-0.0102	13.0	20	L681090-07	WG704676
Silver	mg/l	0.0	-0.00246	15.0	20	L681090-07	WG704676
Zinc	mg/l	0.0	0.0108	55.0*	20	L681090-07	WG704676
Mercury	mg/l	0.0	0.0000487	4.00	20	L680871-19	WG704741
Antimony	mg/l	0.0	0.000260	NA	20	L681090-09	WG704800
Arsenic	mg/l	0.0	0.000770	NA	20	L681090-09	WG704800
Lead	mg/l	0.0	0.0	0.0	20	L681090-09	WG704800
Thallium	mg/l	0.0	0.0	0.0	20	L681090-09	WG704800

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Quality Assurance Report
Level II

L681090

February 11, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Beryllium	mg/l	1	0.996	100.	85-115	WG704676
Cadmium	mg/l	1	1.02	102.	85-115	WG704676
Chromium	mg/l	1	1.01	101.	85-115	WG704676
Copper	mg/l	1	0.983	98.0	85-115	WG704676
Nickel	mg/l	1	0.900	90.0	85-115	WG704676
Selenium	mg/l	1	1.01	101.	85-115	WG704676
Silver	mg/l	1	0.918	92.0	85-115	WG704676
Zinc	mg/l	1	0.990	99.0	85-115	WG704676
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0224	89.4	74.2-124	WG704695
1,1,1-Trichloroethane	mg/l	.025	0.0245	98.0	73.2-123	WG704695
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0215	86.2	70.7-122	WG704695
1,1,2-Trichloroethane	mg/l	.025	0.0251	100.	77.7-118	WG704695
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0250	100.	67.2-143	WG704695
1,1-Dichloroethane	mg/l	.025	0.0266	107.	70.7-126	WG704695
1,1-Dichloroethene	mg/l	.025	0.0240	96.1	67.8-129	WG704695
1,1-Dichloropropene	mg/l	.025	0.0260	104.	73.1-125	WG704695
1,2,3-Trichlorobenzene	mg/l	.025	0.0224	89.6	64.9-135	WG704695
1,2,3-Trichloropropane	mg/l	.025	0.0205	82.2	71.8-121	WG704695
1,2,3-Trimethylbenzene	mg/l	.025	0.0204	81.6	72.3-116	WG704695
1,2,4-Trichlorobenzene	mg/l	.025	0.0234	93.8	69.7-136	WG704695
1,2,4-Trimethylbenzene	mg/l	.025	0.0217	86.9	75-123	WG704695
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0223	89.2	65.4-128	WG704695
1,2-Dibromoethane	mg/l	.025	0.0247	98.8	76.6-121	WG704695
1,2-Dichlorobenzene	mg/l	.025	0.0225	90.0	78.4-117	WG704695
1,2-Dichloroethane	mg/l	.025	0.0229	91.8	68.8-124	WG704695
1,2-Dichloropropane	mg/l	.025	0.0284	114.	76.5-119	WG704695
1,3,5-Trimethylbenzene	mg/l	.025	0.0225	90.0	75.6-124	WG704695
1,3-Dichlorobenzene	mg/l	.025	0.0212	84.8	70.8-128	WG704695
1,3-Dichloropropane	mg/l	.025	0.0252	101.	77.4-117	WG704695
1,4-Dichlorobenzene	mg/l	.025	0.0221	88.3	78.8-115	WG704695
2,2-Dichloropropane	mg/l	.025	0.0227	90.9	62.4-133	WG704695
2-Butanone (MEK)	mg/l	.125	0.136	109.	55-149	WG704695
2-Chloroethyl vinyl ether	mg/l	.125	0.175	140.	43.8-150	WG704695
2-Chlorotoluene	mg/l	.025	0.0209	83.8	74.7-122	WG704695
4-Chlorotoluene	mg/l	.025	0.0223	89.2	77.5-120	WG704695
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.129	103.	70.5-133	WG704695
Acetone	mg/l	.125	0.106	85.1	35.6-163	WG704695
Acrolein	mg/l	.125	0.200	160.	10-190	WG704695
Acrylonitrile	mg/l	.125	0.136	109.	55.2-130	WG704695
Benzene	mg/l	.025	0.0258	103.	74.8-121	WG704695
Bromobenzene	mg/l	.025	0.0229	91.7	77.5-116	WG704695
Bromodichloromethane	mg/l	.025	0.0224	89.8	75.1-116	WG704695
Bromoform	mg/l	.025	0.0225	89.8	67.5-130	WG704695
Bromomethane	mg/l	.025	0.0269	108.	49.9-162	WG704695
Carbon tetrachloride	mg/l	.025	0.0235	94.1	70.2-123	WG704695
Chlorobenzene	mg/l	.025	0.0241	96.3	78.1-119	WG704695
Chlorodibromomethane	mg/l	.025	0.0239	95.7	74-121	WG704695
Chloroethane	mg/l	.025	0.0257	103.	61.7-135	WG704695
Chloroform	mg/l	.025	0.0237	94.6	76-121	WG704695
Chloromethane	mg/l	.025	0.0293	117.	61.5-129	WG704695
cis-1,2-Dichloroethene	mg/l	.025	0.0251	100.	76-119	WG704695
cis-1,3-Dichloropropene	mg/l	.025	0.0274	110.	78.2-120	WG704695
Di-isopropyl ether	mg/l	.025	0.0277	111.	65.6-132	WG704695
Dibromomethane	mg/l	.025	0.0242	96.7	79.5-118	WG704695
Dichlorodifluoromethane	mg/l	.025	0.0264	106.	54.8-135	WG704695
Ethylbenzene	mg/l	.025	0.0246	98.5	78.8-122	WG704695
Hexachloro-1,3-butadiene	mg/l	.025	0.0205	82.1	64.7-129	WG704695
Isopropylbenzene	mg/l	.025	0.0250	99.9	78.6-132	WG704695

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Quality Assurance Report
Level II

L681090

February 11, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Methyl tert-butyl ether	mg/l	.025	0.0234	93.7	71.2-126	WG704695
Methylene Chloride	mg/l	.025	0.0249	99.8	70.3-120	WG704695
n-Butylbenzene	mg/l	.025	0.0241	96.3	76.2-126	WG704695
n-Propylbenzene	mg/l	.025	0.0230	91.8	78.2-122	WG704695
Naphthalene	mg/l	.025	0.0222	88.6	68.4-128	WG704695
p-Isopropyltoluene	mg/l	.025	0.0223	89.1	74-131	WG704695
sec-Butylbenzene	mg/l	.025	0.0223	89.2	74.4-127	WG704695
Styrene	mg/l	.025	0.0243	97.2	80.4-126	WG704695
tert-Butylbenzene	mg/l	.025	0.0229	91.6	75.3-126	WG704695
Tetrachloroethene	mg/l	.025	0.0239	95.5	72.6-126	WG704695
Toluene	mg/l	.025	0.0255	102.	79.7-116	WG704695
trans-1,2-Dichloroethene	mg/l	.025	0.0244	97.7	72.6-121	WG704695
trans-1,3-Dichloropropene	mg/l	.025	0.0255	102.	74.3-123	WG704695
Trichloroethene	mg/l	.025	0.0243	97.2	77.7-118	WG704695
Trichlorofluoromethane	mg/l	.025	0.0223	89.4	63.5-135	WG704695
Vinyl chloride	mg/l	.025	0.0265	106.	65.9-128	WG704695
Xylenes, Total	mg/l	.075	0.0711	94.9	78.7-121	WG704695
4-Bromofluorobenzene				93.70	71-126	WG704695
Dibromofluoromethane				93.90	78.3-121	WG704695
Toluene-d8				105.0	88.5-111	WG704695
a,a,a-Trifluorotoluene				97.70	85-114	WG704695
Mercury	mg/l	.003	0.00289	96.0	85-115	WG704741
1,2,4-Trichlorobenzene	mg/l	.025	0.0166	66.4	22.9-96.1	WG704789
2,4,6-Trichlorophenol	mg/l	.025	0.0213	85.2	29.8-107	WG704789
2,4-Dichlorophenol	mg/l	.025	0.0204	81.4	31.4-103	WG704789
2,4-Dimethylphenol	mg/l	.025	0.0176	70.5	31.9-107	WG704789
2,4-Dinitrophenol	mg/l	.025	0.0194	77.7	24.2-128	WG704789
2,4-Dinitrotoluene	mg/l	.025	0.0226	90.6	31.2-105	WG704789
2,6-Dinitrotoluene	mg/l	.025	0.0226	90.6	30.6-106	WG704789
2-Chloronaphthalene	mg/l	.025	0.0227	90.7	33.6-105	WG704789
2-Chlorophenol	mg/l	.025	0.0150	59.9	26.2-91.5	WG704789
2-Nitrophenol	mg/l	.025	0.0190	76.1	25.9-106	WG704789
3,3-Dichlorobenzidine	mg/l	.025	0.0283	113.	27.2-142	WG704789
4,6-Dinitro-2-methylphenol	mg/l	.025	0.0227	90.9	18.4-148	WG704789
4-Bromophenyl-phenylether	mg/l	.025	0.0257	103.	40.7-116	WG704789
4-Chloro-3-methylphenol	mg/l	.025	0.0181	72.5	35.7-100	WG704789
4-Chlorophenyl-phenylether	mg/l	.025	0.0230	91.9	39-113	WG704789
4-Nitrophenol	mg/l	.025	0.0116	46.4	10-52.7	WG704789
Acenaphthene	mg/l	.025	0.0213	85.2	38.7-109	WG704789
Acenaphthylene	mg/l	.025	0.0237	94.6	36-106	WG704789
Anthracene	mg/l	.025	0.0232	93.0	43.6-113	WG704789
Benzidine	mg/l	.025	0.0332	133.	10-165.2	WG704789
Benzo(a)anthracene	mg/l	.025	0.0235	94.0	51.2-112	WG704789
Benzo(a)pyrene	mg/l	.025	0.0211	84.5	45.6-106	WG704789
Benzo(b)fluoranthene	mg/l	.025	0.0240	96.2	47.6-111	WG704789
Benzo(g,h,i)perylene	mg/l	.025	0.0267	107.	45.2-117	WG704789
Benzo(k)fluoranthene	mg/l	.025	0.0246	98.4	49.4-114	WG704789
Benzylbutyl phthalate	mg/l	.025	0.0224	89.6	31.8-123	WG704789
Bis(2-chlorethoxy)methane	mg/l	.025	0.0181	72.5	37.2-111	WG704789
Bis(2-chloroethyl)ether	mg/l	.025	0.0152	60.6	22.6-108	WG704789
Bis(2-chloroisopropyl)ether	mg/l	.025	0.0164	65.6	32.9-100	WG704789
Bis(2-ethylhexyl)phthalate	mg/l	.025	0.0227	90.8	36.9-134	WG704789
Chrysene	mg/l	.025	0.0232	93.0	54.6-120	WG704789
Di-n-butyl phthalate	mg/l	.025	0.0232	92.7	41.8-120	WG704789
Di-n-octyl phthalate	mg/l	.025	0.0208	83.2	39.7-112	WG704789

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Quality Assurance Report
Level II

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February 11, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Dibenz(a,h)anthracene	mg/l	.025	0.0260	104.	42.8-118	WG704789
Diethyl phthalate	mg/l	.025	0.0239	95.4	36.5-129	WG704789
Dimethyl phthalate	mg/l	.025	0.0247	99.0	35.3-128	WG704789
Fluoranthene	mg/l	.025	0.0237	95.0	45.9-115	WG704789
Fluorene	mg/l	.025	0.0227	90.9	41-112	WG704789
Hexachloro-1,3-butadiene	mg/l	.025	0.0155	61.9	16.1-104	WG704789
Hexachlorobenzene	mg/l	.025	0.0259	103.	38.5-116	WG704789
Hexachlorocyclopentadiene	mg/l	.025	0.0114	45.4	10-121	WG704789
Hexachloroethane	mg/l	.025	0.0128	51.2	16.5-89.8	WG704789
Indeno(1,2,3-cd)pyrene	mg/l	.025	0.0265	106.	45-116	WG704789
Isophorone	mg/l	.025	0.0201	80.5	35.4-112	WG704789
n-Nitrosodi-n-propylamine	mg/l	.025	0.0185	73.9	33.2-106	WG704789
n-Nitrosodimethylamine	mg/l	.025	0.0113	45.3	10-80.1	WG704789
n-Nitrosodiphenylamine	mg/l	.025	0.0247	98.6	44.4-113	WG704789
Naphthalene	mg/l	.025	0.0169	67.8	32.2-101	WG704789
Nitrobenzene	mg/l	.025	0.0180	71.9	31.4-106	WG704789
Pentachlorophenol	mg/l	.025	0.0180	71.9	10-97.4	WG704789
Phenanthrene	mg/l	.025	0.0232	92.8	46.4-113	WG704789
Phenol	mg/l	.025	0.00741	29.7	10-57.9	WG704789
Pyrene	mg/l	.025	0.0243	97.3	46.3-117	WG704789
2,4,6-Tribromophenol				99.00	11.2-130	WG704789
2-Fluorobiphenyl				95.00	29.5-131	WG704789
2-Fluorophenol				37.70	10-77.9	WG704789
Nitrobenzene-d5				61.40	21.8-123	WG704789
Phenol-d5				25.70	5-70.1	WG704789
p-Terphenyl-d14				82.10	29.3-137	WG704789
1,2,4-Trichlorobenzene	mg/l	.025	0.0154	61.4	22.9-96.1	WG705187
2,4,6-Trichlorophenol	mg/l	.025	0.0212	84.9	29.8-107	WG705187
2,4-Dichlorophenol	mg/l	.025	0.0195	78.1	31.4-103	WG705187
2,4-Dimethylphenol	mg/l	.025	0.0160	63.9	31.9-107	WG705187
2,4-Dinitrophenol	mg/l	.025	0.0212	84.9	24.2-128	WG705187
2,4-Dinitrotoluene	mg/l	.025	0.0189	75.7	31.2-105	WG705187
2,6-Dinitrotoluene	mg/l	.025	0.0189	75.8	30.6-106	WG705187
2-Chloronaphthalene	mg/l	.025	0.0194	77.6	33.6-105	WG705187
2-Chlorophenol	mg/l	.025	0.0149	59.8	26.2-91.5	WG705187
2-Nitrophenol	mg/l	.025	0.0187	74.8	25.9-106	WG705187
3,3-Dichlorobenzidine	mg/l	.025	0.0221	88.3	27.2-142	WG705187
4,6-Dinitro-2-methylphenol	mg/l	.025	0.0220	87.8	18.4-148	WG705187
4-Bromophenyl-phenylether	mg/l	.025	0.0219	87.5	40.7-116	WG705187
4-Chloro-3-methylphenol	mg/l	.025	0.0171	68.5	35.7-100	WG705187
4-Chlorophenyl-phenylether	mg/l	.025	0.0203	81.3	39-113	WG705187
4-Nitrophenol	mg/l	.025	0.0135	54.1*	10-52.7	WG705187
Acenaphthene	mg/l	.025	0.0185	74.0	38.7-109	WG705187
Acenaphthylene	mg/l	.025	0.0205	81.9	36-106	WG705187
Anthracene	mg/l	.025	0.0196	78.4	43.6-113	WG705187
Benzidine	mg/l	.025	0.0240	96.0	10-165.2	WG705187
Benzo(a)anthracene	mg/l	.025	0.0190	75.8	51.2-112	WG705187
Benzo(a)pyrene	mg/l	.025	0.0179	71.6	45.6-106	WG705187
Benzo(b)fluoranthene	mg/l	.025	0.0196	78.2	47.6-111	WG705187
Benzo(g,h,i)perylene	mg/l	.025	0.0217	86.6	45.2-117	WG705187
Benzo(k)fluoranthene	mg/l	.025	0.0196	78.2	49.4-114	WG705187
Benzylbutyl phthalate	mg/l	.025	0.0182	72.9	31.8-123	WG705187
Bis(2-chlorethoxy)methane	mg/l	.025	0.0150	60.0	37.2-111	WG705187
Bis(2-chloroethyl)ether	mg/l	.025	0.0121	48.4	22.6-108	WG705187
Bis(2-chloroisopropyl)ether	mg/l	.025	0.0139	55.7	32.9-100	WG705187
Bis(2-ethylhexyl)phthalate	mg/l	.025	0.0189	75.5	36.9-134	WG705187
Chrysene	mg/l	.025	0.0186	74.4	54.6-120	WG705187

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Fax (615) 758-5859

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Daphne Jones; Matt Flinchum
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Cary, NC 27512

Quality Assurance Report
Level II

L681090

February 11, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Di-n-butyl phthalate	mg/l	.025	0.0202	80.6	41.8-120	WG705187
Di-n-octyl phthalate	mg/l	.025	0.0171	68.5	39.7-112	WG705187
Dibenz(a,h)anthracene	mg/l	.025	0.0210	84.0	42.8-118	WG705187
Diethyl phthalate	mg/l	.025	0.0201	80.3	36.5-129	WG705187
Dimethyl phthalate	mg/l	.025	0.0208	83.4	35.3-128	WG705187
Fluoranthene	mg/l	.025	0.0206	82.6	45.9-115	WG705187
Fluorene	mg/l	.025	0.0196	78.6	41-112	WG705187
Hexachloro-1,3-butadiene	mg/l	.025	0.0142	56.9	16.1-104	WG705187
Hexachlorobenzene	mg/l	.025	0.0219	87.7	38.5-116	WG705187
Hexachlorocyclopentadiene	mg/l	.025	0.0117	46.8	10-121	WG705187
Hexachloroethane	mg/l	.025	0.0119	47.4	16.5-89.8	WG705187
Indeno(1,2,3-cd)pyrene	mg/l	.025	0.0220	87.9	45-116	WG705187
Isophorone	mg/l	.025	0.0164	65.7	35.4-112	WG705187
n-Nitrosodi-n-propylamine	mg/l	.025	0.0151	60.3	33.2-106	WG705187
n-Nitrosodimethylamine	mg/l	.025	0.0106	42.2	10-80.1	WG705187
n-Nitrosodiphenylamine	mg/l	.025	0.0202	80.9	44.4-113	WG705187
Naphthalene	mg/l	.025	0.0152	60.7	32.2-101	WG705187
Nitrobenzene	mg/l	.025	0.0150	59.9	31.4-106	WG705187
Pentachlorophenol	mg/l	.025	0.0188	75.2	10-97.4	WG705187
Phenanthrene	mg/l	.025	0.0191	76.5	46.4-113	WG705187
Phenol	mg/l	.025	0.00835	33.4	10-57.9	WG705187
Pyrene	mg/l	.025	0.0188	75.2	46.3-117	WG705187
2,4,6-Tribromophenol				95.50	11.2-130	WG705187
2-Fluorobiphenyl				78.60	29.5-131	WG705187
2-Fluorophenol				42.10	10-77.9	WG705187
Nitrobenzene-d5				52.30	21.8-123	WG705187
Phenol-d5				31.00	5-70.1	WG705187
p-Terphenyl-d14				63.70	29.3-137	WG705187
Antimony	mg/l	.05	0.0504	101.	85-115	WG704800
Arsenic	mg/l	.05	0.0512	102.	85-115	WG704800
Lead	mg/l	.05	0.0510	102.	85-115	WG704800
Thallium	mg/l	.05	0.0510	102.	85-115	WG704800

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0233	0.0224	93.0	74.2-124	4.19	20	WG704695
1,1,1-Trichloroethane	mg/l	0.0244	0.0245	98.0	73.2-123	0.370	20	WG704695
1,1,2,2-Tetrachloroethane	mg/l	0.0223	0.0215	89.0	70.7-122	3.65	20	WG704695
1,1,2-Trichloroethane	mg/l	0.0255	0.0251	102.	77.7-118	1.92	20	WG704695
1,1,2-Trichlorotrifluoroethane	mg/l	0.0251	0.0250	100.	67.2-143	0.400	20	WG704695
1,1-Dichloroethane	mg/l	0.0270	0.0266	108.	70.7-126	1.42	20	WG704695
1,1-Dichloroethene	mg/l	0.0244	0.0240	98.0	67.8-129	1.70	20	WG704695
1,1-Dichloropropene	mg/l	0.0259	0.0260	104.	73.1-125	0.320	20	WG704695
1,2,3-Trichlorobenzene	mg/l	0.0244	0.0224	98.0	64.9-135	8.61	20	WG704695
1,2,3-Trichloropropane	mg/l	0.0219	0.0205	88.0	71.8-121	6.60	20	WG704695
1,2,3-Trimethylbenzene	mg/l	0.0216	0.0204	86.0	72.3-116	5.97	20	WG704695
1,2,4-Trichlorobenzene	mg/l	0.0255	0.0234	102.	69.7-136	8.46	20	WG704695
1,2,4-Trimethylbenzene	mg/l	0.0231	0.0217	92.0	75-123	6.31	20	WG704695
1,2-Dibromo-3-Chloropropane	mg/l	0.0239	0.0223	95.0	65.4-128	6.72	20	WG704695
1,2-Dibromoethane	mg/l	0.0254	0.0247	102.	76.6-121	2.95	20	WG704695
1,2-Dichlorobenzene	mg/l	0.0236	0.0225	94.0	78.4-117	4.91	20	WG704695
1,2-Dichloroethane	mg/l	0.0235	0.0229	94.0	68.8-124	2.31	20	WG704695
1,2-Dichloropropane	mg/l	0.0277	0.0284	111.	76.5-119	2.74	20	WG704695
1,3,5-Trimethylbenzene	mg/l	0.0234	0.0225	94.0	75.6-124	4.05	20	WG704695
1,3-Dichlorobenzene	mg/l	0.0221	0.0212	88.0	70.8-128	4.00	20	WG704695
1,3-Dichloropropane	mg/l	0.0264	0.0252	105.	77.4-117	4.50	20	WG704695

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Quality Assurance Report
Level II

L681090

February 11, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,4-Dichlorobenzene	mg/l	0.0236	0.0221	94.0	78.8-115	6.46	20	WG704695
2,2-Dichloropropane	mg/l	0.0233	0.0227	93.0	62.4-133	2.34	20	WG704695
2-Butanone (MEK)	mg/l	0.134	0.136	107.	55-149	1.66	20	WG704695
2-Chloroethyl vinyl ether	mg/l	0.173	0.175	138.	43.8-150	1.16	20	WG704695
2-Chlorotoluene	mg/l	0.0225	0.0209	90.0	74.7-122	7.10	20	WG704695
4-Chlorotoluene	mg/l	0.0237	0.0223	95.0	77.5-120	6.08	20	WG704695
4-Methyl-2-pentanone (MIBK)	mg/l	0.126	0.129	101.	70.5-133	2.22	20	WG704695
Acetone	mg/l	0.107	0.106	86.0	35.6-163	0.790	23.9	WG704695
Acrolein	mg/l	0.197	0.200	158.	10-190	1.64	28.1	WG704695
Acrylonitrile	mg/l	0.134	0.136	107.	55.2-130	1.03	20	WG704695
Benzene	mg/l	0.0261	0.0258	104.	74.8-121	0.950	20	WG704695
Bromobenzene	mg/l	0.0242	0.0229	97.0	77.5-116	5.40	20	WG704695
Bromodichloromethane	mg/l	0.0225	0.0224	90.0	75.1-116	0.260	20	WG704695
Bromoform	mg/l	0.0228	0.0225	91.0	67.5-130	1.69	20	WG704695
Bromomethane	mg/l	0.0276	0.0269	110.	49.9-162	2.57	20	WG704695
Carbon tetrachloride	mg/l	0.0241	0.0235	96.0	70.2-123	2.56	20	WG704695
Chlorobenzene	mg/l	0.0253	0.0241	101.	78.1-119	5.11	20	WG704695
Chlorodibromomethane	mg/l	0.0246	0.0239	98.0	74-121	2.63	20	WG704695
Chloroethane	mg/l	0.0248	0.0257	99.0	61.7-135	3.28	20	WG704695
Chloroform	mg/l	0.0246	0.0237	98.0	76-121	4.05	20	WG704695
Chloromethane	mg/l	0.0296	0.0293	118.	61.5-129	0.980	20	WG704695
cis-1,2-Dichloroethene	mg/l	0.0252	0.0251	101.	76-119	0.590	20	WG704695
cis-1,3-Dichloropropene	mg/l	0.0273	0.0274	109.	78.2-120	0.430	20	WG704695
Di-isopropyl ether	mg/l	0.0277	0.0277	111.	65.6-132	0.0400	20	WG704695
Dibromomethane	mg/l	0.0243	0.0242	97.0	79.5-118	0.630	20	WG704695
Dichlorodifluoromethane	mg/l	0.0259	0.0264	103.	54.8-135	1.94	20	WG704695
Ethylbenzene	mg/l	0.0253	0.0246	101.	78.8-122	2.55	20	WG704695
Hexachloro-1,3-butadiene	mg/l	0.0231	0.0205	92.0	64.7-129	12.0	20	WG704695
Isopropylbenzene	mg/l	0.0263	0.0250	105.	78.6-132	5.00	20	WG704695
Methyl tert-butyl ether	mg/l	0.0239	0.0234	96.0	71.2-126	1.92	20	WG704695
Methylene Chloride	mg/l	0.0256	0.0249	102.	70.3-120	2.46	20	WG704695
n-Butylbenzene	mg/l	0.0261	0.0241	104.	76.2-126	7.96	20	WG704695
n-Propylbenzene	mg/l	0.0243	0.0230	97.0	78.2-122	5.76	20	WG704695
Naphthalene	mg/l	0.0237	0.0222	95.0	68.4-128	6.62	20	WG704695
p-Isopropyltoluene	mg/l	0.0237	0.0223	95.0	74-131	6.39	20	WG704695
sec-Butylbenzene	mg/l	0.0240	0.0223	96.0	74.4-127	7.31	20	WG704695
Styrene	mg/l	0.0258	0.0243	103.	80.4-126	5.93	20	WG704695
tert-Butylbenzene	mg/l	0.0241	0.0229	96.0	75.3-126	5.22	20	WG704695
Tetrachloroethene	mg/l	0.0247	0.0239	99.0	72.6-126	3.25	20	WG704695
Toluene	mg/l	0.0262	0.0255	105.	79.7-116	2.71	20	WG704695
trans-1,2-Dichloroethene	mg/l	0.0257	0.0244	103.	72.6-121	4.99	20	WG704695
trans-1,3-Dichloropropene	mg/l	0.0253	0.0255	101.	74.3-123	0.980	20	WG704695
Trichloroethene	mg/l	0.0241	0.0243	96.0	77.7-118	0.790	20	WG704695
Trichlorofluoromethane	mg/l	0.0221	0.0223	88.0	63.5-135	1.03	20	WG704695
Vinyl chloride	mg/l	0.0261	0.0265	104.	65.9-128	1.68	20	WG704695
Xylenes, Total	mg/l	0.0739	0.0711	98.0	78.7-121	3.84	20	WG704695
4-Bromofluorobenzene				94.80	71-126			WG704695
Dibromofluoromethane				93.70	78.3-121			WG704695
Toluene-d8				105.0	88.5-111			WG704695
a,a,a-Trifluorotoluene				97.50	85-114			WG704695
1,2,4-Trichlorobenzene	mg/l	0.0194	0.0166	77.0	22.9-96.1	15.4	27.5	WG704789
2,4,6-Trichlorophenol	mg/l	0.0248	0.0213	99.0	29.8-107	14.9	24.1	WG704789
2,4-Dichlorophenol	mg/l	0.0230	0.0204	92.0	31.4-103	12.0	24.9	WG704789
2,4-Dimethylphenol	mg/l	0.0193	0.0176	77.0	31.9-107	8.83	25.7	WG704789
2,4-Dinitrophenol	mg/l	0.0222	0.0194	89.0	24.2-128	13.1	20.5	WG704789
2,4-Dinitrotoluene	mg/l	0.0226	0.0226	90.0	31.2-105	0.180	22	WG704789
2,6-Dinitrotoluene	mg/l	0.0236	0.0226	94.0	30.6-106	4.31	23.1	WG704789

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Quality Assurance Report
Level II

L681090

February 11, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
2-Chloronaphthalene	mg/l	0.0250	0.0227	100.	33.6-105	9.90	23	WG704789
2-Chlorophenol	mg/l	0.0171	0.0150	68.0	26.2-91.5	13.4	26.5	WG704789
2-Nitrophenol	mg/l	0.0220	0.0190	88.0	25.9-106	14.3	26.9	WG704789
3,3-Dichlorobenzidine	mg/l	0.0280	0.0283	112.	27.2-142	1.05	22.3	WG704789
4,6-Dinitro-2-methylphenol	mg/l	0.0257	0.0227	103.	18.4-148	12.5	24.4	WG704789
4-Bromophenyl-phenylether	mg/l	0.0280	0.0257	112.	40.7-116	8.51	21	WG704789
4-Chloro-3-methylphenol	mg/l	0.0191	0.0181	76.0	35.7-100	5.04	22.9	WG704789
4-Chlorophenyl-phenylether	mg/l	0.0237	0.0230	95.0	39-113	3.12	20.9	WG704789
4-Nitrophenol	mg/l	0.0119	0.0116	48.0	10-52.7	2.90	40	WG704789
Acenaphthene	mg/l	0.0230	0.0213	92.0	38.7-109	7.84	21.5	WG704789
Acenaphthylene	mg/l	0.0254	0.0237	102.	36-106	7.01	21	WG704789
Anthracene	mg/l	0.0240	0.0232	96.0	43.6-113	3.39	18.8	WG704789
Benzidine	mg/l	0.0350	0.0332	140.	10-165.2	5.10	40	WG704789
Benzo(a)anthracene	mg/l	0.0234	0.0235	94.0	51.2-112	0.220	20	WG704789
Benzo(a)pyrene	mg/l	0.0218	0.0211	87.0	45.6-106	3.31	20	WG704789
Benzo(b)fluoranthene	mg/l	0.0245	0.0240	98.0	47.6-111	2.03	20	WG704789
Benzo(g,h,i)perylene	mg/l	0.0263	0.0267	105.	45.2-117	1.27	20	WG704789
Benzo(k)fluoranthene	mg/l	0.0237	0.0246	95.0	49.4-114	3.76	20	WG704789
Benzylbutyl phthalate	mg/l	0.0227	0.0224	91.0	31.8-123	1.09	20.7	WG704789
Bis(2-chlorethoxy)methane	mg/l	0.0193	0.0181	77.0	37.2-111	6.42	24.1	WG704789
Bis(2-chloroethyl)ether	mg/l	0.0175	0.0152	70.0	22.6-108	14.4	27.9	WG704789
Bis(2-chloroisopropyl)ether	mg/l	0.0198	0.0164	79.0	32.9-100	18.9	25.1	WG704789
Bis(2-ethylhexyl)phthalate	mg/l	0.0221	0.0227	88.0	36.9-134	2.85	23.6	WG704789
Chrysene	mg/l	0.0229	0.0232	92.0	54.6-120	1.49	20	WG704789
Di-n-butyl phthalate	mg/l	0.0237	0.0232	95.0	41.8-120	2.25	20.2	WG704789
Di-n-octyl phthalate	mg/l	0.0207	0.0208	83.0	39.7-112	0.690	21.1	WG704789
Dibenz(a,h)anthracene	mg/l	0.0255	0.0260	102.	42.8-118	2.16	20	WG704789
Diethyl phthalate	mg/l	0.0243	0.0239	97.0	36.5-129	1.97	20	WG704789
Dimethyl phthalate	mg/l	0.0253	0.0247	101.	35.3-128	2.19	20.8	WG704789
Fluoranthene	mg/l	0.0250	0.0237	100.	45.9-115	5.16	20	WG704789
Fluorene	mg/l	0.0236	0.0227	94.0	41-112	3.91	20.2	WG704789
Hexachloro-1,3-butadiene	mg/l	0.0182	0.0155	73.0	16.1-104	16.2	31.2	WG704789
Hexachlorobenzene	mg/l	0.0267	0.0259	107.	38.5-116	3.00	20.1	WG704789
Hexachlorocyclopentadiene	mg/l	0.0128	0.0114	51.0	10-121	12.1	27.9	WG704789
Hexachloroethane	mg/l	0.0154	0.0128	62.0	16.5-89.8	18.8	30.7	WG704789
Indeno(1,2,3-cd)pyrene	mg/l	0.0265	0.0265	106.	45-116	0.280	20	WG704789
Isophorone	mg/l	0.0212	0.0201	85.0	35.4-112	5.32	21.5	WG704789
n-Nitrosodi-n-propylamine	mg/l	0.0203	0.0185	81.0	33.2-106	9.25	23.7	WG704789
n-Nitrosodimethylamine	mg/l	0.0126	0.0113	50.0	10-80.1	10.6	37.5	WG704789
n-Nitrosodiphenylamine	mg/l	0.0253	0.0247	101.	44.4-113	2.67	20	WG704789
Naphthalene	mg/l	0.0195	0.0169	78.0	32.2-101	14.2	23.8	WG704789
Nitrobenzene	mg/l	0.0207	0.0180	83.0	31.4-106	14.1	25.7	WG704789
Pentachlorophenol	mg/l	0.0196	0.0180	78.0	10-97.4	8.74	35.1	WG704789
Phenanthrene	mg/l	0.0240	0.0232	96.0	46.4-113	3.19	20	WG704789
Phenol	mg/l	0.00789	0.00741	32.0	10-57.9	6.17	35	WG704789
Pyrene	mg/l	0.0241	0.0243	96.0	46.3-117	0.980	20	WG704789
2,4,6-Tribromophenol				109.0	11.2-130			WG704789
2-Fluorobiphenyl				103.0	29.5-131			WG704789
2-Fluorophenol				45.40	10-77.9			WG704789
Nitrobenzene-d5				73.40	21.8-123			WG704789
Phenol-d5				28.60	5-70.1			WG704789
p-Terphenyl-d14				79.60	29.3-137			WG704789
1,2,4-Trichlorobenzene	mg/l	0.0168	0.0154	67.0	22.9-96.1	9.13	27.5	WG705187
2,4,6-Trichlorophenol	mg/l	0.0214	0.0212	86.0	29.8-107	0.890	24.1	WG705187
2,4-Dichlorophenol	mg/l	0.0205	0.0195	82.0	31.4-103	4.83	24.9	WG705187
2,4-Dimethylphenol	mg/l	0.0170	0.0160	68.0	31.9-107	6.13	25.7	WG705187
2,4-Dinitrophenol	mg/l	0.0176	0.0212	70.0	24.2-128	18.8	20.5	WG705187

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Quality Assurance Report
Level II

L681090

February 11, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
2,4-Dinitrotoluene	mg/l	0.0192	0.0189	77.0	31.2-105	1.59	22	WG705187
2,6-Dinitrotoluene	mg/l	0.0201	0.0189	80.0	30.6-106	5.87	23.1	WG705187
2-Chloronaphthalene	mg/l	0.0211	0.0194	84.0	33.6-105	8.53	23	WG705187
2-Chlorophenol	mg/l	0.0158	0.0149	63.0	26.2-91.5	5.42	26.5	WG705187
2-Nitrophenol	mg/l	0.0189	0.0187	76.0	25.9-106	1.23	26.9	WG705187
3,3-Dichlorobenzidine	mg/l	0.0232	0.0221	93.0	27.2-142	4.89	22.3	WG705187
4,6-Dinitro-2-methylphenol	mg/l	0.0221	0.0220	88.0	18.4-148	0.690	24.4	WG705187
4-Bromophenyl-phenylether	mg/l	0.0228	0.0219	91.0	40.7-116	4.00	21	WG705187
4-Chloro-3-methylphenol	mg/l	0.0172	0.0171	69.0	35.7-100	0.260	22.9	WG705187
4-Chlorophenyl-phenylether	mg/l	0.0210	0.0203	84.0	39-113	3.17	20.9	WG705187
4-Nitrophenol	mg/l	0.0122	0.0135	49.0	10-52.7	10.6	40	WG705187
Acenaphthene	mg/l	0.0193	0.0185	77.0	38.7-109	4.10	21.5	WG705187
Acenaphthylene	mg/l	0.0207	0.0205	83.0	36-106	1.34	21	WG705187
Anthracene	mg/l	0.0205	0.0196	82.0	43.6-113	4.58	18.8	WG705187
Benzidine	mg/l	0.0282	0.0240	113.	10-165.2	16.1	40	WG705187
Benzo(a)anthracene	mg/l	0.0194	0.0190	78.0	51.2-112	2.57	20	WG705187
Benzo(a)pyrene	mg/l	0.0185	0.0179	74.0	45.6-106	3.55	20	WG705187
Benzo(b)fluoranthene	mg/l	0.0202	0.0196	81.0	47.6-111	3.40	20	WG705187
Benzo(g,h,i)perylene	mg/l	0.0218	0.0217	87.0	45.2-117	0.770	20	WG705187
Benzo(k)fluoranthene	mg/l	0.0211	0.0196	84.0	49.4-114	7.48	20	WG705187
Benzylbutyl phthalate	mg/l	0.0188	0.0182	75.0	31.8-123	2.90	20.7	WG705187
Bis(2-chlorethoxy)methane	mg/l	0.0162	0.0150	65.0	37.2-111	7.56	24.1	WG705187
Bis(2-chloroethyl)ether	mg/l	0.0143	0.0121	57.0	22.6-108	16.7	27.9	WG705187
Bis(2-chloroisopropyl)ether	mg/l	0.0160	0.0139	64.0	32.9-100	13.9	25.1	WG705187
Bis(2-ethylhexyl)phthalate	mg/l	0.0192	0.0189	77.0	36.9-134	1.70	23.6	WG705187
Chrysene	mg/l	0.0194	0.0186	78.0	54.6-120	4.37	20	WG705187
Di-n-butyl phthalate	mg/l	0.0208	0.0202	83.0	41.8-120	3.17	20.2	WG705187
Di-n-octyl phthalate	mg/l	0.0177	0.0171	71.0	39.7-112	3.26	21.1	WG705187
Dibenz(a,h)anthracene	mg/l	0.0212	0.0210	85.0	42.8-118	1.09	20	WG705187
Diethyl phthalate	mg/l	0.0214	0.0201	86.0	36.5-129	6.35	20	WG705187
Dimethyl phthalate	mg/l	0.0214	0.0208	85.0	35.3-128	2.49	20.8	WG705187
Fluoranthene	mg/l	0.0216	0.0206	86.0	45.9-115	4.46	20	WG705187
Fluorene	mg/l	0.0204	0.0196	82.0	41-112	3.93	20.2	WG705187
Hexachloro-1,3-butadiene	mg/l	0.0162	0.0142	65.0	16.1-104	13.2	31.2	WG705187
Hexachlorobenzene	mg/l	0.0230	0.0219	92.0	38.5-116	4.66	20.1	WG705187
Hexachlorocyclopentadiene	mg/l	0.0119	0.0117	48.0	10-121	2.14	27.9	WG705187
Hexachloroethane	mg/l	0.0134	0.0119	54.0	16.5-89.8	12.1	30.7	WG705187
Indeno(1,2,3-cd)pyrene	mg/l	0.0221	0.0220	88.0	45-116	0.670	20	WG705187
Isophorone	mg/l	0.0175	0.0164	70.0	35.4-112	6.48	21.5	WG705187
n-Nitrosodi-n-propylamine	mg/l	0.0165	0.0151	66.0	33.2-106	9.27	23.7	WG705187
n-Nitrosodimethylamine	mg/l	0.0122	0.0106	49.0	10-80.1	14.4	37.5	WG705187
n-Nitrosodiphenylamine	mg/l	0.0215	0.0202	86.0	44.4-113	6.33	20	WG705187
Naphthalene	mg/l	0.0161	0.0152	64.0	32.2-101	6.20	23.8	WG705187
Nitrobenzene	mg/l	0.0163	0.0150	65.0	31.4-106	8.45	25.7	WG705187
Pentachlorophenol	mg/l	0.0191	0.0188	76.0	10-97.4	1.75	35.1	WG705187
Phenanthrene	mg/l	0.0205	0.0191	82.0	46.4-113	6.76	20	WG705187
Phenol	mg/l	0.00896	0.00835	36.0	10-57.9	7.14	35	WG705187
Pyrene	mg/l	0.0197	0.0188	79.0	46.3-117	4.79	20	WG705187
2,4,6-Tribromophenol				101.0	11.2-130			WG705187
2-Fluorobiphenyl				82.10	29.5-131			WG705187
2-Fluorophenol				43.10	10-77.9			WG705187
Nitrobenzene-d5				58.80	21.8-123			WG705187
Phenol-d5				31.30	5-70.1			WG705187
p-Terphenyl-d14				65.80	29.3-137			WG705187

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Beryllium	mg/l	1.01	-0.000064	1	100.	75-125	L681090-07	WG704676

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Quality Assurance Report
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February 11, 2014

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Cadmium	mg/l	1.02	0.000617	1	100.	75-125	L681090-07	WG704676
Chromium	mg/l	1.03	0.00122	1	100.	75-125	L681090-07	WG704676
Copper	mg/l	1.01	0.000514	1	100.	75-125	L681090-07	WG704676
Nickel	mg/l	0.936	0.0106	1	93.0	75-125	L681090-07	WG704676
Selenium	mg/l	1.03	-0.0102	1	100.	75-125	L681090-07	WG704676
Silver	mg/l	0.627	-0.00246	1	63.0*	75-125	L681090-07	WG704676
Zinc	mg/l	1.03	0.0108	1	100.	75-125	L681090-07	WG704676
1,1,1,2-Tetrachloroethane	mg/l	0.0226	0.0	.025	90.0	64-128	L680529-09	WG704695
1,1,1-Trichloroethane	mg/l	0.0254	0.0	.025	100.	58.7-134	L680529-09	WG704695
1,1,2,2-Tetrachloroethane	mg/l	0.0232	0.0	.025	93.0	56-132	L680529-09	WG704695
1,1,2-Trichloroethane	mg/l	0.0246	0.0	.025	98.0	66.3-125	L680529-09	WG704695
1,1,2-Trichlorotrifluoroethane	mg/l	0.0270	0.0	.025	110.	54.8-154	L680529-09	WG704695
1,1-Dichloroethane	mg/l	0.0284	0.0	.025	110.	58.5-132	L680529-09	WG704695
1,1-Dichloroethene	mg/l	0.0259	0.0	.025	100.	51.1-140	L680529-09	WG704695
1,1-Dichloropropene	mg/l	0.0273	0.0	.025	110.	57.3-136	L680529-09	WG704695
1,2,3-Trichlorobenzene	mg/l	0.0240	0.0	.025	96.0	59.1-138	L680529-09	WG704695
1,2,3-Trichloropropane	mg/l	0.0220	0.0	.025	88.0	61.4-128	L680529-09	WG704695
1,2,3-Trimethylbenzene	mg/l	0.0209	0.0	.025	84.0	61.3-122	L680529-09	WG704695
1,2,4-Trichlorobenzene	mg/l	0.0252	0.0	.025	100.	63.6-143	L680529-09	WG704695
1,2,4-Trimethylbenzene	mg/l	0.0226	0.0	.025	90.0	57.4-137	L680529-09	WG704695
1,2-Dibromo-3-Chloropropane	mg/l	0.0239	0.0	.025	95.0	57.3-136	L680529-09	WG704695
1,2-Dibromoethane	mg/l	0.0243	0.0	.025	97.0	67.1-125	L680529-09	WG704695
1,2-Dichlorobenzene	mg/l	0.0236	0.0	.025	94.0	68.2-123	L680529-09	WG704695
1,2-Dichloroethane	mg/l	0.0236	0.0	.025	94.0	60-126	L680529-09	WG704695
1,2-Dichloropropane	mg/l	0.0269	0.0	.025	110.	64.2-123	L680529-09	WG704695
1,3,5-Trimethylbenzene	mg/l	0.0229	0.0	.025	92.0	63.6-132	L680529-09	WG704695
1,3-Dichlorobenzene	mg/l	0.0215	0.0	.025	86.0	63.1-131	L680529-09	WG704695
1,3-Dichloropropane	mg/l	0.0243	0.0	.025	97.0	67.9-121	L680529-09	WG704695
1,4-Dichlorobenzene	mg/l	0.0238	0.00112	.025	91.0	68.6-123	L680529-09	WG704695
2,2-Dichloropropane	mg/l	0.0247	0.0	.025	99.0	50.5-144	L680529-09	WG704695
2-Butanone (MEK)	mg/l	0.110	0.0	.125	88.0	22.4-138	L680529-09	WG704695
2-Chloroethyl vinyl ether	mg/l	0.0390	0.0	.125	31.0	10-155	L680529-09	WG704695
2-Chlorotoluene	mg/l	0.0212	0.0	.025	85.0	63.6-128	L680529-09	WG704695
4-Chlorotoluene	mg/l	0.0227	0.0	.025	91.0	65.7-127	L680529-09	WG704695
4-Methyl-2-pentanone (MIBK)	mg/l	0.133	0.0	.125	110.	60.8-140	L680529-09	WG704695
Acetone	mg/l	0.0623	0.00468	.125	46.0	10-130	L680529-09	WG704695
Acrolein	mg/l	0.250	0.0	.125	200.	10-200	L680529-09	WG704695
Acrylonitrile	mg/l	0.152	0.0	.125	120.	49.4-133	L680529-09	WG704695
Benzene	mg/l	0.0268	0.0	.025	110.	54.3-133	L680529-09	WG704695
Bromobenzene	mg/l	0.0230	0.0	.025	92.0	63.9-124	L680529-09	WG704695
Bromodichloromethane	mg/l	0.0221	0.0	.025	88.0	63.9-121	L680529-09	WG704695
Bromoform	mg/l	0.0223	0.0	.025	89.0	59.5-134	L680529-09	WG704695
Bromomethane	mg/l	0.0285	0.0	.025	110.	41.7-155	L680529-09	WG704695
Carbon tetrachloride	mg/l	0.0253	0.0	.025	100.	55.7-134	L680529-09	WG704695
Chlorobenzene	mg/l	0.0266	0.00353	.025	92.0	67-125	L680529-09	WG704695
Chlorodibromomethane	mg/l	0.0230	0.0	.025	92.0	64.3-125	L680529-09	WG704695
Chloroethane	mg/l	0.0264	0.0	.025	100.	51.5-136	L680529-09	WG704695
Chloroform	mg/l	0.0250	0.0	.025	100.	63-129	L680529-09	WG704695
Chloromethane	mg/l	0.0285	0.0	.025	110.	42.4-135	L680529-09	WG704695
cis-1,2-Dichloroethene	mg/l	0.0266	0.0	.025	110.	59.2-129	L680529-09	WG704695
cis-1,3-Dichloropropene	mg/l	0.0257	0.0	.025	100.	66.4-125	L680529-09	WG704695
Di-isopropyl ether	mg/l	0.0288	0.0	.025	120.	56.9-136	L680529-09	WG704695
Dibromomethane	mg/l	0.0248	0.0	.025	99.0	68.2-124	L680529-09	WG704695
Dichlorodifluoromethane	mg/l	0.0282	0.0	.025	110.	40.6-144	L680529-09	WG704695
Ethylbenzene	mg/l	0.0240	0.0	.025	96.0	61.4-133	L680529-09	WG704695
Hexachloro-1,3-butadiene	mg/l	0.0222	0.0	.025	89.0	55.1-136	L680529-09	WG704695
Isopropylbenzene	mg/l	0.0256	0.0	.025	100.	66.8-141	L680529-09	WG704695

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Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Methyl tert-butyl ether	mg/l	0.0264	0.000987	.025	100.	57.7-134	L680529-09	WG704695
Methylene Chloride	mg/l	0.0265	0.000443	.025	100.	58.1-122	L680529-09	WG704695
n-Butylbenzene	mg/l	0.0256	0.0	.025	100.	62.7-140	L680529-09	WG704695
n-Propylbenzene	mg/l	0.0235	0.0	.025	94.0	65.9-131	L680529-09	WG704695
Naphthalene	mg/l	0.0232	0.0	.025	93.0	58-135	L680529-09	WG704695
p-Isopropyltoluene	mg/l	0.0234	0.0	.025	94.0	63.2-139	L680529-09	WG704695
sec-Butylbenzene	mg/l	0.0233	0.0	.025	93.0	62.2-136	L680529-09	WG704695
Styrene	mg/l	0.0239	0.0	.025	96.0	66.8-133	L680529-09	WG704695
tert-Butylbenzene	mg/l	0.0236	0.0	.025	94.0	63.3-134	L680529-09	WG704695
Tetrachloroethene	mg/l	0.0238	0.0	.025	95.0	53-139	L680529-09	WG704695
Toluene	mg/l	0.0248	0.0	.025	99.0	61.4-130	L680529-09	WG704695
trans-1,2-Dichloroethene	mg/l	0.0265	0.0	.025	110.	56.5-129	L680529-09	WG704695
trans-1,3-Dichloropropene	mg/l	0.0233	0.0	.025	93.0	64.1-128	L680529-09	WG704695
Trichloroethene	mg/l	0.0246	0.0	.025	98.0	44.1-149	L680529-09	WG704695
Trichlorofluoromethane	mg/l	0.0238	0.0	.025	95.0	49.6-145	L680529-09	WG704695
Vinyl chloride	mg/l	0.0282	0.0	.025	110.	47.8-137	L680529-09	WG704695
Xylenes, Total	mg/l	0.0714	0.0	.075	95.0	63.3-131	L680529-09	WG704695
4-Bromofluorobenzene					92.40	71-126		WG704695
Dibromofluoromethane					100.0	78.3-121		WG704695
Toluene-d8					103.0	88.5-111		WG704695
a,a,a-Trifluorotoluene					97.80	85-114		WG704695
Mercury	mg/l	0.00293	0.0000487	.003	96.0	80-120	L680871-19	WG704741
Antimony	mg/l	0.0500	0.000260	.05	99.0	75-125	L681090-09	WG704800
Arsenic	mg/l	0.0516	0.000770	.05	100.	75-125	L681090-09	WG704800
Lead	mg/l	0.0510	0.0	.05	100.	75-125	L681090-09	WG704800
Thallium	mg/l	0.0510	0.0	.05	100.	75-125	L681090-09	WG704800

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Beryllium	mg/l	1.02	1.01	102.	75-125	1.00	20	L681090-07	WG704676
Cadmium	mg/l	1.03	1.02	103.	75-125	1.00	20	L681090-07	WG704676
Chromium	mg/l	1.03	1.03	103.	75-125	0.0	20	L681090-07	WG704676
Copper	mg/l	1.02	1.01	102.	75-125	1.00	20	L681090-07	WG704676
Nickel	mg/l	0.940	0.936	93.0	75-125	0.0	20	L681090-07	WG704676
Selenium	mg/l	1.04	1.03	105.	75-125	1.00	20	L681090-07	WG704676
Silver	mg/l	0.433	0.627	43.5*	75-125	37.0*	20	L681090-07	WG704676
Zinc	mg/l	1.04	1.03	103.	75-125	1.00	20	L681090-07	WG704676
1,1,1,2-Tetrachloroethane	mg/l	0.0224	0.0226	89.4	64-128	0.940	20	L680529-09	WG704695
1,1,1-Trichloroethane	mg/l	0.0254	0.0254	101.	58.7-134	0.260	20	L680529-09	WG704695
1,1,2,2-Tetrachloroethane	mg/l	0.0225	0.0232	90.0	56-132	3.13	22.2	L680529-09	WG704695
1,1,2-Trichloroethane	mg/l	0.0253	0.0246	101.	66.3-125	2.90	20	L680529-09	WG704695
1,1,2-Trichlorotrifluoroethane	mg/l	0.0264	0.0270	106.	54.8-154	2.07	22.5	L680529-09	WG704695
1,1-Dichloroethane	mg/l	0.0271	0.0284	108.	58.5-132	4.70	20	L680529-09	WG704695
1,1-Dichloroethene	mg/l	0.0248	0.0259	99.3	51.1-140	4.29	20.2	L680529-09	WG704695
1,1-Dichloropropene	mg/l	0.0268	0.0273	107.	57.3-136	1.80	20	L680529-09	WG704695
1,2,3-Trichlorobenzene	mg/l	0.0239	0.0240	95.7	59.1-138	0.160	23.7	L680529-09	WG704695
1,2,3-Trichloropropane	mg/l	0.0216	0.0220	86.2	61.4-128	1.80	22.4	L680529-09	WG704695
1,2,3-Trimethylbenzene	mg/l	0.0215	0.0209	86.1	61.3-122	2.99	20	L680529-09	WG704695
1,2,4-Trichlorobenzene	mg/l	0.0251	0.0252	100.	63.6-143	0.460	21.9	L680529-09	WG704695
1,2,4-Trimethylbenzene	mg/l	0.0227	0.0226	90.8	57.4-137	0.660	20	L680529-09	WG704695
1,2-Dibromo-3-Chloropropane	mg/l	0.0237	0.0239	94.6	57.3-136	0.840	27	L680529-09	WG704695
1,2-Dibromoethane	mg/l	0.0255	0.0243	102.	67.1-125	4.83	20	L680529-09	WG704695

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Duncklee and Dunham
Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L681090

February 11, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,2-Dichlorobenzene	mg/l	0.0238	0.0236	95.2	68.2-123	1.01	20	L680529-09	WG704695
1,2-Dichloroethane	mg/l	0.0237	0.0236	94.6	60-126	0.120	20	L680529-09	WG704695
1,2-Dichloropropane	mg/l	0.0276	0.0269	110.	64.2-123	2.41	20	L680529-09	WG704695
1,3,5-Trimethylbenzene	mg/l	0.0235	0.0229	94.1	63.6-132	2.54	20.5	L680529-09	WG704695
1,3-Dichlorobenzene	mg/l	0.0220	0.0215	87.9	63.1-131	2.32	20	L680529-09	WG704695
1,3-Dichloropropane	mg/l	0.0259	0.0243	103.	67.9-121	6.26	20	L680529-09	WG704695
1,4-Dichlorobenzene	mg/l	0.0247	0.0238	94.2	68.6-123	3.43	20	L680529-09	WG704695
2,2-Dichloropropane	mg/l	0.0240	0.0247	96.0	50.5-144	2.97	21.9	L680529-09	WG704695
2-Butanone (MEK)	mg/l	0.108	0.110	86.0	22.4-138	1.94	27	L680529-09	WG704695
2-Chloroethyl vinyl ether	mg/l	0.0183	0.0390	14.6	10-155	72.3*	20	L680529-09	WG704695
2-Chlorotoluene	mg/l	0.0221	0.0212	88.3	63.6-128	4.03	20	L680529-09	WG704695
4-Chlorotoluene	mg/l	0.0232	0.0227	93.0	65.7-127	2.39	20	L680529-09	WG704695
4-Methyl-2-pentanone (MIBK)	mg/l	0.132	0.133	106.	60.8-140	0.410	25.1	L680529-09	WG704695
Acetone	mg/l	0.0582	0.0623	42.8	10-130	6.79	27.9	L680529-09	WG704695
Acrolein	mg/l	0.227	0.250	182.	10-200	9.39	27.7	L680529-09	WG704695
Acrylonitrile	mg/l	0.145	0.152	116.	49.4-133	5.27	25.3	L680529-09	WG704695
Benzene	mg/l	0.0266	0.0268	106.	54.3-133	0.690	20	L680529-09	WG704695
Bromobenzene	mg/l	0.0236	0.0230	94.3	63.9-124	2.30	20	L680529-09	WG704695
Bromodichloromethane	mg/l	0.0228	0.0221	91.1	63.9-121	3.19	20	L680529-09	WG704695
Bromoform	mg/l	0.0224	0.0223	89.7	59.5-134	0.480	20.5	L680529-09	WG704695
Bromomethane	mg/l	0.0272	0.0285	109.	41.7-155	4.36	21.9	L680529-09	WG704695
Carbon tetrachloride	mg/l	0.0245	0.0253	97.8	55.7-134	3.28	20	L680529-09	WG704695
Chlorobenzene	mg/l	0.0283	0.0266	99.0	67-125	6.18	20	L680529-09	WG704695
Chlorodibromomethane	mg/l	0.0245	0.0230	98.2	64.3-125	6.62	20.8	L680529-09	WG704695
Chloroethane	mg/l	0.0255	0.0264	102.	51.5-136	3.36	40	L680529-09	WG704695
Chloroform	mg/l	0.0240	0.0250	95.9	63-129	4.23	20	L680529-09	WG704695
Chloromethane	mg/l	0.0272	0.0285	109.	42.4-135	4.43	20	L680529-09	WG704695
cis-1,2-Dichloroethene	mg/l	0.0256	0.0266	102.	59.2-129	3.80	20	L680529-09	WG704695
cis-1,3-Dichloropropene	mg/l	0.0272	0.0257	109.	66.4-125	5.78	20	L680529-09	WG704695
Di-isopropyl ether	mg/l	0.0277	0.0288	111.	56.9-136	3.83	20	L680529-09	WG704695
Dibromomethane	mg/l	0.0253	0.0248	101.	68.2-124	2.07	20	L680529-09	WG704695
Dichlorodifluoromethane	mg/l	0.0278	0.0282	111.	40.6-144	1.43	20.2	L680529-09	WG704695
Ethylbenzene	mg/l	0.0252	0.0240	101.	61.4-133	4.56	20	L680529-09	WG704695
Hexachloro-1,3-butadiene	mg/l	0.0231	0.0222	92.4	55.1-136	4.09	23.6	L680529-09	WG704695
Isopropylbenzene	mg/l	0.0261	0.0256	104.	66.8-141	1.89	20	L680529-09	WG704695
Methyl tert-butyl ether	mg/l	0.0255	0.0264	97.9	57.7-134	3.62	20	L680529-09	WG704695
Methylene Chloride	mg/l	0.0253	0.0265	99.3	58.1-122	4.66	20	L680529-09	WG704695
n-Butylbenzene	mg/l	0.0266	0.0256	106.	62.7-140	3.85	20.3	L680529-09	WG704695
n-Propylbenzene	mg/l	0.0242	0.0235	97.0	65.9-131	2.93	20	L680529-09	WG704695
Naphthalene	mg/l	0.0222	0.0232	88.9	58-135	4.38	25.5	L680529-09	WG704695
p-Isopropyltoluene	mg/l	0.0237	0.0234	94.9	63.2-139	1.30	20.4	L680529-09	WG704695
sec-Butylbenzene	mg/l	0.0237	0.0233	94.7	62.2-136	1.39	20.3	L680529-09	WG704695
Styrene	mg/l	0.0251	0.0239	100.	66.8-133	4.83	20	L680529-09	WG704695
tert-Butylbenzene	mg/l	0.0239	0.0236	95.6	63.3-134	1.38	21	L680529-09	WG704695
Tetrachloroethene	mg/l	0.0248	0.0238	99.2	53-139	3.96	20	L680529-09	WG704695
Toluene	mg/l	0.0260	0.0248	104.	61.4-130	4.77	20	L680529-09	WG704695
trans-1,2-Dichloroethene	mg/l	0.0260	0.0265	104.	56.5-129	1.87	20	L680529-09	WG704695
trans-1,3-Dichloropropene	mg/l	0.0263	0.0233	105.	64.1-128	12.0	20	L680529-09	WG704695
Trichloroethene	mg/l	0.0244	0.0246	97.5	44.1-149	0.850	20	L680529-09	WG704695
Trichlorofluoromethane	mg/l	0.0231	0.0238	92.2	49.6-145	3.08	21.2	L680529-09	WG704695
Vinyl chloride	mg/l	0.0270	0.0282	108.	47.8-137	4.38	20	L680529-09	WG704695
Xylenes, Total	mg/l	0.0726	0.0714	96.8	63.3-131	1.73	20	L680529-09	WG704695
4-Bromofluorobenzene				91.20	71-126				WG704695
Dibromofluoromethane				95.40	78.3-121				WG704695
Toluene-d8				105.0	88.5-111				WG704695
a,a,a-Trifluorotoluene				96.80	85-114				WG704695
Mercury	mg/l	0.00298	0.00293	97.9	80-120	2.00	20	L680871-19	WG704741

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L681090

February 11, 2014

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Antimony	mg/l	0.0515	0.0500	102.	75-125	2.96	20	L681090-09	WG704800
Arsenic	mg/l	0.0528	0.0516	104.	75-125	2.30	20	L681090-09	WG704800
Lead	mg/l	0.0516	0.0510	103.	75-125	1.17	20	L681090-09	WG704800
Thallium	mg/l	0.0514	0.0510	103.	75-125	0.781	20	L681090-09	WG704800

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

WG704676: R2882156: L681090-01 02 03 04 05 06 07 08
WG704695: R2882330: L681090-01 02 03 04 05 06 07 08 09
WG704741: R2882418: L681090-01 02 03 04 05 06 07 08
WG704789: R2882528: L681090-01 02 05 06
WG705187: R2883405 R2883682: L681090-03 04 07 08 09
WG704800: R2883810: L681090-01 02 03 04 05 06 07 08

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L681090

February 11, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Duncklee & Dunham
511 Keisler Dr.
Cary, North Carolina 27518

Billing Information:
Quote #: DUNDUNNC101413S

Report to: **Daphne Jones; Matt Flinchum**

Email To: **daphne; matt@dunkleedunham.com**

Project Description: **Dorothea Dix Campus**

City/State Collected: **Raleigh, NC**

Phone: **919-858-9898**
Fax: **919-858-9899**

Client Project # **201336**

Lab Project #

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No ___Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LABS SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L#: **I110**

Acctnum: **DUNDUNNC**
Template:
Prelogin:
TSR: **Hunt**
Cooler:
Shipped Via: **Raleigh Serv**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs x 8260B + TICs (QA/QC-NoTICs-note on COC)	SVOCs x 8270D + TICs (QA/QC-NoTICs-note on COC	Total PP Metals:(6010C/7471A or 6010C/7470A/6020)							Rem./Contaminant	Sample # (lab only)
DOP-MW-1	G	GW		2/3/14	0912	5	X	X	X								-01
16-MW-1					0912		X	X	X								02
17-MW-2					1240		X	X	X								03
17-MW-3					1105		X	X	X								04
18-MW-1					1707		X	X	X								05
18-MW-2					1357		X	X	X								06
18-MW-3					1455		X	X	X								07
18-MW-L1					1605		X	X	X								08
GW-EB-2					1740		X	X	X								09
Trip blank						1	X										10

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other _____

pH _____ Temp _____
Flow _____ Other _____

Remarks: NO TICs for GW-EB-2, Trip blank

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	2/3/14	18:20	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
	2/3/14	18:20	

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ Sw

Temp: 1.4 °C Bottles Received: 46

Date: 2-4-14 Time: 1330

Condition: (lab use only) OK

COC Seal Intact: ___Y ___N ___NA

pH Checked: <2 NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 16-MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-02

Date Collected: 2/3/2014

Lab File ID: 0205_51

Date Analyzed: 2/5/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 16-MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-02

Date Collected: 2/3/2014

Lab File ID: 0205A_23

Date Analyzed: 2/6/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
019550-08-4	3,4-Dimethyl-3-hexanol	4.58	0.013	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: DUP-MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-01

Date Collected: 2/3/2014

Lab File ID: 0205_50

Date Analyzed: 2/5/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: DUP-MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-01

Date Collected: 2/3/2014

Lab File ID: 0205A_22

Date Analyzed: 2/6/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 1

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
005582-82-1	3-Heptanol, 3-methyl-	4.58	0.012	83.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 17-MW-2

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-03

Date Collected: 2/3/2014

Lab File ID: 0205_52

Date Analyzed: 2/5/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 17-MW-2

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-03

Date Collected: 2/3/2014

Lab File ID: 0207A_15

Date Analyzed: 2/7/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 17-MW-3

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-04

Date Collected: 2/3/2014

Lab File ID: 0205_53

Date Analyzed: 2/5/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 17-MW-3

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-04

Date Collected: 2/3/2014

Lab File ID: 0207A_16

Date Analyzed: 2/7/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 18-MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-05

Date Collected: 2/3/2014

Lab File ID: 0205_54

Date Analyzed: 2/5/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 18-MW-1

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-05

Date Collected: 2/3/2014

Lab File ID: 0205A_26

Date Analyzed: 2/6/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 18-MW-2

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-06

Date Collected: 2/3/2014

Lab File ID: 0205_55

Date Analyzed: 2/5/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 18-MW-2

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-06

Date Collected: 2/3/2014

Lab File ID: 0205A_27

Date Analyzed: 2/6/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 18-MW-3

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-07

Date Collected: 2/3/2014

Lab File ID: 0205_56

Date Analyzed: 2/5/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 18-MW-3

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-07

Date Collected: 2/3/2014

Lab File ID: 0207A_17

Date Analyzed: 2/7/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 18-MW-4

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-08

Date Collected: 2/3/2014

Lab File ID: 0205_57

Date Analyzed: 2/5/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 0

Concentration units:

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

Environmental Science Corp.
Laboratory Services

SEMI-VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client ID: 18-MW-4

Client Name: Duncklee and Dunham

Project Desc. Dorothea Dix Campus

Matrix: WATER

ESC Sample No: L681090-08

Date Collected: 2/3/2014

Lab File ID: 0207A_18

Date Analyzed: 2/7/2014

Dilution Factor: 1.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Concentration units:

Number of TICs Found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA

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Page

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Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

Report Summary

Friday February 28, 2014

Report Number: L685093
Samples Received: 02/27/14
Client Project: 201336

Description: Dorothea Dix Campus

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 28,2014

ESC Sample # : L685093-01

Date Received : February 27, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-HA-I 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/26/14 11:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	78.1	0.0333		%		2540 G-2	02/28/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.32	2.1	mg/kg		8270D	02/27/14	50
Acenaphthylene	0.58	0.34	2.1	mg/kg	J	8270D	02/27/14	50
Anthracene	1.2	0.32	2.1	mg/kg	J	8270D	02/27/14	50
Benzidine	U	3.2	21.	mg/kg		8270D	02/27/14	50
Benzo(a)anthracene	2.3	0.21	2.1	mg/kg		8270D	02/27/14	50
Benzo(b)fluoranthene	1.8	0.35	2.1	mg/kg	J	8270D	02/27/14	50
Benzo(k)fluoranthene	0.65	0.29	2.1	mg/kg	J	8270D	02/27/14	50
Benzo(g,h,i)perylene	1.0	0.36	2.1	mg/kg	J	8270D	02/27/14	50
Benzo(a)pyrene	1.7	0.27	2.1	mg/kg	J	8270D	02/27/14	50
Bis(2-chlorethoxy)methane	U	0.38	21.	mg/kg		8270D	02/27/14	50
Bis(2-chloroethyl)ether	U	0.45	21.	mg/kg		8270D	02/27/14	50
Bis(2-chloroisopropyl)ether	U	0.38	21.	mg/kg		8270D	02/27/14	50
4-Bromophenyl-phenylether	U	0.57	21.	mg/kg		8270D	02/27/14	50
2-Chloronaphthalene	U	0.32	2.1	mg/kg		8270D	02/27/14	50
4-Chlorophenyl-phenylether	U	0.31	21.	mg/kg		8270D	02/27/14	50
Chrysene	3.1	0.28	2.1	mg/kg		8270D	02/27/14	50
Dibenz(a,h)anthracene	0.72	0.41	2.1	mg/kg	J	8270D	02/27/14	50
3,3-Dichlorobenzidine	U	4.0	21.	mg/kg		8270D	02/27/14	50
2,4-Dinitrotoluene	U	0.30	21.	mg/kg		8270D	02/27/14	50
2,6-Dinitrotoluene	U	0.37	21.	mg/kg		8270D	02/27/14	50
Fluoranthene	1.8	0.25	2.1	mg/kg	J	8270D	02/27/14	50
Fluorene	U	0.34	2.1	mg/kg		8270D	02/27/14	50
Hexachlorobenzene	U	0.43	21.	mg/kg		8270D	02/27/14	50
Hexachloro-1,3-butadiene	U	0.50	21.	mg/kg		8270D	02/27/14	50
Hexachlorocyclopentadiene	U	2.9	21.	mg/kg		8270D	02/27/14	50
Hexachloroethane	U	0.67	21.	mg/kg		8270D	02/27/14	50
Indeno(1,2,3-cd)pyrene	1.1	0.39	2.1	mg/kg	J	8270D	02/27/14	50
Isophorone	U	0.26	21.	mg/kg		8270D	02/27/14	50
Naphthalene	U	0.44	2.1	mg/kg		8270D	02/27/14	50
Nitrobenzene	U	0.35	21.	mg/kg		8270D	02/27/14	50
n-Nitrosodimethylamine	U	3.2	21.	mg/kg		8270D	02/27/14	50
n-Nitrosodiphenylamine	U	0.30	21.	mg/kg		8270D	02/27/14	50
n-Nitrosodi-n-propylamine	U	0.45	21.	mg/kg		8270D	02/27/14	50
Phenanthrene	5.4	0.26	2.1	mg/kg		8270D	02/27/14	50
Benzylbutyl phthalate	U	0.52	21.	mg/kg		8270D	02/27/14	50
Bis(2-ethylhexyl)phthalate	U	0.60	21.	mg/kg		8270D	02/27/14	50
Di-n-butyl phthalate	U	0.54	21.	mg/kg		8270D	02/27/14	50
Diethyl phthalate	U	0.34	21.	mg/kg		8270D	02/27/14	50
Dimethyl phthalate	U	0.27	21.	mg/kg		8270D	02/27/14	50
Di-n-octyl phthalate	U	0.45	21.	mg/kg		8270D	02/27/14	50

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 28,2014

ESC Sample # : L685093-01

Date Received : February 27, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-HA-I 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/26/14 11:00

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	3.8	0.62	2.1	mg/kg		8270D	02/27/14	50
1,2,4-Trichlorobenzene	U	0.44	21.	mg/kg		8270D	02/27/14	50
Acid Extractables								
4-Chloro-3-methylphenol	U	0.24	21.	mg/kg		8270D	02/27/14	50
2-Chlorophenol	U	0.42	21.	mg/kg		8270D	02/27/14	50
2,4-Dichlorophenol	U	0.37	21.	mg/kg		8270D	02/27/14	50
2,4-Dimethylphenol	U	2.4	21.	mg/kg		8270D	02/27/14	50
4,6-Dinitro-2-methylphenol	U	6.2	21.	mg/kg		8270D	02/27/14	50
2,4-Dinitrophenol	U	4.9	21.	mg/kg		8270D	02/27/14	50
2-Nitrophenol	U	0.65	21.	mg/kg		8270D	02/27/14	50
4-Nitrophenol	U	2.6	21.	mg/kg		8270D	02/27/14	50
Pentachlorophenol	U	2.4	21.	mg/kg		8270D	02/27/14	50
Phenol	U	0.35	21.	mg/kg		8270D	02/27/14	50
2,4,6-Trichlorophenol	U	0.39	21.	mg/kg		8270D	02/27/14	50
Surrogate Recovery								
2-Fluorophenol	64.1			% Rec.	J7	8270D	02/27/14	50
Phenol-d5	70.6			% Rec.	J7	8270D	02/27/14	50
Nitrobenzene-d5	105.			% Rec.	J7	8270D	02/27/14	50
2-Fluorobiphenyl	102.			% Rec.	J7	8270D	02/27/14	50
2,4,6-Tribromophenol	68.0			% Rec.	J7	8270D	02/27/14	50
p-Terphenyl-d14	52.5			% Rec.	J7	8270D	02/27/14	50

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 28,2014

ESC Sample # : L685093-02

Date Received : February 27, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-HA-H 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/26/14 11:05

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total Solids	81.0	0.0333		%		2540 G-2	02/28/14	1
Base/Neutral Extractables								
Acenaphthene	U	0.64	4.1	mg/kg		8270D	02/27/14	100
Acenaphthylene	1.6	0.67	4.1	mg/kg	J	8270D	02/27/14	100
Anthracene	2.1	0.63	4.1	mg/kg	J	8270D	02/27/14	100
Benzidine	U	6.4	41.	mg/kg		8270D	02/27/14	100
Benzo(a)anthracene	2.5	0.43	4.1	mg/kg	J	8270D	02/27/14	100
Benzo(b)fluoranthene	2.8	0.70	4.1	mg/kg	J	8270D	02/27/14	100
Benzo(k)fluoranthene	1.0	0.58	4.1	mg/kg	J	8270D	02/27/14	100
Benzo(g,h,i)perylene	0.91	0.72	4.1	mg/kg	J	8270D	02/27/14	100
Benzo(a)pyrene	1.8	0.55	4.1	mg/kg	J	8270D	02/27/14	100
Bis(2-chlorethoxy)methane	U	0.77	41.	mg/kg		8270D	02/27/14	100
Bis(2-chloroethyl)ether	U	0.90	41.	mg/kg		8270D	02/27/14	100
Bis(2-chloroisopropyl)ether	U	0.76	41.	mg/kg		8270D	02/27/14	100
4-Bromophenyl-phenylether	U	1.1	41.	mg/kg		8270D	02/27/14	100
2-Chloronaphthalene	U	0.64	4.1	mg/kg		8270D	02/27/14	100
4-Chlorophenyl-phenylether	U	0.63	41.	mg/kg		8270D	02/27/14	100
Chrysene	3.4	0.56	4.1	mg/kg	J	8270D	02/27/14	100
Dibenz(a,h)anthracene	U	0.82	4.1	mg/kg		8270D	02/27/14	100
3,3-Dichlorobenzidine	U	7.9	41.	mg/kg		8270D	02/27/14	100
2,4-Dinitrotoluene	U	0.61	41.	mg/kg		8270D	02/27/14	100
2,6-Dinitrotoluene	U	0.74	41.	mg/kg		8270D	02/27/14	100
Fluoranthene	2.3	0.50	4.1	mg/kg	J	8270D	02/27/14	100
Fluorene	U	0.68	4.1	mg/kg		8270D	02/27/14	100
Hexachlorobenzene	U	0.86	41.	mg/kg		8270D	02/27/14	100
Hexachloro-1,3-butadiene	U	1.0	41.	mg/kg		8270D	02/27/14	100
Hexachlorocyclopentadiene	U	5.9	41.	mg/kg		8270D	02/27/14	100
Hexachloroethane	U	1.3	41.	mg/kg		8270D	02/27/14	100
Indeno(1,2,3-cd)pyrene	1.0	0.77	4.1	mg/kg	J	8270D	02/27/14	100
Isophorone	U	0.52	41.	mg/kg		8270D	02/27/14	100
Naphthalene	U	0.89	4.1	mg/kg		8270D	02/27/14	100
Nitrobenzene	U	0.70	41.	mg/kg		8270D	02/27/14	100
n-Nitrosodimethylamine	U	6.5	41.	mg/kg		8270D	02/27/14	100
n-Nitrosodiphenylamine	U	0.59	41.	mg/kg		8270D	02/27/14	100
n-Nitrosodi-n-propylamine	U	0.91	41.	mg/kg		8270D	02/27/14	100
Phenanthrene	5.2	0.53	4.1	mg/kg		8270D	02/27/14	100
Benzylbutyl phthalate	U	1.0	41.	mg/kg		8270D	02/27/14	100
Bis(2-ethylhexyl)phthalate	U	1.2	41.	mg/kg		8270D	02/27/14	100
Di-n-butyl phthalate	U	1.1	41.	mg/kg		8270D	02/27/14	100
Diethyl phthalate	U	0.69	41.	mg/kg		8270D	02/27/14	100
Dimethyl phthalate	U	0.54	41.	mg/kg		8270D	02/27/14	100
Di-n-octyl phthalate	U	0.91	41.	mg/kg		8270D	02/27/14	100

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Daphne Jones; Matt Flinchum
Duncklee and Dunham
PO Box 639
Cary, NC 27512

February 28,2014

ESC Sample # : L685093-02

Date Received : February 27, 2014
Description : Dorothea Dix Campus

Site ID : RALEIGH, NC

Sample ID : 5-HA-H 6-12IN

Project # : 201336

Collected By : Phillip Jones
Collection Date : 02/26/14 11:05

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Pyrene	4.7	1.2	4.1	mg/kg		8270D	02/27/14	100
1,2,4-Trichlorobenzene	U	0.88	41.	mg/kg		8270D	02/27/14	100
Acid Extractables								
4-Chloro-3-methylphenol	U	0.48	41.	mg/kg		8270D	02/27/14	100
2-Chlorophenol	U	0.83	41.	mg/kg		8270D	02/27/14	100
2,4-Dichlorophenol	U	0.75	41.	mg/kg		8270D	02/27/14	100
2,4-Dimethylphenol	U	4.7	41.	mg/kg		8270D	02/27/14	100
4,6-Dinitro-2-methylphenol	U	12.	41.	mg/kg		8270D	02/27/14	100
2,4-Dinitrophenol	U	9.8	41.	mg/kg		8270D	02/27/14	100
2-Nitrophenol	U	1.3	41.	mg/kg		8270D	02/27/14	100
4-Nitrophenol	U	5.2	41.	mg/kg		8270D	02/27/14	100
Pentachlorophenol	U	4.8	41.	mg/kg		8270D	02/27/14	100
Phenol	U	0.70	41.	mg/kg		8270D	02/27/14	100
2,4,6-Trichlorophenol	U	0.78	41.	mg/kg		8270D	02/27/14	100
Surrogate Recovery								
2-Fluorophenol	64.3			% Rec.	J7	8270D	02/27/14	100
Phenol-d5	68.6			% Rec.	J7	8270D	02/27/14	100
Nitrobenzene-d5	120.			% Rec.	J7	8270D	02/27/14	100
2-Fluorobiphenyl	98.1			% Rec.	J7	8270D	02/27/14	100
2,4,6-Tribromophenol	53.3			% Rec.	J7	8270D	02/27/14	100
p-Terphenyl-d14	75.2			% Rec.	J7	8270D	02/27/14	100

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 02/28/14 15:27 Printed: 02/28/14 15:28

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L685093-01	WG708295	SAMP	Acenaphthylene	R2888984	J
	WG708295	SAMP	Anthracene	R2888984	J
	WG708295	SAMP	Benzo(b)fluoranthene	R2888984	J
	WG708295	SAMP	Benzo(k)fluoranthene	R2888984	J
	WG708295	SAMP	Benzo(g,h,i)perylene	R2888984	J
	WG708295	SAMP	Benzo(a)pyrene	R2888984	J
	WG708295	SAMP	Dibenz(a,h)anthracene	R2888984	J
	WG708295	SAMP	Fluoranthene	R2888984	J
	WG708295	SAMP	Indeno(1,2,3-cd)pyrene	R2888984	J
	WG708295	SAMP	2-Fluorophenol	R2888984	J7
	WG708295	SAMP	Phenol-d5	R2888984	J7
	WG708295	SAMP	Nitrobenzene-d5	R2888984	J7
	WG708295	SAMP	2-Fluorobiphenyl	R2888984	J7
	WG708295	SAMP	2,4,6-Tribromophenol	R2888984	J7
	WG708295	SAMP	p-Terphenyl-d14	R2888984	J7
L685093-02	WG708295	SAMP	Acenaphthylene	R2888984	J
	WG708295	SAMP	Anthracene	R2888984	J
	WG708295	SAMP	Benzo(a)anthracene	R2888984	J
	WG708295	SAMP	Benzo(b)fluoranthene	R2888984	J
	WG708295	SAMP	Benzo(k)fluoranthene	R2888984	J
	WG708295	SAMP	Benzo(g,h,i)perylene	R2888984	J
	WG708295	SAMP	Benzo(a)pyrene	R2888984	J
	WG708295	SAMP	Chrysene	R2888984	J
	WG708295	SAMP	Fluoranthene	R2888984	J
	WG708295	SAMP	Indeno(1,2,3-cd)pyrene	R2888984	J
	WG708295	SAMP	2-Fluorophenol	R2888984	J7
	WG708295	SAMP	Phenol-d5	R2888984	J7
	WG708295	SAMP	Nitrobenzene-d5	R2888984	J7
	WG708295	SAMP	2-Fluorobiphenyl	R2888984	J7
	WG708295	SAMP	2,4,6-Tribromophenol	R2888984	J7
	WG708295	SAMP	p-Terphenyl-d14	R2888984	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/28/14 at 15:28:04

TSR Signing Reports: 350
R2 - Rush: Next Day

MDL/RDL; Use ASG, COG, TLG not ICP on GW; Attach COC to back of report PDF; PPB

Sample: L685093-01 Account: DUNDUNNC Received: 02/27/14 09:30 Due Date: 02/28/14 00:00 RPT Date: 02/28/14 15:27

Sample: L685093-02 Account: DUNDUNNC Received: 02/27/14 09:30 Due Date: 02/28/14 00:00 RPT Date: 02/28/14 15:27

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Tax I.D. 62-0814289

Est. 1970

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Daphne Jones; Matt Flinchum
PO Box 639

Cary, NC 27512

Quality Assurance Report
Level II

L685093

February 28, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG708379	02/28/14 08:22
1,2,4-Trichlorobenzene	< .333	mg/kg			WG708295	02/27/14 17:06
2,4,6-Trichlorophenol	< .333	mg/kg			WG708295	02/27/14 17:06
2,4-Dichlorophenol	< .333	mg/kg			WG708295	02/27/14 17:06
2,4-Dimethylphenol	< .333	mg/kg			WG708295	02/27/14 17:06
2,4-Dinitrophenol	< .333	mg/kg			WG708295	02/27/14 17:06
2,4-Dinitrotoluene	< .333	mg/kg			WG708295	02/27/14 17:06
2,6-Dinitrotoluene	< .333	mg/kg			WG708295	02/27/14 17:06
2-Chloronaphthalene	< .033	mg/kg			WG708295	02/27/14 17:06
2-Chlorophenol	< .333	mg/kg			WG708295	02/27/14 17:06
2-Nitrophenol	< .333	mg/kg			WG708295	02/27/14 17:06
3,3-Dichlorobenzidine	< .333	mg/kg			WG708295	02/27/14 17:06
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG708295	02/27/14 17:06
4-Bromophenyl-phenylether	< .333	mg/kg			WG708295	02/27/14 17:06
4-Chloro-3-methylphenol	< .333	mg/kg			WG708295	02/27/14 17:06
4-Chlorophenyl-phenylether	< .333	mg/kg			WG708295	02/27/14 17:06
4-Nitrophenol	< .333	mg/kg			WG708295	02/27/14 17:06
Acenaphthene	< .033	mg/kg			WG708295	02/27/14 17:06
Acenaphthylene	< .033	mg/kg			WG708295	02/27/14 17:06
Anthracene	< .033	mg/kg			WG708295	02/27/14 17:06
Benzidine	< .333	mg/kg			WG708295	02/27/14 17:06
Benzo(a)anthracene	< .033	mg/kg			WG708295	02/27/14 17:06
Benzo(a)pyrene	< .033	mg/kg			WG708295	02/27/14 17:06
Benzo(b)fluoranthene	< .033	mg/kg			WG708295	02/27/14 17:06
Benzo(g,h,i)perylene	< .033	mg/kg			WG708295	02/27/14 17:06
Benzo(k)fluoranthene	< .033	mg/kg			WG708295	02/27/14 17:06
Benzylbutyl phthalate	< .333	mg/kg			WG708295	02/27/14 17:06
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG708295	02/27/14 17:06
Bis(2-chloroethyl)ether	< .333	mg/kg			WG708295	02/27/14 17:06
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG708295	02/27/14 17:06
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG708295	02/27/14 17:06
Chrysene	< .033	mg/kg			WG708295	02/27/14 17:06
Di-n-butyl phthalate	< .333	mg/kg			WG708295	02/27/14 17:06
Di-n-octyl phthalate	< .333	mg/kg			WG708295	02/27/14 17:06
Dibenz(a,h)anthracene	< .033	mg/kg			WG708295	02/27/14 17:06
Diethyl phthalate	< .333	mg/kg			WG708295	02/27/14 17:06
Dimethyl phthalate	< .333	mg/kg			WG708295	02/27/14 17:06
Fluoranthene	< .033	mg/kg			WG708295	02/27/14 17:06
Fluorene	< .033	mg/kg			WG708295	02/27/14 17:06
Hexachloro-1,3-butadiene	< .333	mg/kg			WG708295	02/27/14 17:06
Hexachlorobenzene	< .333	mg/kg			WG708295	02/27/14 17:06
Hexachlorocyclopentadiene	< .333	mg/kg			WG708295	02/27/14 17:06
Hexachloroethane	< .333	mg/kg			WG708295	02/27/14 17:06
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG708295	02/27/14 17:06
Isophorone	< .333	mg/kg			WG708295	02/27/14 17:06
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG708295	02/27/14 17:06
n-Nitrosodimethylamine	< .333	mg/kg			WG708295	02/27/14 17:06
n-Nitrosodiphenylamine	< .333	mg/kg			WG708295	02/27/14 17:06
Naphthalene	< .033	mg/kg			WG708295	02/27/14 17:06
Nitrobenzene	< .333	mg/kg			WG708295	02/27/14 17:06
Pentachlorophenol	< .333	mg/kg			WG708295	02/27/14 17:06
Phenanthrene	< .033	mg/kg			WG708295	02/27/14 17:06
Phenol	< .333	mg/kg			WG708295	02/27/14 17:06
Pyrene	< .033	mg/kg			WG708295	02/27/14 17:06
2,4,6-Tribromophenol		% Rec.	77.80	21.6-142	WG708295	02/27/14 17:06
2-Fluorobiphenyl		% Rec.	85.40	34.9-129	WG708295	02/27/14 17:06
2-Fluorophenol		% Rec.	79.50	21.1-116	WG708295	02/27/14 17:06

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Cary, NC 27512

Quality Assurance Report
Level II

L685093

February 28, 2014

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Nitrobenzene-d5	% Rec.		77.50		21.9-129		02/27/14 17:06
Phenol-d5	% Rec.		81.20		26.3-121		02/27/14 17:06
p-Terphenyl-d14	% Rec.		76.50		21.5-128		02/27/14 17:06

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Total Solids	%	82.0	82.2	0.274	5	L685143-09	WG708379

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
			Laboratory Control Sample			
Total Solids	%	50	50.0	99.9	85-115	WG708379
1,2,4-Trichlorobenzene	mg/kg	.333	0.249	74.9	39.8-100	WG708295
2,4,6-Trichlorophenol	mg/kg	.333	0.265	79.6	44.4-108	WG708295
2,4-Dichlorophenol	mg/kg	.333	0.275	82.5	46.2-109	WG708295
2,4-Dimethylphenol	mg/kg	.333	0.273	82.0	42.2-110	WG708295
2,4-Dinitrophenol	mg/kg	.333	0.195	58.6	10-105	WG708295
2,4-Dinitrotoluene	mg/kg	.333	0.297	89.3	53-112	WG708295
2,6-Dinitrotoluene	mg/kg	.333	0.311	93.3	51.6-110	WG708295
2-Chloronaphthalene	mg/kg	.333	0.291	87.4	47.1-105	WG708295
2-Chlorophenol	mg/kg	.333	0.265	79.5	40.8-103	WG708295
2-Nitrophenol	mg/kg	.333	0.285	85.6	44.2-113	WG708295
3,3-Dichlorobenzidine	mg/kg	.333	0.226	68.0	21-101	WG708295
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.266	79.8	23.1-119	WG708295
4-Bromophenyl-phenylether	mg/kg	.333	0.291	87.4	51.4-110	WG708295
4-Chloro-3-methylphenol	mg/kg	.333	0.290	87.2	51.1-113	WG708295
4-Chlorophenyl-phenylether	mg/kg	.333	0.282	84.6	48.1-108	WG708295
4-Nitrophenol	mg/kg	.333	0.258	77.3	34.8-109	WG708295
Acenaphthene	mg/kg	.333	0.277	83.1	48.9-107	WG708295
Acenaphthylene	mg/kg	.333	0.282	84.7	49.2-111	WG708295
Anthracene	mg/kg	.333	0.282	84.5	52-112	WG708295
Benzidine	mg/kg	.333	0.0683	20.5	0-48	WG708295
Benzo(a)anthracene	mg/kg	.333	0.281	84.3	52.3-106	WG708295
Benzo(a)pyrene	mg/kg	.333	0.244	73.1	51.9-106	WG708295
Benzo(b)fluoranthene	mg/kg	.333	0.267	80.3	51.3-106	WG708295
Benzo(g,h,i)perylene	mg/kg	.333	0.291	87.5	45.8-108	WG708295
Benzo(k)fluoranthene	mg/kg	.333	0.261	78.3	52.9-107	WG708295
Benzylbutyl phthalate	mg/kg	.333	0.267	80.3	47.5-115	WG708295
Bis(2-chlorethoxy)methane	mg/kg	.333	0.270	81.0	44.9-108	WG708295
Bis(2-chloroethyl)ether	mg/kg	.333	0.260	78.2	32.5-112	WG708295
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.271	81.5	40.4-99	WG708295
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.271	81.5	48.1-116	WG708295
Chrysene	mg/kg	.333	0.280	84.0	54.4-110	WG708295
Di-n-butyl phthalate	mg/kg	.333	0.278	83.5	49.7-113	WG708295
Di-n-octyl phthalate	mg/kg	.333	0.277	83.1	49.6-112	WG708295
Dibenz(a,h)anthracene	mg/kg	.333	0.282	84.6	45.7-111	WG708295
Diethyl phthalate	mg/kg	.333	0.265	79.5	52-112	WG708295
Dimethyl phthalate	mg/kg	.333	0.284	85.3	51.4-108	WG708295
Fluoranthene	mg/kg	.333	0.289	86.7	53.7-110	WG708295
Fluorene	mg/kg	.333	0.274	82.2	51.1-109	WG708295
Hexachloro-1,3-butadiene	mg/kg	.333	0.270	81.1	41.5-112	WG708295
Hexachlorobenzene	mg/kg	.333	0.284	85.3	43.2-104	WG708295
Hexachlorocyclopentadiene	mg/kg	.333	0.184	55.3	13.5-123	WG708295
Hexachloroethane	mg/kg	.333	0.268	80.6	36.2-103	WG708295
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.284	85.2	47.5-109	WG708295
Isophorone	mg/kg	.333	0.310	93.2	28.8-104	WG708295

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L685093

February 28, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
n-Nitrosodi-n-propylamine	mg/kg	.333	0.285	85.6	43.3-109	WG708295
n-Nitrosodimethylamine	mg/kg	.333	0.302	90.8	18.1-122	WG708295
n-Nitrosodiphenylamine	mg/kg	.333	0.270	81.0	48.8-107	WG708295
Naphthalene	mg/kg	.333	0.250	75.0	43.4-103	WG708295
Nitrobenzene	mg/kg	.333	0.285	85.5	40.7-109	WG708295
Pentachlorophenol	mg/kg	.333	0.262	78.8	16.2-102	WG708295
Phenanthrene	mg/kg	.333	0.273	81.8	51.6-107	WG708295
Phenol	mg/kg	.333	0.290	87.1	41.5-106	WG708295
Pyrene	mg/kg	.333	0.265	79.6	47.1-108	WG708295
2,4,6-Tribromophenol				86.80	21.6-142	WG708295
2-Fluorobiphenyl				85.10	34.9-129	WG708295
2-Fluorophenol				80.00	21.1-116	WG708295
Nitrobenzene-d5				81.60	21.9-129	WG708295
Phenol-d5				80.70	26.3-121	WG708295
p-Terphenyl-d14				68.60	21.5-128	WG708295

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,2,4-Trichlorobenzene	mg/kg	0.273	0.249	82.0	39.8-100	8.84	20	WG708295
2,4,6-Trichlorophenol	mg/kg	0.297	0.265	89.0	44.4-108	11.4	20	WG708295
2,4-Dichlorophenol	mg/kg	0.294	0.275	88.0	46.2-109	6.61	20	WG708295
2,4-Dimethylphenol	mg/kg	0.302	0.273	91.0	42.2-110	10.0	20	WG708295
2,4-Dinitrophenol	mg/kg	0.212	0.195	64.0	10-105	8.43	36.5	WG708295
2,4-Dinitrotoluene	mg/kg	0.322	0.297	97.0	53-112	8.05	20	WG708295
2,6-Dinitrotoluene	mg/kg	0.344	0.311	103.	51.6-110	10.2	20	WG708295
2-Chloronaphthalene	mg/kg	0.310	0.291	93.0	47.1-105	6.31	20	WG708295
2-Chlorophenol	mg/kg	0.272	0.265	82.0	40.8-103	2.84	20	WG708295
2-Nitrophenol	mg/kg	0.306	0.285	92.0	44.2-113	7.18	20.9	WG708295
3,3-Dichlorobenzidine	mg/kg	0.264	0.226	79.0	21-101	15.4	22	WG708295
4,6-Dinitro-2-methylphenol	mg/kg	0.328	0.266	98.0	23.1-119	20.9	23.7	WG708295
4-Bromophenyl-phenylether	mg/kg	0.306	0.291	92.0	51.4-110	5.01	20	WG708295
4-Chloro-3-methylphenol	mg/kg	0.325	0.290	98.0	51.1-113	11.2	20	WG708295
4-Chlorophenyl-phenylether	mg/kg	0.316	0.282	95.0	48.1-108	11.5	20	WG708295
4-Nitrophenol	mg/kg	0.301	0.258	90.0	34.8-109	15.7	20	WG708295
Acenaphthene	mg/kg	0.312	0.277	94.0	48.9-107	11.9	20	WG708295
Acenaphthylene	mg/kg	0.312	0.282	94.0	49.2-111	10.2	20	WG708295
Anthracene	mg/kg	0.301	0.282	90.0	52-112	6.57	20	WG708295
Benzidine	mg/kg	0.0720	0.0683	22.0	0-48	5.40	40	WG708295
Benzo(a)anthracene	mg/kg	0.322	0.281	97.0	52.3-106	13.7	20	WG708295
Benzo(a)pyrene	mg/kg	0.288	0.244	86.0	51.9-106	16.6	20	WG708295
Benzo(b)fluoranthene	mg/kg	0.320	0.267	96.0	51.3-106	18.0	20	WG708295
Benzo(g,h,i)perylene	mg/kg	0.329	0.291	99.0	45.8-108	12.3	20	WG708295
Benzo(k)fluoranthene	mg/kg	0.299	0.261	90.0	52.9-107	13.6	20	WG708295
Benzylbutyl phthalate	mg/kg	0.321	0.267	96.0	47.5-115	18.1	20	WG708295
Bis(2-chlorethoxy)methane	mg/kg	0.297	0.270	89.0	44.9-108	9.70	20	WG708295
Bis(2-chloroethyl)ether	mg/kg	0.273	0.260	82.0	32.5-112	4.58	26	WG708295
Bis(2-chloroisopropyl)ether	mg/kg	0.292	0.271	88.0	40.4-99	7.39	20.7	WG708295
Bis(2-ethylhexyl)phthalate	mg/kg	0.327	0.271	98.0	48.1-116	18.5	20.5	WG708295
Chrysene	mg/kg	0.313	0.280	94.0	54.4-110	11.3	20	WG708295
Di-n-butyl phthalate	mg/kg	0.296	0.278	89.0	49.7-113	6.34	20	WG708295
Di-n-octyl phthalate	mg/kg	0.326	0.277	98.0	49.6-112	16.2	22	WG708295
Dibenz(a,h)anthracene	mg/kg	0.320	0.282	96.0	45.7-111	12.8	20	WG708295
Diethyl phthalate	mg/kg	0.302	0.265	91.0	52-112	13.2	20	WG708295
Dimethyl phthalate	mg/kg	0.309	0.284	93.0	51.4-108	8.55	20	WG708295
Fluoranthene	mg/kg	0.309	0.289	93.0	53.7-110	6.70	20	WG708295
Fluorene	mg/kg	0.303	0.274	91.0	51.1-109	10.1	20	WG708295
Hexachloro-1,3-butadiene	mg/kg	0.285	0.270	85.0	41.5-112	5.22	20	WG708295
Hexachlorobenzene	mg/kg	0.307	0.284	92.0	43.2-104	7.69	20.1	WG708295

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Fax (615) 758-5859

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Cary, NC 27512

Quality Assurance Report
Level II

L685093

February 28, 2014

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Hexachlorocyclopentadiene	mg/kg	0.217	0.184	65.0	13.5-123	16.3	20.7	WG708295
Hexachloroethane	mg/kg	0.265	0.268	80.0	36.2-103	1.26	22.7	WG708295
Indeno(1,2,3-cd)pyrene	mg/kg	0.322	0.284	97.0	47.5-109	12.7	20	WG708295
Isophorone	mg/kg	0.342	0.310	102.	28.8-104	9.56	20	WG708295
n-Nitrosodi-n-propylamine	mg/kg	0.292	0.285	88.0	43.3-109	2.43	20	WG708295
n-Nitrosodimethylamine	mg/kg	0.299	0.302	90.0	18.1-122	1.18	23.5	WG708295
n-Nitrosodiphenylamine	mg/kg	0.288	0.270	86.0	48.8-107	6.53	20	WG708295
Naphthalene	mg/kg	0.267	0.250	80.0	43.4-103	6.88	20	WG708295
Nitrobenzene	mg/kg	0.312	0.285	94.0	40.7-109	9.24	21	WG708295
Pentachlorophenol	mg/kg	0.275	0.262	82.0	16.2-102	4.48	22.9	WG708295
Phenanthrene	mg/kg	0.303	0.273	91.0	51.6-107	10.6	20	WG708295
Phenol	mg/kg	0.291	0.290	87.0	41.5-106	0.170	20	WG708295
Pyrene	mg/kg	0.316	0.265	95.0	47.1-108	17.5	20	WG708295
2,4,6-Tribromophenol				86.40	21.6-142			WG708295
2-Fluorobiphenyl				89.90	34.9-129			WG708295
2-Fluorophenol				80.60	21.1-116			WG708295
Nitrobenzene-d5				87.80	21.9-129			WG708295
Phenol-d5				82.80	26.3-121			WG708295
p-Terphenyl-d14				82.60	21.5-128			WG708295

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,2,4-Trichlorobenzene	mg/kg	0.289	0.0	.333	87.0	36.5-114	L684815-03	WG708295
2,4,6-Trichlorophenol	mg/kg	0.388	0.0	.333	120.	33.8-133	L684815-03	WG708295
2,4-Dichlorophenol	mg/kg	0.349	0.0	.333	100.	34.8-134	L684815-03	WG708295
2,4-Dimethylphenol	mg/kg	0.388	0.0	.333	120.	12.3-149	L684815-03	WG708295
2,4-Dinitrophenol	mg/kg	0.546	0.0	.333	160.*	10-121	L684815-03	WG708295
2,4-Dinitrotoluene	mg/kg	0.343	0.0	.333	100.	27.8-147	L684815-03	WG708295
2,6-Dinitrotoluene	mg/kg	0.378	0.0	.333	110.	36.5-137	L684815-03	WG708295
2-Chloronaphthalene	mg/kg	0.293	0.0	.333	88.0	37.5-123	L684815-03	WG708295
2-Chlorophenol	mg/kg	0.255	0.0	.333	76.0	33.2-121	L684815-03	WG708295
2-Nitrophenol	mg/kg	0.377	0.0	.333	110.	29.5-144	L684815-03	WG708295
3,3-Dichlorobenzidine	mg/kg	0.305	0.0	.333	92.0	10-129	L684815-03	WG708295
4,6-Dinitro-2-methylphenol	mg/kg	0.298	0.0	.333	90.0	10-144	L684815-03	WG708295
4-Bromophenyl-phenylether	mg/kg	0.273	0.0	.333	82.0	39-130	L684815-03	WG708295
4-Chloro-3-methylphenol	mg/kg	0.436	0.0	.333	130.	27-154	L684815-03	WG708295
4-Chlorophenyl-phenylether	mg/kg	0.328	0.0	.333	98.0	37.9-123	L684815-03	WG708295
4-Nitrophenol	mg/kg	0.281	0.0	.333	84.0	20-133	L684815-03	WG708295
Acenaphthene	mg/kg	0.486	0.120	.333	110.	32.2-134	L684815-03	WG708295
Acenaphthylene	mg/kg	0.307	0.0	.333	92.0	38.7-129	L684815-03	WG708295
Anthracene	mg/kg	0.295	0.0649	.333	69.0	32.3-137	L684815-03	WG708295
Benzidine	mg/kg	0.0	0.0	.333	0.0	0-49.9	L684815-03	WG708295
Benzo(a)anthracene	mg/kg	0.245	0.0	.333	74.0	33.3-124	L684815-03	WG708295
Benzo(a)pyrene	mg/kg	0.235	0.0	.333	71.0	28.2-128	L684815-03	WG708295
Benzo(b)fluoranthene	mg/kg	0.248	0.0	.333	74.0	23.3-133	L684815-03	WG708295
Benzo(g,h,i)perylene	mg/kg	0.287	0.0	.333	86.0	10-127	L684815-03	WG708295
Benzo(k)fluoranthene	mg/kg	0.249	0.0	.333	75.0	31-129	L684815-03	WG708295
Benzylbutyl phthalate	mg/kg	0.237	0.0	.333	71.0	33.4-128	L684815-03	WG708295
Bis(2-chlorethoxy)methane	mg/kg	0.361	0.0	.333	110.	35-132	L684815-03	WG708295
Bis(2-chloroethyl)ether	mg/kg	0.275	0.0	.333	82.0	28.8-128	L684815-03	WG708295
Bis(2-chloroisopropyl)ether	mg/kg	0.302	0.0	.333	91.0	31.8-118	L684815-03	WG708295
Bis(2-ethylhexyl)phthalate	mg/kg	0.231	0.0	.333	69.0	21.8-141	L684815-03	WG708295
Chrysene	mg/kg	0.254	0.0	.333	76.0	36.3-129	L684815-03	WG708295
Di-n-butyl phthalate	mg/kg	0.240	0.0	.333	72.0	32.2-133	L684815-03	WG708295
Di-n-octyl phthalate	mg/kg	0.246	0.0	.333	74.0	28.5-128	L684815-03	WG708295
Dibenz(a,h)anthracene	mg/kg	0.280	0.0	.333	84.0	10.5-128	L684815-03	WG708295
Diethyl phthalate	mg/kg	0.139	0.0	.333	42.0	39.4-136	L684815-03	WG708295
Dimethyl phthalate	mg/kg	0.211	0.0	.333	63.0	35.8-137	L684815-03	WG708295

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Quality Assurance Report
Level II

L685093

February 28, 2014

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Fluoranthene	mg/kg	0.303	0.0	.333	91.0	27.9-138	L684815-03	WG708295
Fluorene	mg/kg	0.401	0.107	.333	88.0	34-133	L684815-03	WG708295
Hexachloro-1,3-butadiene	mg/kg	0.278	0.0	.333	84.0	36.5-125	L684815-03	WG708295
Hexachlorobenzene	mg/kg	0.258	0.0	.333	77.0	34.4-116	L684815-03	WG708295
Hexachlorocyclopentadiene	mg/kg	0.240	0.0	.333	72.0	10-124	L684815-03	WG708295
Hexachloroethane	mg/kg	0.599	0.0	.333	180.*	11.3-143	L684815-03	WG708295
Indeno(1,2,3-cd)pyrene	mg/kg	0.278	0.0	.333	84.0	10-128	L684815-03	WG708295
Isophorone	mg/kg	0.469	0.0387	.333	130.*	25.7-116	L684815-03	WG708295
n-Nitrosodi-n-propylamine	mg/kg	0.322	0.0	.333	97.0	33-134	L684815-03	WG708295
n-Nitrosodimethylamine	mg/kg	0.214	0.0	.333	64.0	19.2-127	L684815-03	WG708295
n-Nitrosodiphenylamine	mg/kg	0.732	0.271	.333	140.*	26.8-133	L684815-03	WG708295
Naphthalene	mg/kg	0.275	0.0	.333	82.0	36.4-121	L684815-03	WG708295
Nitrobenzene	mg/kg	0.420	0.0	.333	130.	30.9-134	L684815-03	WG708295
Pentachlorophenol	mg/kg	0.297	0.0	.333	89.0	10-139	L684815-03	WG708295
Phenanthrene	mg/kg	0.439	0.178	.333	78.0	30.8-137	L684815-03	WG708295
Phenol	mg/kg	0.295	0.0	.333	89.0	25.1-130	L684815-03	WG708295
Pyrene	mg/kg	0.278	0.0	.333	83.0	24.1-130	L684815-03	WG708295
2,4,6-Tribromophenol					61.90	21.6-142		WG708295
2-Fluorobiphenyl					90.80	34.9-129		WG708295
2-Fluorophenol					78.50	21.1-116		WG708295
Nitrobenzene-d5					107.0	21.9-129		WG708295
Phenol-d5					80.70	26.3-121		WG708295
p-Terphenyl-d14					50.90	21.5-128		WG708295

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,2,4-Trichlorobenzene	mg/kg	0.312	0.289	93.8	36.5-114	7.83	28.4	L684815-03	WG708295
2,4,6-Trichlorophenol	mg/kg	0.371	0.388	111.	33.8-133	4.35	28.1	L684815-03	WG708295
2,4-Dichlorophenol	mg/kg	0.429	0.349	129.	34.8-134	20.5	27.3	L684815-03	WG708295
2,4-Dimethylphenol	mg/kg	0.386	0.388	116.	12.3-149	0.290	32.3	L684815-03	WG708295
2,4-Dinitrophenol	mg/kg	0.617	0.546	185.*	10-121	12.2	39.4	L684815-03	WG708295
2,4-Dinitrotoluene	mg/kg	0.374	0.343	112.	27.8-147	8.60	29.7	L684815-03	WG708295
2,6-Dinitrotoluene	mg/kg	0.429	0.378	129.	36.5-137	12.4	29.7	L684815-03	WG708295
2-Chloronaphthalene	mg/kg	0.307	0.293	92.3	37.5-123	4.69	26.5	L684815-03	WG708295
2-Chlorophenol	mg/kg	0.286	0.255	86.0	33.2-121	11.7	29.3	L684815-03	WG708295
2-Nitrophenol	mg/kg	0.410	0.377	123.	29.5-144	8.56	29.9	L684815-03	WG708295
3,3-Dichlorobenzidine	mg/kg	0.325	0.305	97.6	10-129	6.20	40	L684815-03	WG708295
4,6-Dinitro-2-methylphenol	mg/kg	0.533	0.298	160.*	10-144	56.4*	32.7	L684815-03	WG708295
4-Bromophenyl-phenylether	mg/kg	0.312	0.273	93.7	39-130	13.2	26	L684815-03	WG708295
4-Chloro-3-methylphenol	mg/kg	0.388	0.436	116.	27-154	11.6	26.6	L684815-03	WG708295
4-Chlorophenyl-phenylether	mg/kg	0.320	0.328	96.1	37.9-123	2.42	25.9	L684815-03	WG708295
4-Nitrophenol	mg/kg	0.207	0.281	62.3	20-133	30.1	30.2	L684815-03	WG708295
Acenaphthene	mg/kg	0.446	0.486	97.9	32.2-134	8.47	27.3	L684815-03	WG708295
Acenaphthylene	mg/kg	0.317	0.307	95.3	38.7-129	3.27	25.9	L684815-03	WG708295
Anthracene	mg/kg	0.336	0.295	81.3	32.3-137	12.8	28.4	L684815-03	WG708295
Benzidine	mg/kg	0.0	0.0	0.00	0-49.9	0.0	40	L684815-03	WG708295
Benzo(a)anthracene	mg/kg	0.266	0.245	79.9	33.3-124	8.21	29	L684815-03	WG708295
Benzo(a)pyrene	mg/kg	0.262	0.235	78.7	28.2-128	10.8	28.4	L684815-03	WG708295
Benzo(b)fluoranthene	mg/kg	0.275	0.248	82.6	23.3-133	10.6	30.3	L684815-03	WG708295
Benzo(g,h,i)perylene	mg/kg	0.320	0.287	96.0	10-127	10.7	31.9	L684815-03	WG708295
Benzo(k)fluoranthene	mg/kg	0.285	0.249	85.5	31-129	13.3	26.7	L684815-03	WG708295
Benzylbutyl phthalate	mg/kg	0.261	0.237	78.2	33.4-128	9.53	28.5	L684815-03	WG708295
Bis(2-chlorethoxy)methane	mg/kg	0.385	0.361	116.	35-132	6.50	26.1	L684815-03	WG708295
Bis(2-chloroethyl)ether	mg/kg	0.298	0.275	89.5	28.8-128	8.09	33.6	L684815-03	WG708295
Bis(2-chloroisopropyl)ether	mg/kg	0.337	0.302	101.	31.8-118	11.0	31.7	L684815-03	WG708295
Bis(2-ethylhexyl)phthalate	mg/kg	0.253	0.231	75.9	21.8-141	8.98	35.2	L684815-03	WG708295
Chrysene	mg/kg	0.276	0.254	82.8	36.3-129	8.16	28	L684815-03	WG708295
Di-n-butyl phthalate	mg/kg	0.248	0.240	74.5	32.2-133	3.42	25.9	L684815-03	WG708295

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L685093

February 28, 2014

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Di-n-octyl phthalate	mg/kg	0.270	0.246	81.0	28.5-128	9.24	32.5	L684815-03	WG708295
Dibenz(a,h)anthracene	mg/kg	0.315	0.280	94.5	10.5-128	11.6	29.5	L684815-03	WG708295
Diethyl phthalate	mg/kg	0.154	0.139	46.2	39.4-136	9.89	25.5	L684815-03	WG708295
Dimethyl phthalate	mg/kg	0.252	0.211	75.6	35.8-137	17.8	25.4	L684815-03	WG708295
Fluoranthene	mg/kg	0.325	0.303	97.5	27.9-138	6.81	26.9	L684815-03	WG708295
Fluorene	mg/kg	0.384	0.401	83.0	34-133	4.42	27.1	L684815-03	WG708295
Hexachloro-1,3-butadiene	mg/kg	0.306	0.278	91.8	36.5-125	9.52	29.7	L684815-03	WG708295
Hexachlorobenzene	mg/kg	0.283	0.258	85.0	34.4-116	9.41	25.4	L684815-03	WG708295
Hexachlorocyclopentadiene	mg/kg	0.247	0.240	74.0	10-124	2.88	37.5	L684815-03	WG708295
Hexachloroethane	mg/kg	0.330	0.599	99.1	11.3-143	57.9*	31.9	L684815-03	WG708295
Indeno(1,2,3-cd)pyrene	mg/kg	0.312	0.278	93.8	10-128	11.6	31.5	L684815-03	WG708295
Isophorone	mg/kg	0.475	0.469	131.*	25.7-116	1.41	27.7	L684815-03	WG708295
n-Nitrosodi-n-propylamine	mg/kg	0.338	0.322	101.	33-134	4.77	28.2	L684815-03	WG708295
n-Nitrosodimethylamine	mg/kg	0.247	0.214	74.2	19.2-127	14.5	32	L684815-03	WG708295
n-Nitrosodiphenylamine	mg/kg	0.765	0.732	148.*	26.8-133	4.38	25.9	L684815-03	WG708295
Naphthalene	mg/kg	0.297	0.275	89.2	36.4-121	7.90	27.2	L684815-03	WG708295
Nitrobenzene	mg/kg	0.421	0.420	126.	30.9-134	0.0700	27.8	L684815-03	WG708295
Pentachlorophenol	mg/kg	0.330	0.297	99.2	10-139	10.5	28.3	L684815-03	WG708295
Phenanthrene	mg/kg	0.460	0.439	84.7	30.8-137	4.76	26.5	L684815-03	WG708295
Phenol	mg/kg	0.327	0.295	98.3	25.1-130	10.3	29.6	L684815-03	WG708295
Pyrene	mg/kg	0.320	0.278	96.0	24.1-130	14.0	29.9	L684815-03	WG708295
2,4,6-Tribromophenol				77.80	21.6-142				WG708295
2-Fluorobiphenyl				88.90	34.9-129				WG708295
2-Fluorophenol				85.40	21.1-116				WG708295
Nitrobenzene-d5				111.0	21.9-129				WG708295
Phenol-d5				86.60	26.3-121				WG708295
p-Terphenyl-d14				60.00	21.5-128				WG708295

Batch number /Run number / Sample number cross reference

WG708379: R2888774: L685093-01 02
WG708295: R2888923 R2888984: L685093-01 02

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
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Quality Assurance Report
Level II

L685093

February 28, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address: DuncKlee + Dunham
511 Keisler Drive Suite 102
Cary, NC 27518

Billing Information:

Analysis/Container/Preservative

Chain of Custody
Page 1 of 1

B076

ESC LAB SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

Report to: Daphne Jones
Email to: daphne@dunckleedunham.com
Project Description: Dorothea Dix Campus
City/Sate Collected: Raleigh, NC
Phone: (919) 858-4898
FAX:
Client Project #: 201336
ESC Key:
Collected by: (print) Phillip Jones
Site/Facility ID#:
P.O.#:
Collected by (signature):
Immediately Packed on Ice N ___ Y

Rush? (Lab MUST Be Notified)
X Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed:
Email? __No X Yes
FAX? __No __Yes

CoCode (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Remarks/Contaminant	Sample # (lab only)
5-SB-I (6-12") HA PJ	G	SS	6-12"	2/26/14	1100	1		L685093-01
5-SB-H (6-12") HA PJ	↓	↓	↓	↓	1105	1		02

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

pH ___ Temp ___

Remarks: Results needed by end of business day Fri 2/28/14 as per conversation w/ Jimmy Hunt

Flow ___ Other ___

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA	Condition: (lab use only) OK TB
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1° / Bottles Received: 2 4oz + 1 TB	CoC Seals Intact ___ Y ___ N ✓ NA
Relinquished by: (Signature)	Date: 2/26/14	Time: 18:50	Received for lab by: (Signature)	Date: 2-27-14 / Time: 0830	pH Checked: / NCF:

Appendix E

SmartData Solutions®

Subsurface Characterization Using Membrane Interface Probe (MIP) and Soil Electrical Conductivity (EC) Technologies Former Dorothea Dix Hospital 820 S. Boylan Avenue Raleigh, North Carolina

PREPARED FOR

Duncklee and Dunham Environmental Geologists and Engineers
511 Keisler Drive, Suite 102
Cary, North Carolina 27518

February 14, 2014

PREPARED BY

COLUMBIA Technologies, LLC
1448 South Rolling Road
Baltimore, Maryland 21227
410-536-9911
www.columbiatechnologies.com

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Figure 3.... Plan View, Maximum ECD Response, Area 18

APPENDICES

Appendix A: MIP Logs

Appendix B: Select Cross Sections

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Introduction

Duncklee and Dunham Environmental Geologists and Engineers (Duncklee) contracted **COLUMBIA Technologies, LLC (COLUMBIA)** to conduct an investigation of subsurface contamination at the Former Dorothea Dix Hospital site, located in Raleigh, North Carolina. This investigation involved delineating the depth and horizontal extent of any volatile organic compound (VOC) contamination distributions, in order to help facilitate the transfer of the property. Tooling used at the site included the Membrane Interface Probe (MIP) technology to map the dissolved phase, vapor phase and sorbed phase of VOCs and the Electrical Conductivity (EC) technology to characterize soil electrical conductivity. Both technologies are contained in a single downhole tool, the MIP/EC Probe, allowing **COLUMBIA** to collect multiple lines of evidence with a single push at each location.

The investigation was conducted on January 13th, 2014 to January 15th, 2014 and 15 MIP/EC locations were attempted, of which 12 locations were successfully completed to depth. They ranged from 7 feet to 46 feet below ground surface (bgs). A Geoprobe® Direct Push Technology (DPT) drilling rig was used to advance the locations.

MIP/EC Equipment Description

The MIP/EC probe is approximately 12-inches (30 cm) in length and 1.5-inches (3.8 cm) in diameter. The probe is driven into the ground at the nominal rate of one foot per minute using a DPT rig.

The MIP/EC probe was developed by Geoprobe Systems® and contains two separate systems: the soil Electrical Conductivity, or EC tool; and the Membrane Interface Probe, or MIP. EC, MIP chemical response, MIP operating parameters, rate of push speed and temperature are collected by the MIP/EC Field Instrument, and displayed continuously in real time during each push of the probe.

EC: Soil electrical conductivity, the inverse of soil resistivity, is measured using a dipole arrangement. In this process, an alternating electrical current is transmitted through the soil from the center, isolated pin of the probe. This current is then passed back to the probe body. The voltage response of the imposed current to the soil is measured across these same two points. Conductivity is measured in Siemens/meter, and due to the low conductivity of earth materials,

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the EC probe uses milliSiemens/meter (mS/m). The probe is reasonably accurate in the range of 5 to 400 mS/m.

The electrical properties of soil vary by geological setting. Therefore, conductivity measurements will vary both in magnitude and the relative change from one soil type to another in each geological setting. In general, at a given location, lower conductivity values are characteristic of larger particles such as cobbles and sands, while higher conductivities are characteristic of finer sized particles such as finer sand, silts and clays. Observed conductivities significantly higher than 400 mS/m are indicative of ionic materials other than soil. Examples include saltwater intrusion, presence of ionic chemicals from storage or injection, or potentially soil mixtures with metallic compounds.

MIP: The MIP portion of the probe is used to create high resolution, real-time profiles of subsurface VOC contamination. The operating principle is based on heating the soil and/or water around a semi-permeable polymer membrane to 121º Celsius (C), which allows VOCs to partition across this membrane. The MIP can be used in saturated or unsaturated soils, as water does not pass through the membrane. Nitrogen is used as an inert carrier gas, and travels from a surface supply down a transfer tubing which sweeps across the back of the membrane and returns any captured VOCs to the installed detectors at the surface. It takes approximately 60 seconds for the nitrogen gas stream to travel through 150 feet of inert tubing and reach the detectors.

COLUMBIA utilizes three detectors: a Photo Ionization Detector (PID), a Flame Ionization Detector (FID) and an Electron Capture Detector (ECD), mounted on a laboratory grade Shimadzu Model 14A gas chromatograph. The output signal from the detectors is captured by a MIP data logging system installed on a MIP Field Computer or laptop computer.

The PID detector consists of a special ultraviolet (UV) lamp mounted on a thermostatically controlled, low volume, flow-through cell. The temperature is adjustable from ambient temperature to 250ºC. The 10.2 electron volt (eV) UV lamp emits energy at a wavelength of 120 nanometers, which is sufficient to ionize most aromatics such as benzene, toluene, xylene, etc., and many other molecules such as hydrogen sulfide (H_2S), hexane, and ethanol whose ionization potential is below 10.2 eV. The PID also emits a response for

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chlorinated compounds containing double-bonded carbons (halogenated ethylenes), such as trichloroethylene (TCE) and tetrachloroethylene (PCE). Methanol and water, which have ionization potentials greater than 10.2 eV, do not respond on the PID. Since the PID is non-destructive, it is often run first in series with other detectors for multiple analyses from a single injection.

The FID utilizes a hydrogen flame to combust compounds in the carrier gas. The FID responds linearly over several orders of magnitude, and the response is very stable from day to day. This detector responds to any molecule with a carbon-hydrogen bond, but poorly to compounds such as H_2S, carbon tetrachloride, or ammonia. The carrier gas effluent from the GC column is mixed with hydrogen and burned. This combustion ionizes the analyte molecules. A collector electrode attracts the negative ions to the electrometer amplifier, producing an analog signal, which is directed to the data system input.

The ECD detector consists of a sealed stainless steel cylinder containing radioactive Nickel-63. The Nickel-63 emits beta particles (electrons), which collide with the carrier gas molecules, ionizing them in the process. This forms a stable cloud of free electrons in the ECD cell. When electro-negative compounds (especially chlorinated, fluorinated or brominated molecules), such as carbon tetrachloride or TCE, enter the cell, they immediately combine with the free electrons, temporarily reducing the number remaining in the electron cloud. The detector electronics, which maintain a constant current of about 1 nanoampere through the electron cloud, are forced to pulse at a faster rate to compensate for the decreased number of free electrons. The pulse rate is converted to an analog output, which is transmitted to the data system.

The ECD detector provides for extremely sensitive detection of common contaminants such as PCE and TCE, typically in the range of 100-200 parts per billion (ppb) in-situ concentrations for these compounds. However, the relatively small linear range of the detector as compared to the other detectors, the maximum response of the detector will be reached early, typically at in-situ concentration of 1 to 2 ppm for these polychlorinated compounds. Additionally, ECD detector response varies considerably for different compounds. Of particular note the response factor of the ECD to polychlorinated compounds such as PCE is a factor of 1000 to 10,000 as compared to dichloro compounds, such as the common degradation product cis-1,2 Dichloroethylene (DCE). Performance testing for the

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compounds of interest is critical to understanding the system response to in-situ chemical distributions.

Depth in feet is measured and recorded using a precision potentiometer with a 100-inch linear range. The potentiometer is mounted onto the mast of the DPT rig and a counter-weight anchored to the foot of the rig. Measurements are recorded on the down stroke of the mast, as the tooling string is pushed into the ground, and is accurate within 1/10th of an inch. The reference elevation (depth) reported for each individual boring is established by setting the data logger to zero feet with the membrane on the MIP/EC probe aligned with the ground surface. True boring elevations can be established with the addition of survey data if provided for in the scope of work.

MIP System Performance Test

As a quality control check, the MIP system response is evaluated prior to and upon completion of each MIP location. An aqueous phase performance test is performed using specific compounds designed to evaluate the sensitivity of the particular probe, transfer line and detector suite to be used. The resulting values are recorded and compared to predetermined values.

The EC dipole is also evaluated using a brass and stainless steel test jig, resulting in known values of 55 and 290 mS. Results must fall within 10% of the expected values; otherwise corrective action must be performed.

Investigation Methods

A total of 15 MIP/EC locations were attempted, of which 12 locations were successfully completed to depth at the Former Dorothea Dix Hospital site. Each location was selected by **Duncklee's** representative onsite, and the termination depth of each location was also determined by **Duncklee's** representative onsite. Immediately upon completion of each location, the dataset is wirelessly delivered to **COLUMBIA's** remote servers for Quality Assurance/Quality Control (QA/QC) review and upload to a password secure website using Columbia's patented ***SmartData Solutions***® technology. The results from each location are shown in Appendix A. Select cross sectional views are shown in Appendix B.

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General MIP/EC Log Interpretation

Each MIP/EC log includes five separate graphs of data. The first graph displays the soil electrical conductivity and is measured in mS/m. In general, lower conductivities are indicative of coarser grained particles, such as sands and silty sands, and higher conductivities are indicative of finer grained particles, such as clays and silty clays. The next three graphs are measures of chemical detector response: PID, FID, and ECD, measured in microvolts (μV). These graphs are a linear scale, and provide a relative comparison of total detector response between boring locations. The last graph is temperature of the probe as it is advanced in the subsurface. This graph is monitored to make sure the heating elements of the MIP/EC probe are sufficient to volatilize the VOCs the system comes in contact with.

Interpreting MIP Results and Comparison to Sampling and Laboratory Analyses

A typically configured MIP system is effective at profiling the relatively distribution of certain VOCs and relative soil types versus depth. The typical MIP system will detected VOCs with boiling points of 121ºC or less; with vapor pressures above approximately 0.14 psi; and with non-polar hydrophobic compound structures. The sensitivity or in-situ detection level of a MIP system is dependent on many different factors. **COLUMBIA's** systems and protocols are standardized to provide reliable and comparable detection and logging of chlorinated VOCs (CVOCs) on the order of 200 ppb in-situ concentrations. Petroleum based VOCs are reliably logged at 1 part per million (ppm) in-situ concentrations. Each of **COLUMBIA's** MIP system configurations are performance tested prior to use and if requested, MIP systems may be specially configured for atypical compounds of concern (COCs) and site conditions.

An understanding of the principles of operation and performance of the configured MIP detectors is essential to properly interpreting the MIP log results. For example, a CVOC with an ionization potential greater than 10.2 eV will respond on the ECD detector but not on the PID equipped with a 10.2 eV lamp. A hydrophillic compound such as an alcohol or ketone will normally be scrubbed out of the MIP gas stream by the MIP Membrane and the installed dryer and never reach the detectors. Each CVOC has a different response factor on the ECD. For example the primary contaminant has a 1000 to 10000 higher level response on the ECD than the degradation product cis-1,2 DCE. Each variation in detector or system performance can be overcome by properly configuring and testing the MIP system for the site specific COCs prior to

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use. Additionally, the in-field performance tests performed before and after each boring are critical to monitor the performance of the MIP system from the membrane through to the data logging system.

Generalized correlations between MIP response and laboratory sample results can be inferred, but cannot be viewed as a linear comparison. MIP response and laboratory results are collected, analyzed and reported in different units and by different procedures, so correlation is not an exact one-to-one comparison. For example, not all VOCs present and analyzed in laboratory instruments with compound separation are detected and measured by a typical MIP system. The MIP process uses a membrane extraction process from a heated zone of varying subsurface matrix of soil, water, and/or vapor. Soil and groundwater results involve the collection of a sample, extraction of sub-sample at the surface, and then transporting them to a laboratory for further extraction and analysis. These two processes are different by definition.

Unusual or invalid responses on the MIP system can result from malfunctions such as carrier or makeup gas leakage, gas flow blockage, heater failure, and carryover of water vapor or excessive chemical saturation. Each MIP detector will respond differently to each of these malfunctions. The most common cause of false positive responses for CVOCs is water carryover or blockage of carrier gas flow. The most common causes of false negative are improperly adjusted gas flows or leakage and inoperative detectors. **COLUMBIA's** operators are trained to recognize these problems and to take the appropriate corrective action in the field.

SmartData Solutions®

COLUMBIA's *SmartData Solutions*® is a patented process (U.S. Patent No, 7,058,509) that enables the rapid processing of field data into easy to understand 2D visualizations posted to a password protected website. This process includes QA/QC review, formatting and rapid visualization of the data for the project team and enables a complete check of the dataset prior to completion of fieldwork.

Log Anomalies and Field Notes

No log anomalies were noted. Locations 17-MIP-01A, 17-MIP-01B and 17-MIP-01C were each refused at less than four feet.

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Recommendations

COLUMBIA recommends the use of the Hydraulic Profiling Tool (HPT) technology to better delineate pathways for the various contaminants. HPT information can also be useful for creating contaminate fate and transport models, selecting monitoring well location and screen intervals, and targeting zones for remedial injections. **COLUMBIA** also recommends obtaining confirmation samples and laboratory analyses to confirm the existence and type of VOCs detected by the MIP system.

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Figure 1 Sitemap and Locations
January 13th, 2013-January 15th, 2013

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Figure 2 Plan View, Maximum ECD Response, Area 16
January 13th, 2013-January 15th, 2013

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Figure 3 Plan View, Maximum ECD Response, Area 18
January 13th, 2013-January 15th, 2013

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APPENDIX A

MIP Logs

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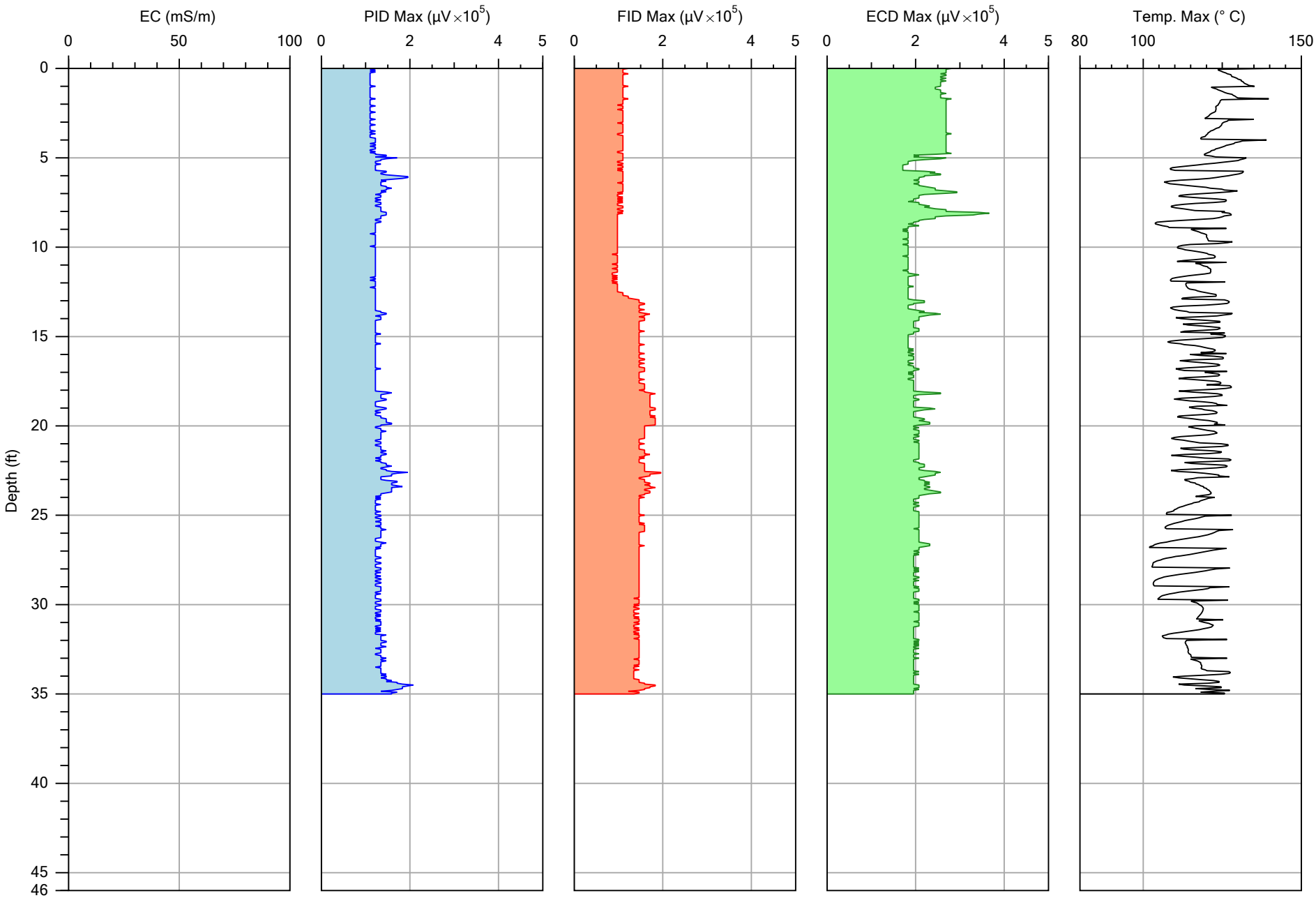

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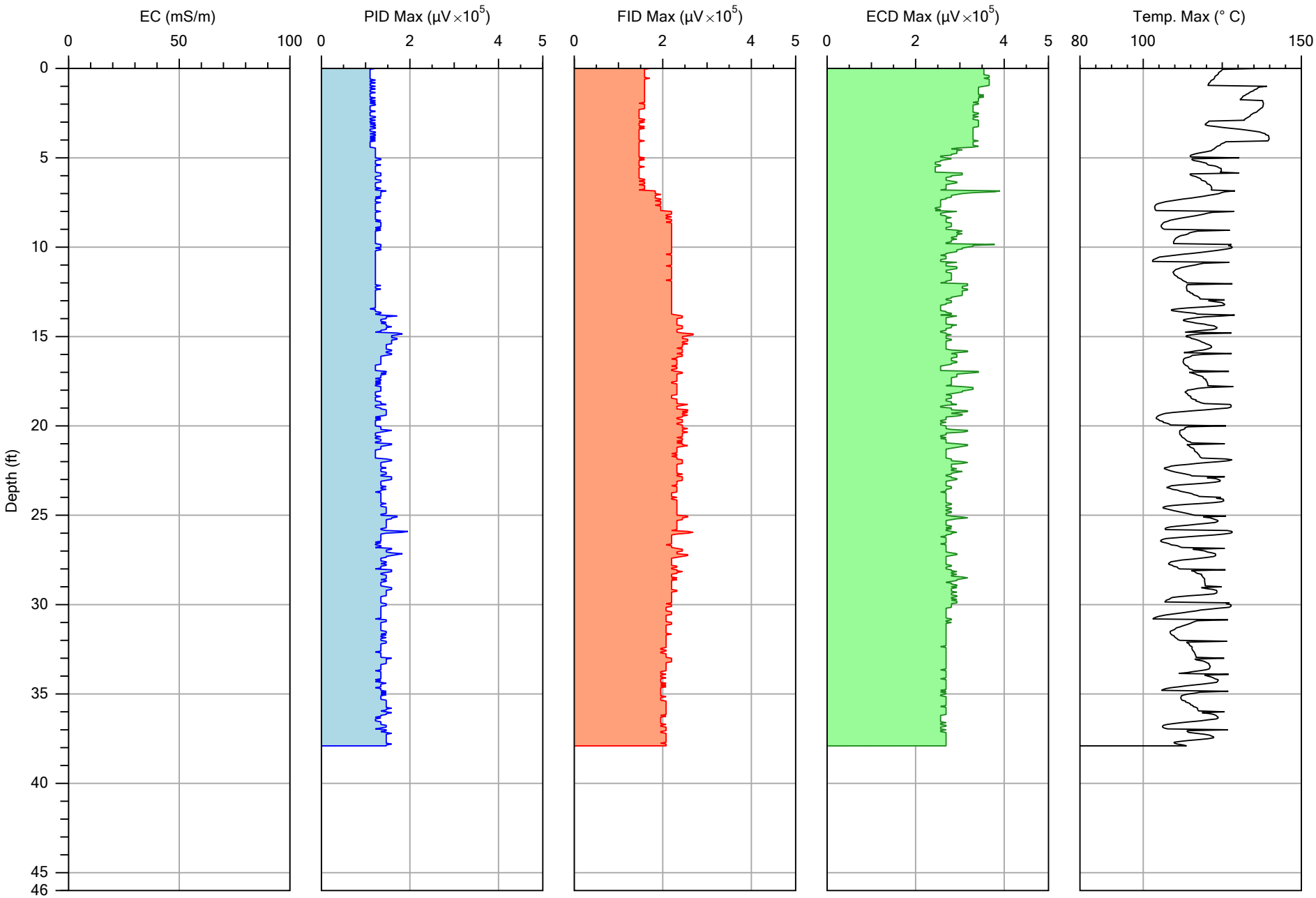

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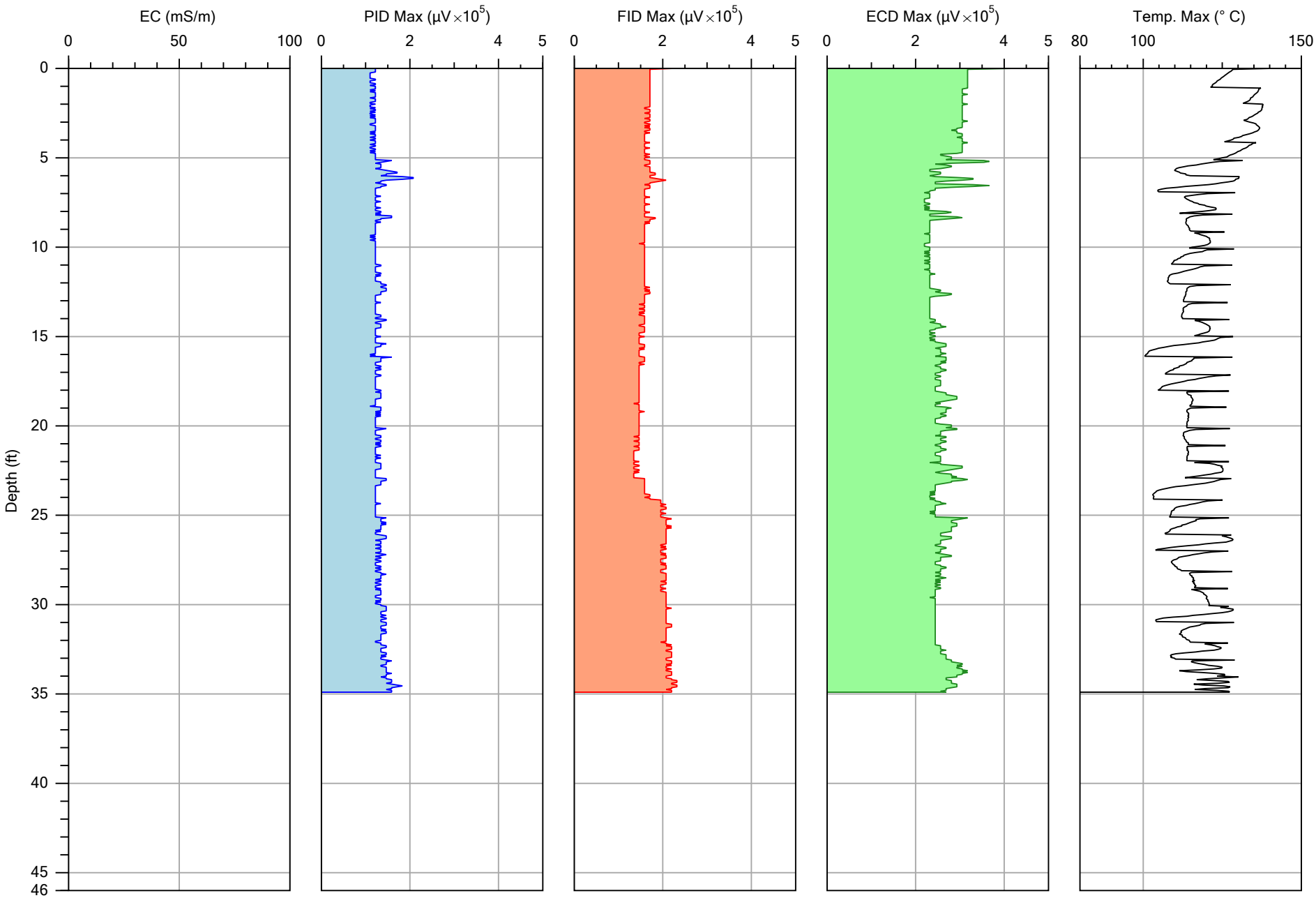

COLUMBIA TECHNOLOGIES

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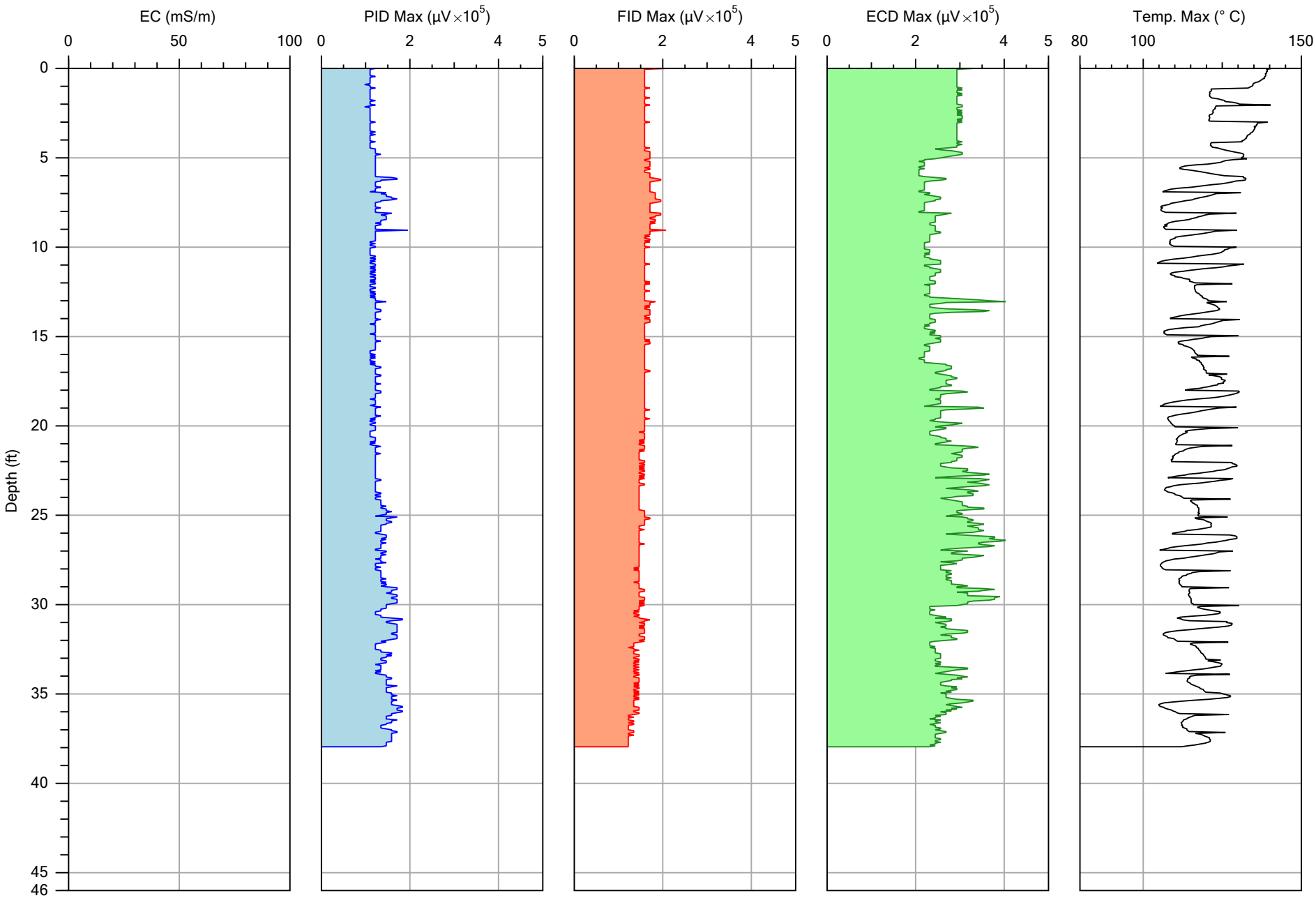
Project ID: Former Dorothea Dix Hospital	Client: Duncklee & Dunham	Location:



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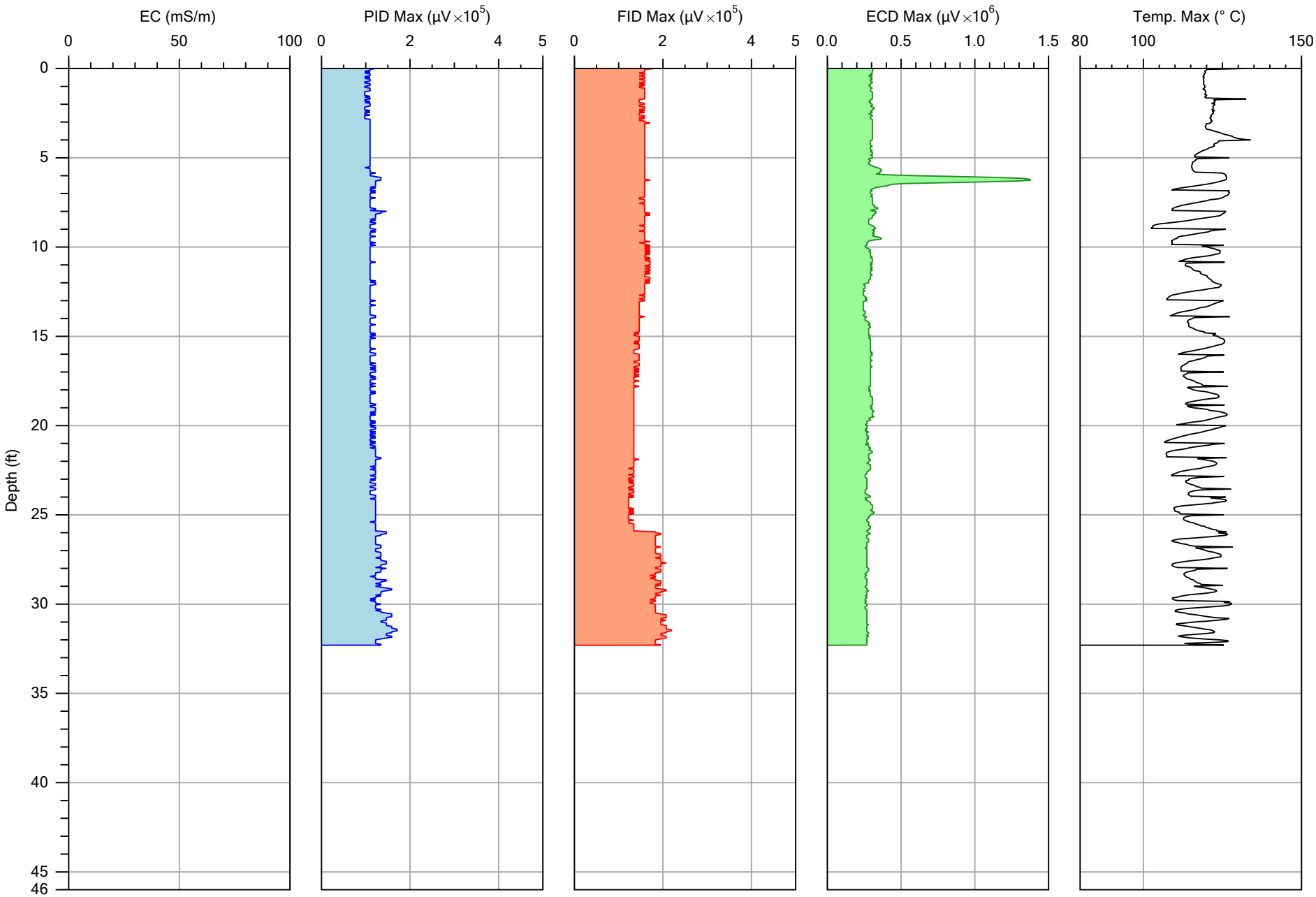
Project ID: Former Dorothea Dix Hospital	Client: Duncklee & Dunham	Location:



COLUMBIA TECHNOLOGIES

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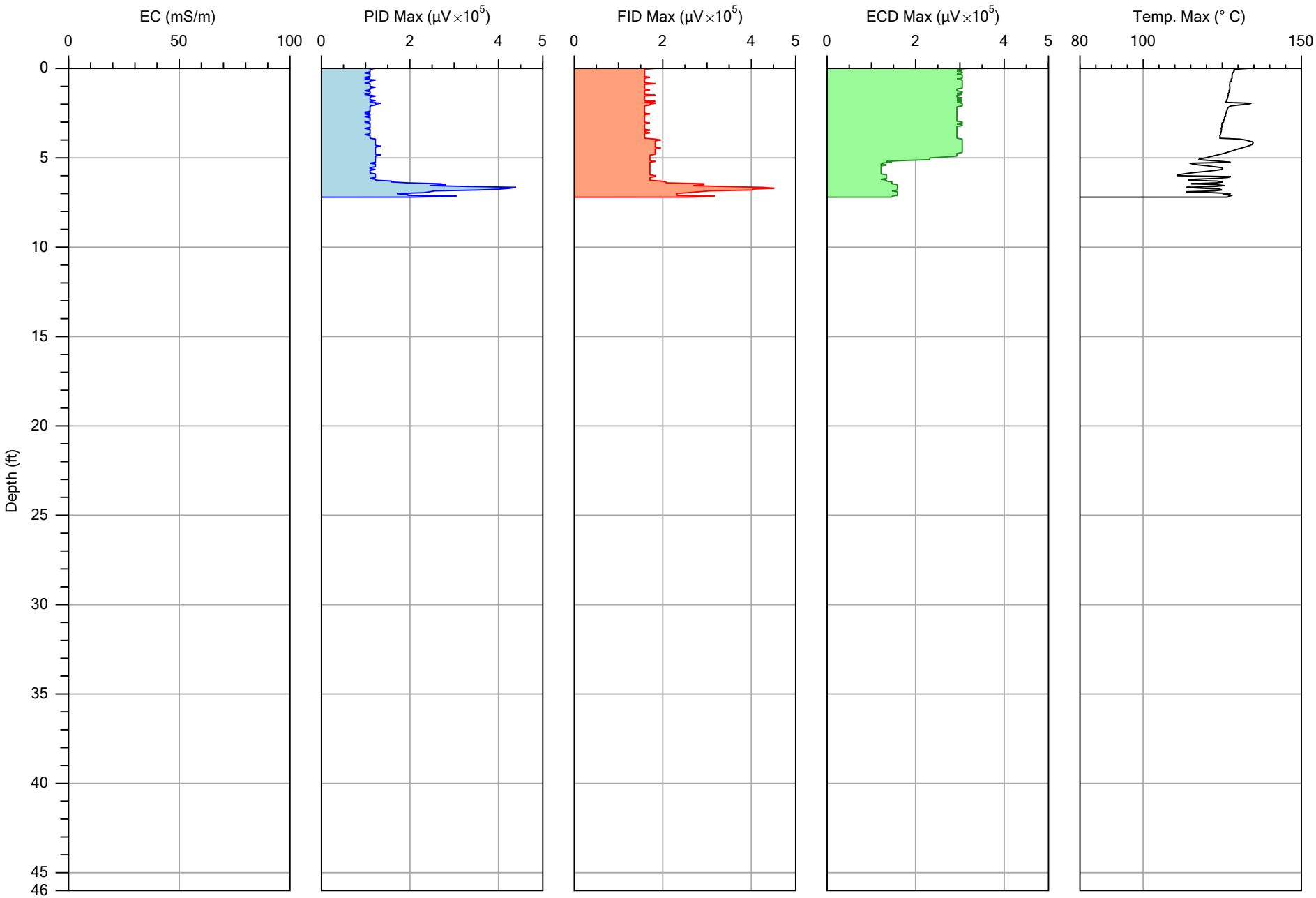
Project ID: Former Dorothea Dix Hospital	Client: Duncklee & Dunham	Location:



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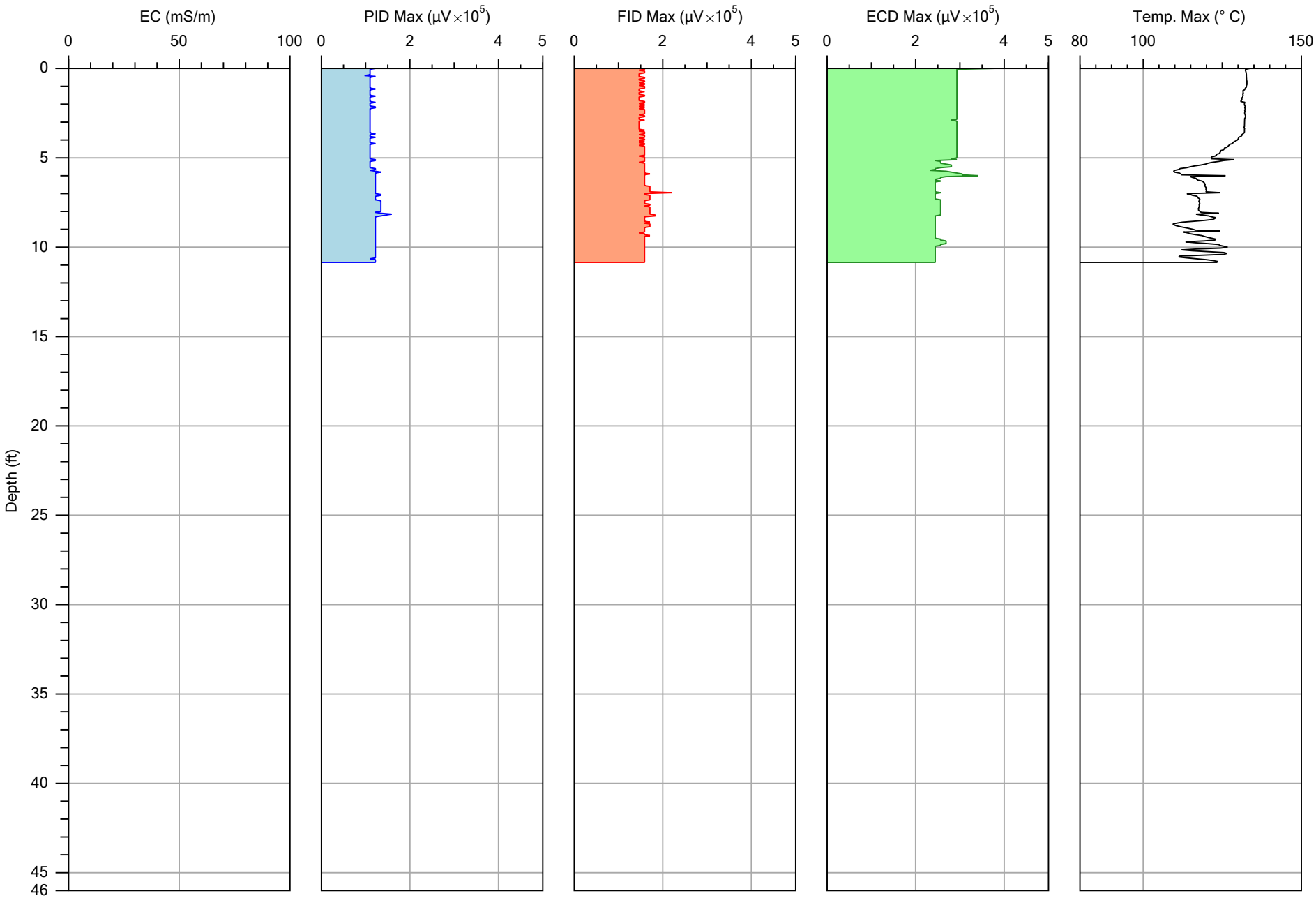

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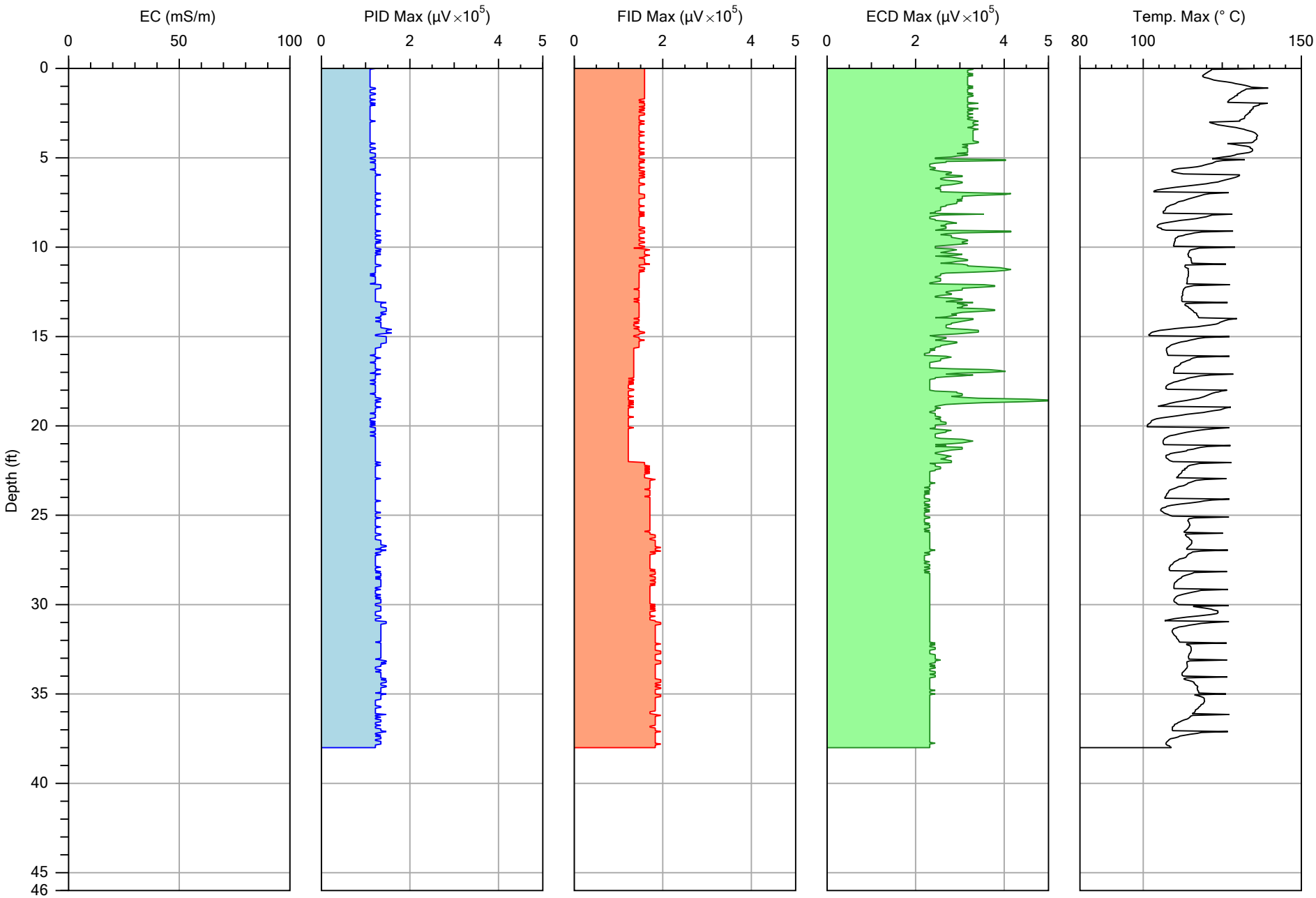

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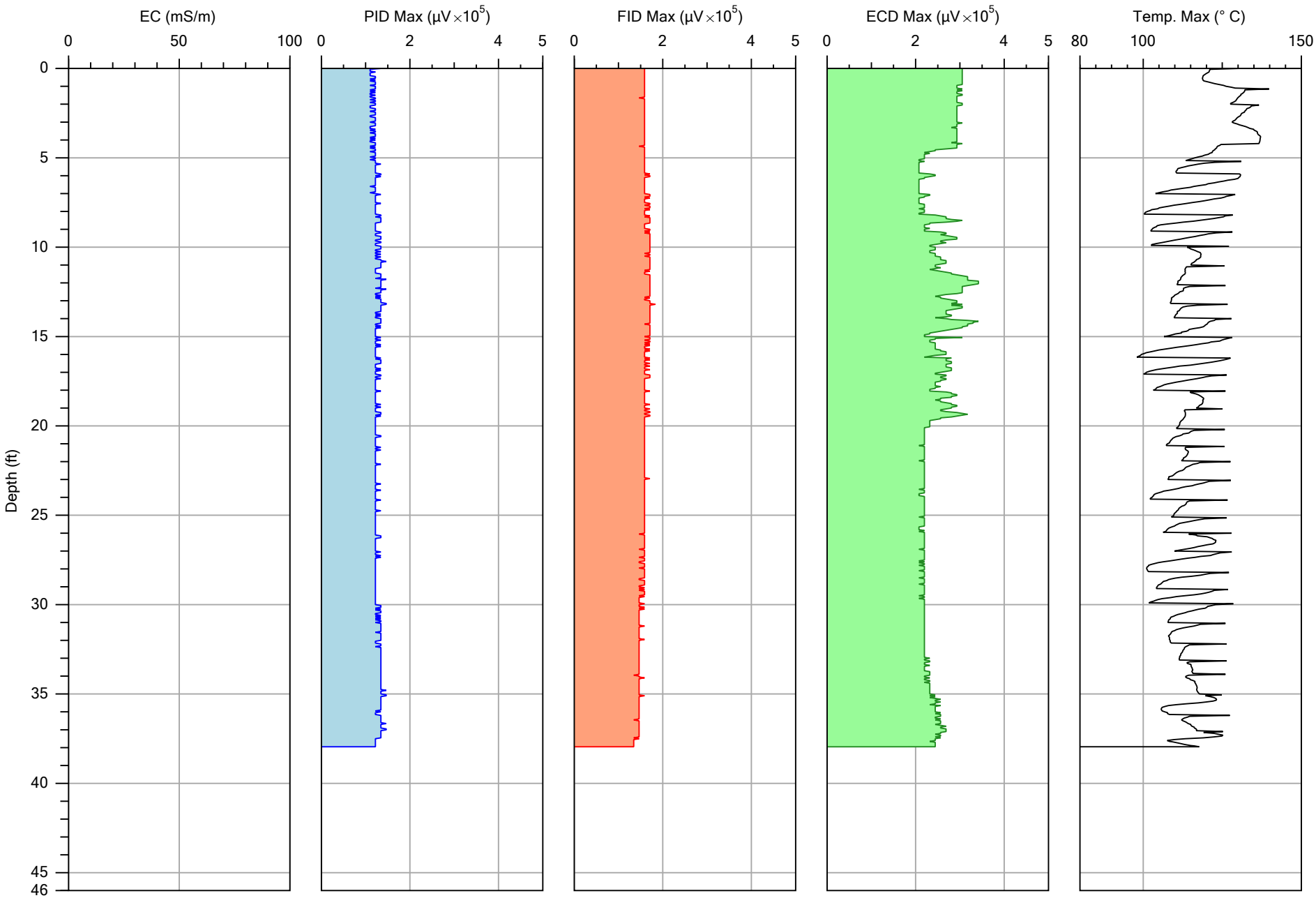

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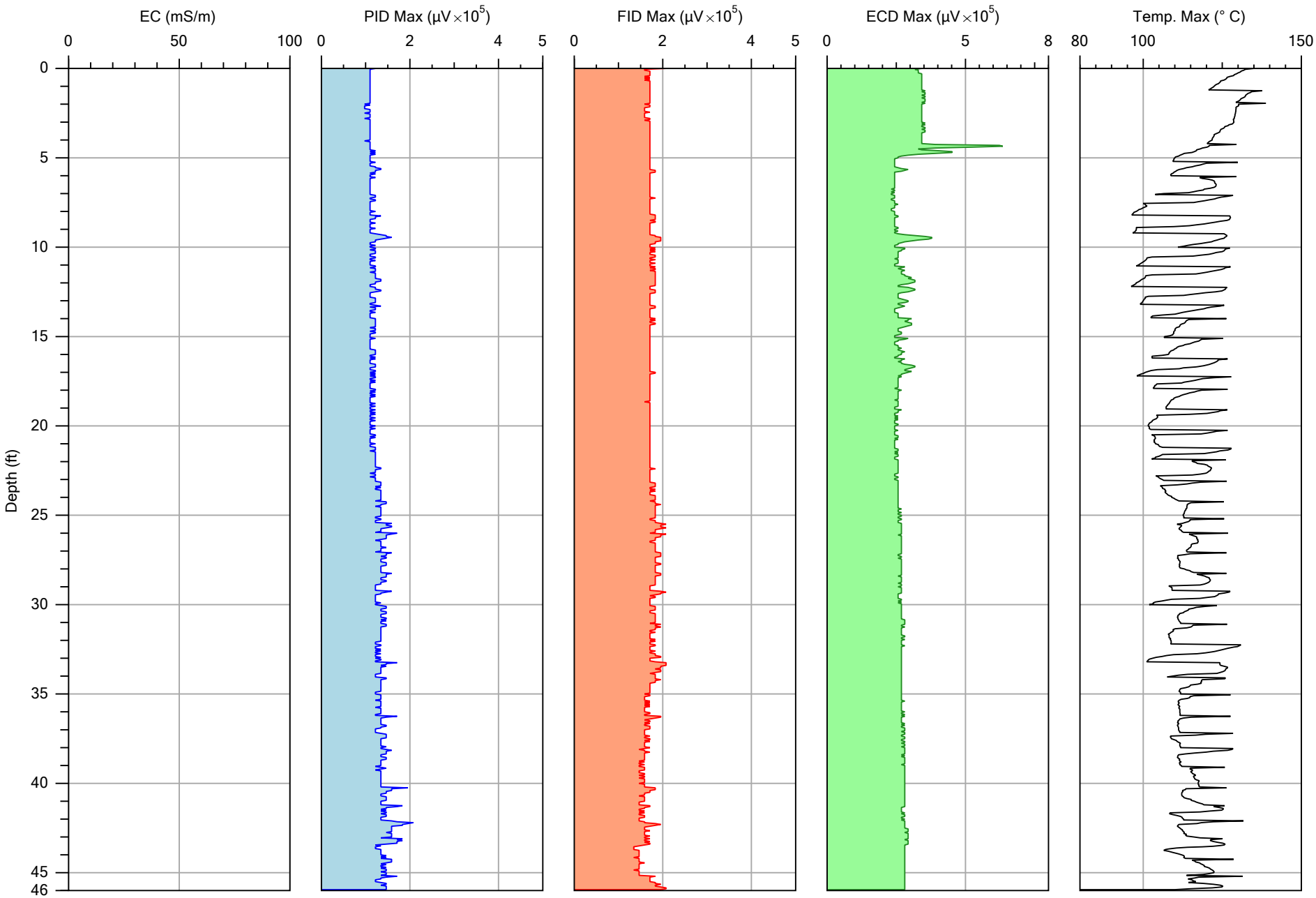

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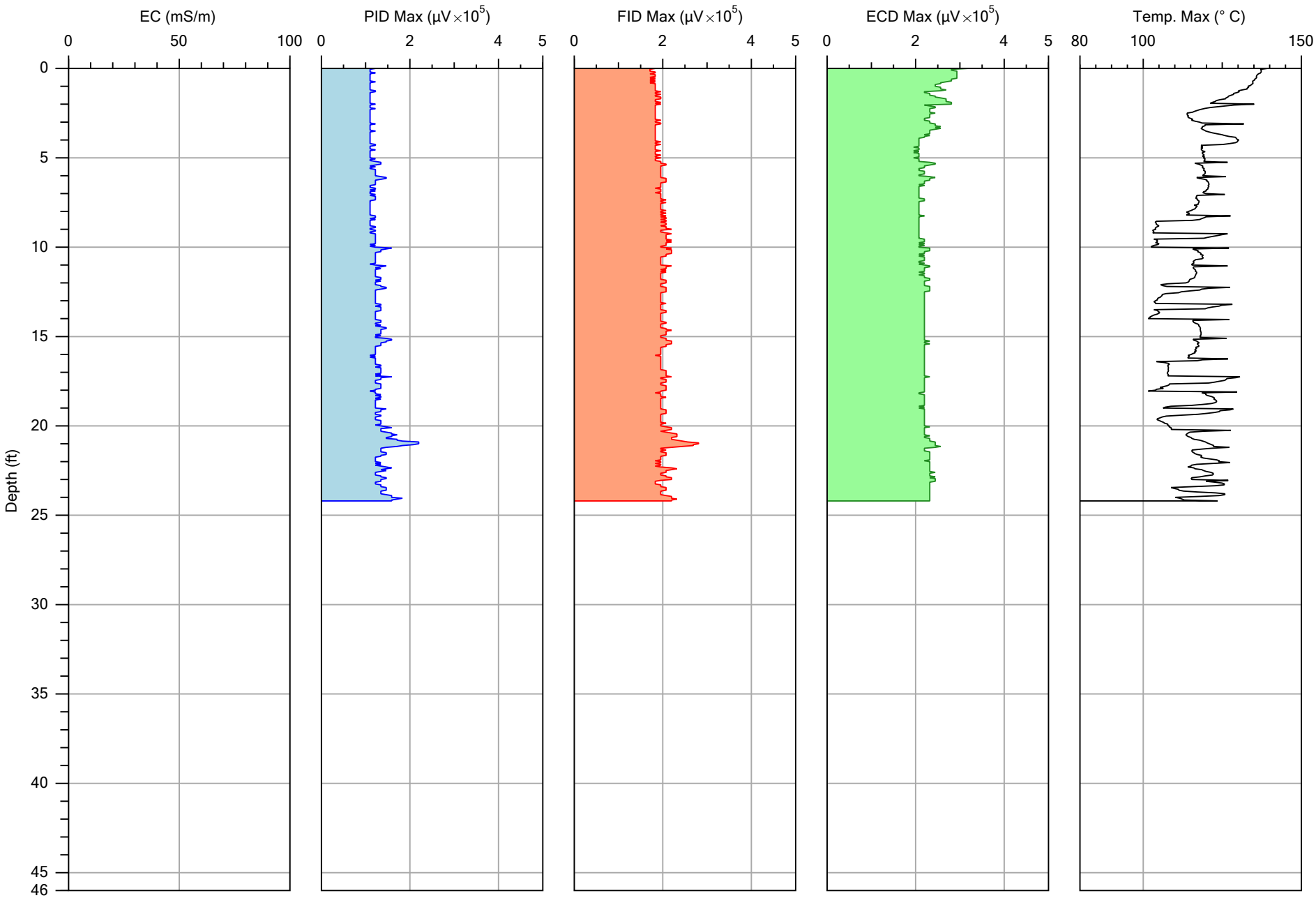

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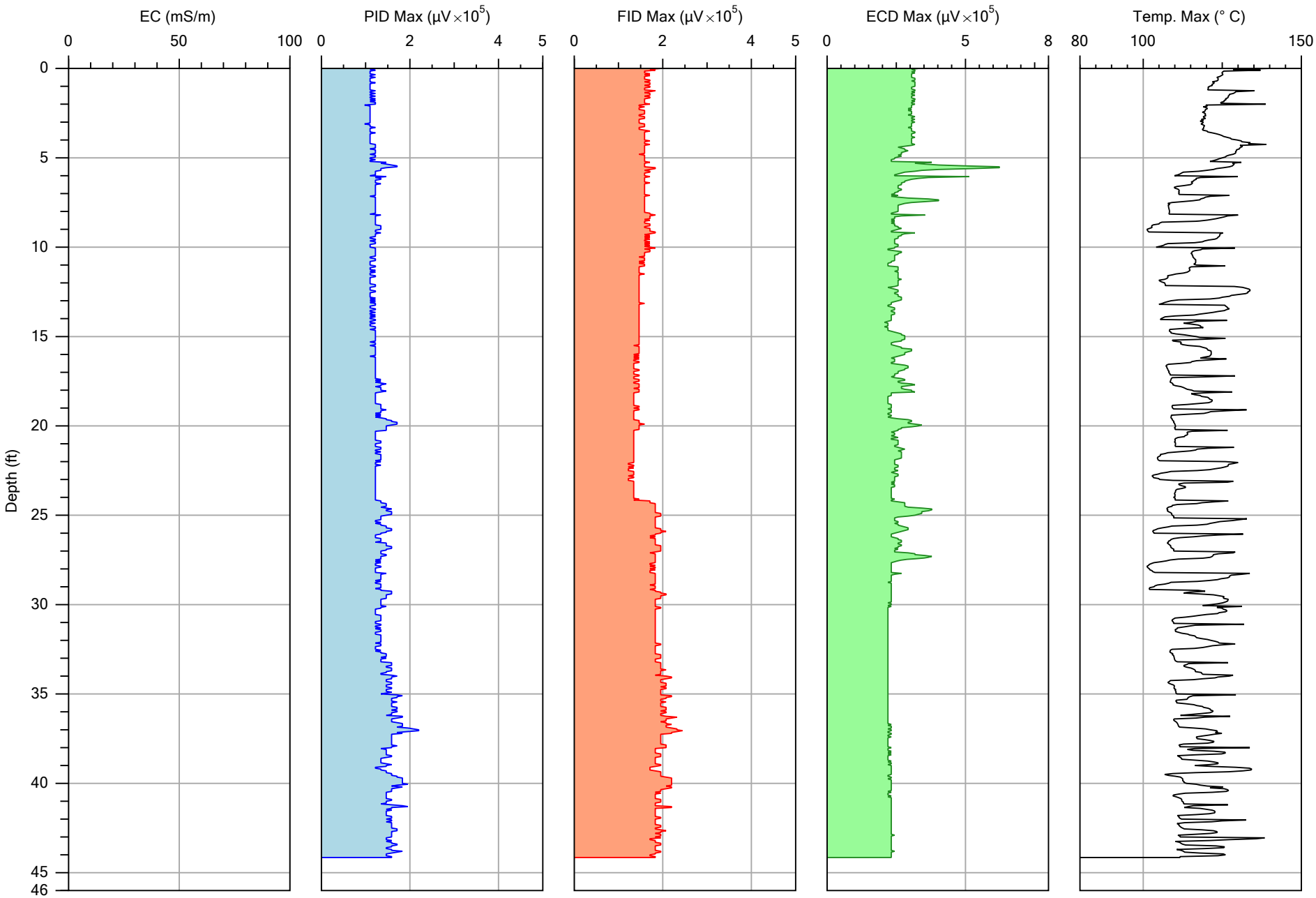

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Company: COLUMBIA Technologies	Operator: D.M.	Date: 1/14/2014
Project ID: Former Dorothea Dix Hospital	Client: Duncklee & Dunham	Location:

APPENDIX B

Select Cross Sections

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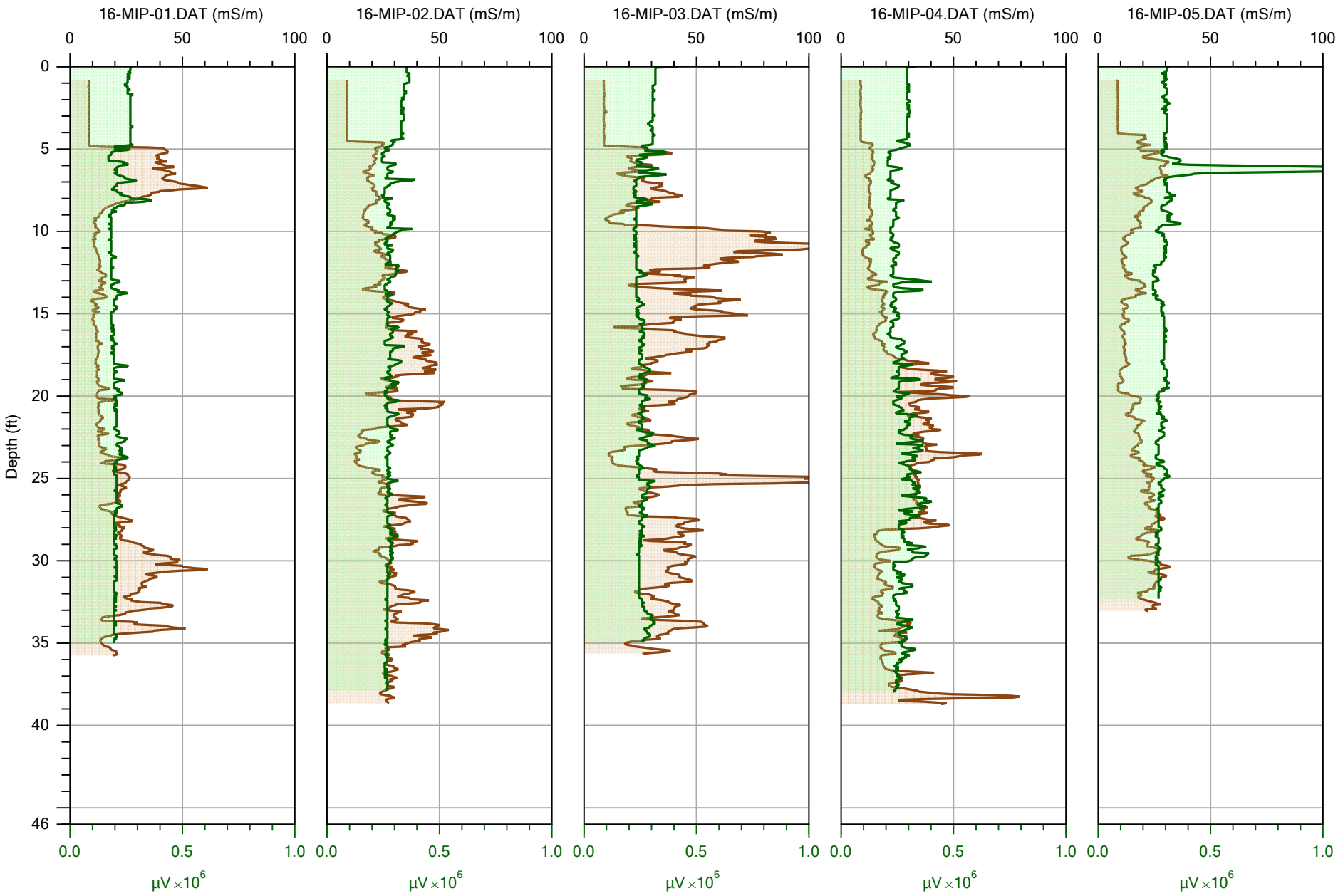

COLUMBIA TECHNOLOGIES

EC / ECD Max

Company: COLUMBIA Technologies	Operator: D.M.
Project ID: Former Dorothea Dix Hospital	Client: Duncklee & Dunham

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16-MIP-02.DAT	1/13/2014
16-MIP-03.DAT	1/13/2014
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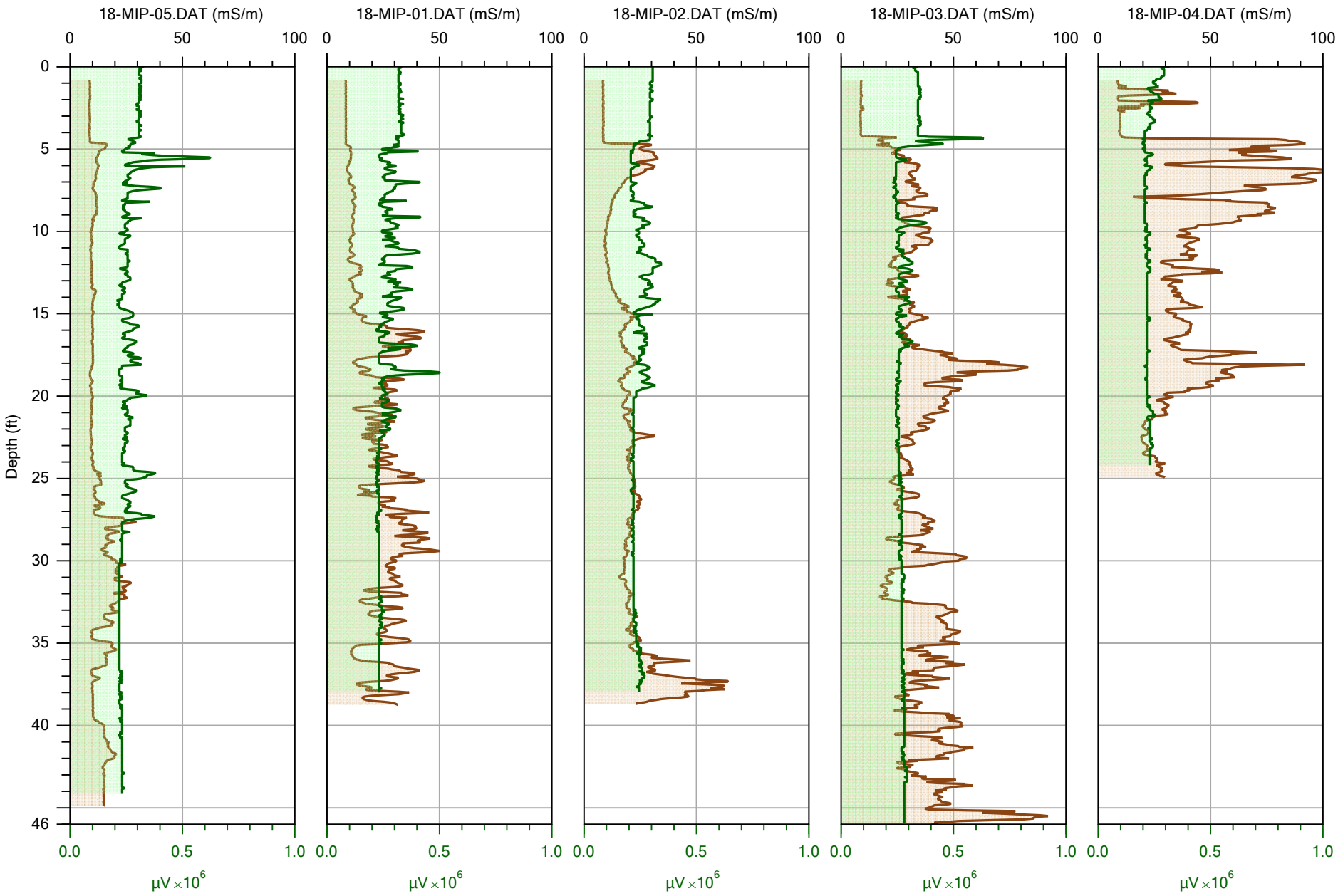

COLUMBIA TECHNOLOGIES

EC / ECD Max

Company: COLUMBIA Technologies	Operator: D.M.
Project ID: Former Dorothea Dix Hospital	Client: Duncklee & Dunham

18-MIP-05.DAT	1/14/2014
18-MIP-01.DAT	1/14/2014
18-MIP-02.DAT	1/14/2014
18-MIP-03.DAT	1/14/2014
18-MIP-04.DAT	1/14/2014

Appendix G

Appendix G
Summary of Tentatively Identified Compounds (TICs) for Samples with Volatile and Semivolatile Testing
Dorothea Dix Campus
Raleigh, North Carolina

Area	Sample Name	CAS #	VOC TICs	RT	Est Conc (mg/kg)	QF (Match %)	CAS #	SVOC TICs	RT	Est Conc (mg/kg)	QF (Match %)
1	1-SB-A (9.5-10.5')		None				000994-05-8	Butane, 2-methoxy-2-methyl	3.06	0.147	83
	1-SB-B (4-5')		None				000060-33-3	9,12-Octadecadienoic acid (Z,Z)-	8.77	0.035	95
							002492-22-0	cis-2,6-Dimethly-2,6-ocatdiene	11.6	0.063	68
							003817-00-1	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(	7.83	0.021	64
							000123-42-2	2-Pentanone-4-hydroxy-4-methyl	4.43	0.078	59
	1-SB-C (5.5-6')		None				000994-05-8	Butane, 2-methoxy-2-methyl	3.06	0.151	83
	1-SB-D (4-5')		None				003817-00-1	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(	9.69	0.03	59
	1-SB-E (3-4')		None				000084-65-1	9,10-Anthracenedione	8.58	0.022	96
							002039-76-1	3-Acetylphenanthrene	9.38	0.028	96
							001576-67-6	Phenanthrene, 3,6-dimethyl	8.78	0.05	95
							000483-95-8	Phenanthrene, 1-methyl-7-1-(1 methyl	9.25	0.037	74
							000994-05-8	Butane, 2-methoxy-2-methyl	3.06	0.146	72
							002381-21-7	Pyrene, 1-methyl	9.22	0.022	64
	1-SB-F (11-12')		None				000994-05-8	Butane, 2-methoxy-2-methyl	3.06	0.152	72
	1-SB-G (7-8')		None				000994-05-8	Butane, 2-methoxy-2-methyl	3.06	0.155	72
2	2-HA-A (6-12")	000541-05-9	Cyclotrisiloxane, hexamethyl-	5.08	0.004	80	000994-05-8	Butane, 2-methoxy-2-methyl	2.96	0.769	72
	2-HA-B (6-12")		None				000994-05-8	Butane, 2-methoxy-2-methyl	2.96	0.769	72
4	4-SB-A (3.5 - 4.5')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.042	78
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.29	0.095	72
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.07	1.09	64
5	5-SB-A (12')		None				000541-02-6	Cyclopentasiloxane, decamethyl-	5.66	0.054	90
							000994-05-8	Butane, 2-methoxy-2-methyl-	2.90	0.169	72
	5-SB-B (6-7')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	2.95	0.547	72
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.28	0.161	64
	5-SB-C (6-7')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	2.96	0.640	72
	5-SB-D (5-6')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	2.96	0.601	72
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.28	0.115	59
	5-SB-E (7-8')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	2.96	0.625	72
	5-SB-F (4-5')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.06	0.160	83

Appendix G
Summary of Tentatively Identified Compounds (TICs) for Samples with Volatile and Semivolatile Testing
Dorothea Dix Campus
Raleigh, North Carolina

Area	Sample Name	CAS #	VOC TICs	RT	Est Conc (mg/kg)	QF (Match %)	CAS #	SVOC TICs	RT	Est Conc (mg/kg)	QF (Match %)
5	5-SB-G (3.5-4')		None				000832-64-4	Phenanthrene, 4-methyl-	8.40	2.30	96
							003674-66-6	Phenanthrene, 2,5-dimethyl-	8.78	2.12	96
							000243-17-4	11H-Benzo[b]fluorene	9.42	0.498	94
							001705-84-6	Triphenylene, 2-methyl-	10.84	1.22	94
							003674-69-9	Phenanthrene, 4,5-dimethyl-	8.67	1.71	93
							000207-08-9	Benzo[k]fluoranthene	12.42	1.04	93
							000610-48-0	Anthracene, 1-methyl-	8.38	0.868	91
							001576-67-6	Phenanthrene, 3,6-dimethyl-	8.74	0.534	90
							002381-21-7	Pyrene, 1-methyl-	9.22	0.761	90
							001576-69-8	Phenanthrene, 2,7-dimethyl-	8.76	0.625	86
							007396-38-5	Phenanthrene, 2,4,5,7-tetramethyl-	9.25	4.14	83
							000243-17-4	11H-Benzo[b]fluorene	9.32	0.606	83
							000053-70-3	Dibenz[a,h]anthracene	14.22	0.483	83
							003674-66-6	Phenanthrene, 2,5-dimethyl-	8.70	0.539	68
							000000-00-0	Naphthalene, 6-ethyl-1,2,3,4-tetra	8.65	1.21	64
							001740-19-8	1-Phenanthrenecarboxylic acid, 1,2	9.97	0.921	60
8	8-SB-A (1-2')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.1	0.233	72
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	1.02	64
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.42	0.91	64
	8-SB-B (1-2')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.1	0.190	72
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.183	64
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.43	0.052	59
	8-SB-C (1-2')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.1	0.255	74
	8-SB-D (1-2')		None				000053-19-0	Mitotane	9.66	0.147	91
							000207-08-9	Benzo(k)fluoranthene	12.42	0.117	89
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.02	0.936	72
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.42	0.116	72
	8-SB-E (1-2")		None				000483-65-5	Phenanthrene, 1-methyl-7-(1-methyl	9.25	0.038	93
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.224	59

Appendix G
Summary of Tentatively Identified Compounds (TICs) for Samples with Volatile and Semivolatile Testing
Dorothea Dix Campus
Raleigh, North Carolina

Area	Sample Name	CAS #	VOC TICs	RT	Est Conc (mg/kg)	QF (Match %)	CAS #	SVOC TICs	RT	Est Conc (mg/kg)	QF (Match %)
10	10-SB-A (4-5')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.1	0.221	78
							000077-76-9	Propane, 2-2-dimethoxy	2.83	0.040	74
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.977	74
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.43	0.111	74
	10-SB-B (1-2')		None				001330-96-7	1,2-Benzenedicarboxylic acid, isod	13.42	0.48	80
							003648-21-3	1,2-Benzenedicarboxylic acid, dihe	12.30	0.310	72
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.10	0.114	64
							003648-21-3	1,2-Benzenedicarboxylic acid, dihe	11.8	0.207	64
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.42	0.042	59
	10-SB-C (1-2')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	1.63	1.63	72
	10-SB-D (2-3')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.05	0.933	74
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.1	0.202	74
11	11-SB-A (2')		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.774	72
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.37	0.053	72
	11-SB-B (2')		None					None			
	11-SB-C (2')		None				000541-05-9	Cyclotrisiloxane, hexamethyl-	4.09	0.134	91
							000541-02-6	Cyclopentasiloxane, decamethyl-	5.66	0.069	90
							004630-07-3	Naphthalene, 1,2,3,5,6,7,8,8a-octa	14.28	0.039	90
							000994-05-8	Butane, 2-methoxy-2-methyl-	2.90	0.284	72
							000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.29	0.089	59
	DUP-1		None					None			
13	13-SB-J (8-9')	000091-17-8	Naphthalene, decahydro-	7.76	0.039	96		None			
		002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	8.87	0.081	94					
		002958-76-1	Naphthalene, decahydro-2-methyl-	8.27	0.030	90					
		056253-64-6	Benzene, (2-methyl-1-butenyl)-	9.17	0.033	90					
		002051-30-1	Octane, 2,6-dimethyl-	6.31	0.029	81					
		000769-25-5	Benzene, 2-ethenyl-1,3,5-trimethyl	10.08	0.041	78					
		004923-78-8	Cyclohexane, 1-ethyl-2-methyl-, tr	6.18	0.033	76					

Appendix G
Summary of Tentatively Identified Compounds (TICs) for Samples with Volatile and Semivolatile Testing
Dorothea Dix Campus
Raleigh, North Carolina

Area	Sample Name	CAS #	VOC TICs	RT	Est Conc (mg/kg)	QF (Match %)	CAS #	SVOC TICs	RT	Est Conc (mg/kg)	QF (Match %)
16	16-MW-1		None				019550-08-4	3,4-Dimethyl-3-hexanol	4.58	0.013	72
	DUP-MW-1		None				005582-82-1	3-Heptanol, 3-methyl	4.58	0.012	83
17	17-MW-1		None					None			
	17-MW-2		None					None			
	17-MW-3		None					None			
	17-MW-4		None				105-87-3	2,6-Octadien-1-ol,2,7-dimethyl-,		0.018	72
18	18-TMW-1		None					Only VOCs tested in this sample			
	18-MW-1		None					None			
	18-MW-2		None					None			
	18-MW-3		None					None			
	18-MW-4		None					None			
19	19-MW-1		None				934-34-9	2(3H)-Benzothiazolone	9.26	0.022	95
21	21-SW-A		None				000301-02-0	9-Octadecenamide, (Z)-	13.69	0.003	90
	21-SW-B		None				000301-02-0	9-Octadecenamide, (Z)-	13.69	0.001	99
	DUP-SW		None					None			
	21-SW-C		None					None			
	21-SED-A		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	1.74	59
	21-SED-B		None				000540-97-6	Cyclohexasiloxane, dodecamethyl-	6.40	0.149	91
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.03	0.783	78
							000994-05-8	Butane, 2-methoxy-2-methyl-	3.1	0.151	64
	21-SED-C		None				000994-05-8	Butane, 2-methoxy-2-methyl-	3.04	1.57	74

Notes
RT = Retention Time
QF - percent match with mass spectrograph
VOC - Volatile Organic Compound
SVOC - Semivolatile organic compound
CAS # is a unique numerical identifer for every chemical subtance described in open scientific literature.

TICs that have same CAS # are in same colored cell

Appendix F

Taylor Wiseman & Taylor
ENGINEERS I SURVEYORS I SCIENTISTS
3500 Regency Parkway, Suite 260, Cary, NC 27518
919-297-0085 phone 919-297-0090 fax
www.taylorwiseman.com

DOROTHEA DIX HOSPITAL

820 S. Boylan Avenue, Raleigh, NC

Geological Feature Survey

TWT Project #: 70610.6005.00

Date of Well Survey: January 31, 2014

SURVEY CONTROL LINE

Control	*Northing*	*Easting*	*Elevation*
TWT #40	734,624.78	2,100,393.60	325.60
DIX AZ MK	735,453.97	2,099,353.27	377.46

Survey Point ID	*Northing*	*Easting*	*CL of Lid Elevation*	*Top of Case Elevation*
MW-16-1	736080.15	2101363.43	324.03	323.72
MW-17-1	734903.73	2101897.05	358.75	358.29
MW-17-2	734645.36	2101688.79	348.32	348.13
MW-17-3	734638.79	2101857.99	354.73	354.27
MW-17-4	734811.54	2101954.54	359.99	359.53
MW-18-1	734722.63	2101184.66	322.37	322.22
MW-18-2	734548.30	2101000.48	310.98	310.38
MW-18-3	734333.41	2100982.66	307.77	307.3
MW-18-4	734371.36	2101360.39	326.04	325.73
MW-19-1	736852.36	2100254.54	332.58	332.28
bldg-13	734911.7339	2101835.287		
bldg-31	734444.2547	2101190.998		
bldg-38	735896.355	2101339.308		

Survey Control Metadata:

Horizontal Datum: NAD83 (2011)
Epoch: 2010.00
Vertical Datum: NAVD88 (Geoid 2012)
Units: U.S. Survey Feet
GPS Technique: Network RTK (VRS)
Date of GPS Control Survey: 5/15/13 & 5/16/13
GPS Ant. Type: Trimble R8-3
GPS Ant. SN: 5009418437
Fixed Stations: NCLI, DURH & NCJL
See attached page that documents metadata
Project Combined Factor: 0.99990267
Point of Localization: TWT 40
Class of Survey: "A" - Urban Land Survey
Adjustment: TGO Least Squares at 95% C.L.
Positional Accuracy: 0.05'

Survey Notes:

Survey control for this project was established by a combination of GPS and conventional surveying methodologies. There are numerous geodetic control monuments on and around the Dorothea Dix hospital property, but none of the monuments situated near the center of the campus were optimal for GPS. As such, TWT set a 5/8" rebar with cap (TWT# 40) in the center of the campus away from all vegetation. On May 15 and 16, 2013, GPS data was logged at TWT# 40 while RTK surveying was being performed to set control point pairs around the campus. The base data gathered on these two dates was submitted to the National Geodetic Survey's OPUS website for processing.

In order to remain consistent with previous surveys on the property, a digital level run was performed from "DIX AZ MK" to TWT# 40, thereby making "DIX AZ MK" the vertical benchmark for this survey. "DIX AZ MK" is a class 1, second order vertical benchmark.

Survey Certification:

I, Chad T. Howard, certify that this report was prepared under my supervision, from an actual ground (conventional) and GPS survey made under my supervision;
that the positional accuracy has been reported hereon;
that the geological features surveyed and identified hereon were surveyed in a manner sufficient to comply with national map accuracy standards and the requirements of the Standards of Practice for Land Surveying in North Carolina (21 NCAC 56.1600).

Witness my original signature, registration number and seal this 10th day of February, in the year of our Lord 2014.

2/10/2014

NORTH CAROLINA PROFESSIONAL SEAL L-4220 LAND SURVEYOR CHAD T. HOWARD

OPUS METADATA FOR TWT CONTROL POINT #40

REF FRAME: NAD_83(2011)(EPOCH:2010.0000)

HORIZONTAL COORDINATES HELD:

Lat (N):	35 46 4.84868	Grid N:	734624.78'
Lon (W):	78 39 41.67065	Grid E:	2100393.60'
		Ellip Hgt:	217.91'
CF:	0.99990267	Ortho Hgt:	325.67'

Date:	May 14, 2013	Ephemeris:	ultra-rapid
Start:	14:56	Antenna:	Trimble R8-3 (GNSS)
Stop:	19:59:30	P2P (Lat):	0.007'
Obs used:	12063 / 12660 (95%)	P2P (Lon):	0.010'
# Fixed Amb:	71 / 72 (99%)	P2P (Ellip):	0.030'
Overall RMS:	0.05'	P2P (Ortho):	0.072'

Horizontal network accuracy = .008'

Vertical network accuracy = .010'

FIXED STATIONS USED:

PID	DESIGNATION	LAT (N)	LON (W)
DG5759	NCLI LILLINGTON 2004	352512.546	784840.339
DG9328	DURH DURHAM COOP	355946.129	785358.036
DL3891	NCJL JORDAN LAKE	354652.496	790203.927

Appendix H

GARCO, Inc.

NON-HAZARDOUS WASTE MANIFEST

Please print or type

NON-HAZARDOUS WASTE MANIFEST	Manifest Document No. 14001	Page 1 of
3. Generator's Name and Mailing Address: Dorthea Dix, 820 South Boylan Avenue, Raleigh, NC 27603	1. Generator's US EPA ID No.	
	4. Generator's Phone	
5. Transporter 1 Company Name: GARCO, Inc.	6. US EPA ID No.: NCR000135384	B. Transporter 1 Phone: (336) 683-0911
7. Transporter 2 Company Name	8. US EPA ID No.	D. Transporter 2 Phone
9. Designated Facility Name and Site Address: GARCO, Inc, 2503 N. Fayetteville St., Asheboro, NC 27203		10. US EPA ID Number: NCR000135384
		F. Facility's Phone: (336) 683-0911

11. Waste Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
A) Non Hazardous Material	1	Roll Off	6.93	T
B)				
C)				
D)				

G. Additional Descriptions for Materials Listed Above

A) Well Cuttings C)

B) D)

15. Special Handling Instructions and Additional Information

24 Hour ER# 800-814-1204

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date: Month	Day	Year
Daphne Jones for/City of Raleigh	Daphne M Jones / for City of Raleigh	2	26	14

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date: Month	Day	Year
Wendell Schofell	Wendell Schofell	02	26	14

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date: Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt for waste materials covered by this manifest, except as noted above.

Printed/Typed Name	Signature	Date: Month	Day	Year
Leigh Ann Gordon	Leigh Ann Gordon	2	26	14

GARCO, Inc.

NON-HAZARDOUS WASTE MANIFEST

Please print or type

NON-HAZARDOUS WASTE MANIFEST	Manifest Document No. 14002	Page 1 of 1
3. Generator's Name and Mailing Address: Dorthea Dix, 820 South Boylan Avenue, Raleigh, NC 27603	1. Generator's US EPA ID No.	
	4. Generator's Phone	
5. Transporter 1 Company Name: GARCO, Inc.	6. US EPA ID No.: NCR000135384	B. Transporter 1 Phone: (336) 683-0911
7. Transporter 2 Company Name	8. US EPA ID No.	D. Transporter 2 Phone
9. Designated Facility Name and Site Address: GARCO, Inc, 2503 N. Fayetteville St., Asheboro, NC 27203		10. US EPA ID Number: NCR000135384
		F. Facility's Phone: (336) 683-0911

11. Waste Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
A) Non Hazardous Material	1	Roll Off	~~.28~~ (14)	t
B)			.28	
C)				
D)				

G. Additional Descriptions for Materials Listed Above

A) Well Cuttings

B)

C)

D)

15. Special Handling Instructions and Additional Information

24 Hour ER# 800-814-1204

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
Daphne M Jones for City of Raleigh	Daphne M. Jones for City of Raleigh	2/26/14

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Mike Gth	[illegible]	2/26/14

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt for waste materials covered by this manifest, except as noted above.

Printed/Typed Name	Signature	Date (Month Day Year)
Leigh Ann Gordon	Leigh Ann Gordon	2/26/14

GARCO, Inc.

NON-HAZARDOUS WASTE MANIFEST

Please print or type

NON-HAZARDOUS WASTE MANIFEST		Manifest Document No. 14003	2 Page 1 of 1
3. Generator's Name and Mailing Address	Dorthea Dix 820 South Boylan Avenue Raleigh, NC 27603	1. Generator's US EPA ID No.	
		4. Generator's Phone	
5. Transporter 1 Company Name GARCO, Inc.	6. US EPA ID No. NCR000135384	B. Transporter 1 Phone (336) 683-0911	
7. Transporter 2 Company Name	8. US EPA ID No.	D. Transporter 2 Phone	
9. Designated Facility Name and Site Address	GARCO, Inc 2503 N. Fayetteville St. Asheboro, NC 27203	10. US EPA ID Number NCR000135384	
		F. Facility's Phone (336) 683-0911	

11. Waste Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
A) Non Hazardous Material	5	DM	2000	P
B)				
C)				
D)				

G. Additional Descriptions for Materials Listed Above

A) Purge Water C)

B) D)

15. Special Handling Instructions and Additional Information

24 Hour ER# 800-814-1204

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Daphne M. Jones for City of Raleigh

Signature: Daphne M Jones for City of Raleigh

Date: Month 2 Day 26 Year 14

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Mike Gulch

Signature: [illegible]

Date: Month 2 Day 26 Year 14

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt for waste materials covered by this manifest, except as noted above.

Printed/Typed Name: Leigh Ann Gordon

Signature: Leigh Ann Gordon

Date: Month 2 Day 26 Year 14