

CASWELL COUNTY LANDFILL
Yanceyville, North Carolina
Semi-Annual Water Quality Monitoring Report
August 2011 Sampling Event
S&ME Project No. 1584-07-034

Prepared For:



Caswell County
Post Office Box 98
144 Court Square
Yanceyville, North Carolina 27379

Prepared By:

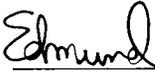


S&ME, Inc.
3718 Old Battleground Road
Greensboro, North Carolina 27410

October 24, 2011



I hereby certify this 24th day of October 2011 that this report was prepared by me or under my direct supervision.


Edmund
Environmental Department Manager

A circular professional seal for Edmund. The outer ring contains the text "NORTH CAROLINA" at the top and "EDMUND" at the bottom. The inner ring contains "LICENSED" at the top and "SEAL" at the bottom. The center of the seal contains the name "Edmund" and the number "16".

Report prepared by:


Connel D. Ware
Senior Project Manager

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1.0 EXECUTIVE SUMMARY

Six monitoring wells at the Caswell County Landfill were sampled on August 3, 2011. These six wells (MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6) comprise the groundwater monitoring system for the closed Caswell County Landfill. This sampling event was conducted according to North Carolina Solid Waste Management Guidelines. Samples were analyzed by PACE Analytical Services, Inc. of Huntersville, North Carolina, a North Carolina certified laboratory. The six samples collected from the on-site monitoring wells were submitted for analysis of the North Carolina Landfill Appendix I volatile organic constituents and eight RCRA Metals.

Analytical results of the six water samples indicate that none of the 8-RCRA metals were detected at concentrations exceeding the corresponding 15A North Carolina Administrative Code (NCAC) 2L.0200 groundwater quality standards (2L Standard) during this event in the samples collected from the compliance monitoring well network. The metal barium was detected in the samples collected from one or more groundwater monitoring wells during the August 3, 2011 monitoring event; however, at concentrations less than the corresponding 2L Standards. There were no other metals detected above the method detection limit.

The volatile organic constituent benzene was detected in monitoring wells MW-2, MW-4, and MW-5 at reported concentrations at or above the corresponding 2L Standard of 1 µg/L. The organic constituent 1,4-dichlorobenzene was detected in the groundwater samples collected from wells MW-2, MW-4, and MW-5 at reported concentrations above the corresponding 2L Standard of 6 µg/L. Chlorobenzene, chloroethane, 1,2-dichlorobenzene, and 1,1-dichloroethane were detected in one or more groundwater samples during this monitoring event; however, each of the reported concentrations of these constituents were less than their respective 2L Standard. No other volatile organic compounds were detected in the monitoring wells sampled during this event.

During this monitoring event, no volatile organic constituents were detected above the method detection limit in the down-gradient stream sample location at SW-2. The creek was dry at up-gradient stream sampling location SW-1 and therefore samples could not be collected from this location. Barium was detected at down-gradient sample location SW-2 at similar concentrations to previous sampling events. The reported concentration of barium at SW-2 is below its respective 15A NCAC 2B Surface Water Standard for Class C surface waters. There were no other metals detected above the method detection limit in the surface water samples collected during this sampling event.

It is believed that the cause of the 2L Standards exceedances at the Caswell County Landfill is from percolation of landfill constituents from the waste management units into the uppermost groundwater aquifer. Due to the detection of these exceedances above the 2L Standards in the compliance wells, S&ME recommends that a water supply well receptor survey be completed for the Caswell County Landfill and the development of plans to address the 2L Standards exceedances in accordance with regulatory requirements.

2.0 INTRODUCTION

S&ME Inc. (S&ME) has completed the August 2011 semi-annual monitoring event at the closed Caswell County Landfill site. The monitoring activities were authorized by Caswell County Manager, Mr. Kevin Howard and were completed in general accordance with S&ME proposal 1584-11-P077 dated April 29, 2011. This report summarizes our understanding of the project, our field services, and the results of laboratory analyses performed on the samples collected.

The Caswell County Landfill is a closed facility that currently monitors groundwater under a Post Closure Care Plan on a semi-annual basis. The facility uses a network of six (6) groundwater monitoring wells to monitor groundwater quality at the Facility. The groundwater monitoring network is made up of one upgradient monitoring well (MW-1) and five downgradient compliance monitoring wells (MW-2, MW-3, MW-4, MW-5, and MW-6). The collected groundwater samples are analyzed in accordance with 15A NCAC 13B .0500 et seq for the North Carolina Landfill Appendix I volatile organic constituent suite plus the 8 RCRA metals. Groundwater monitoring wells were purged and groundwater samples were collected using new, disposable, Teflon bailers, or a sterile peristaltic pump with new Teflon tubing.

The facility also typically monitors surface water quality at the stream that crosses the downgradient region of the Facility. As conditions allow, during each semi-annual monitoring event, two surface water samples are collected from this stream at designated sampling points. Stream sampling location SW-1 is the upstream sampling location to the south of the waste management unit. Stream sampling location SW-2 is the downstream sampling location. During the August 3, 2011 sampling event, stream samples were only collected from surface water monitoring point SW-2. The creek was dry at stream sampling location SW-1 and therefore samples could not be collected from this location.

This report discusses the field procedures, summarizes the field measurements and analytical results for the August 3, 2011 water quality monitoring event.

3.0 SCOPE OF WORK

S&ME has performed the first semi-annual groundwater sampling of the six (6) network groundwater monitoring wells for the 2011 groundwater monitoring year. The groundwater monitoring wells were purged, sampled, and the collected groundwater samples analyzed (in accordance with 15A NCAC 13B .0500 et seq) for the North Carolina Appendix I volatile organic constituents and the eight RCRA metals. This semi-annual groundwater monitoring report has been prepared to summarize the August 2011 groundwater monitoring event and includes:

- Summary Tables of the laboratory analytical data from each sampling event,
- Development of a potentiometric map incorporating the latest groundwater elevation data,
- A discussion of findings and results,
- An electronic copy of this report will be sent to the North Carolina Department of Environment and Natural Resources (NC DENR)

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater monitoring well sampling took place on August 3, 2011. The monitoring well locations with respect to the Facility layout are shown on **Figure 1**. A representative from S&ME opened each well and measured the static water level from the top edge of the PVC casing in the wells. The total well depth was used to determine the volume of water in the wells at the time of the sampling event. These data are summarized in **Table 1**.

Monitor wells MW-1, MW-2, and MW-4 were manually purged using a new, sterile Teflon bailer prior to collecting the water samples. Each well was purged of three times the well volume or purged until the well went dry prior to the collection of the groundwater sample. The bailer was lowered, by hand, using a nylon rope into the well in such a manner as to minimize agitation of the groundwater. The purge water from each of these wells was monitored for pH, conductivity, and temperature.

Monitor wells MW-3, MW-5, and MW-6 were purged and sampled using a peristaltic pump. New Teflon tubing was used at each well. Each well was purged of three times the well volume or purged until the well was dry prior to the collection of the groundwater sample. The purge water from each of these wells was monitored for pH, conductivity, and temperature.

The field data collected during sampling was recorded on the groundwater sampling field data sheets included in **Appendix A** of this report.

Immediately upon collection, each groundwater sample was placed in laboratory supplied containers, packed on ice, and placed under chain-of custody. The sampling technician wore nitrile gloves that were changed between wells to reduce the possibility of cross contamination.

All monitoring well samples were then sent to PACE Analytical Services, Inc. (PACE) in Huntersville, North Carolina to be analyzed for Appendix I volatile organic constituents and the eight RCRA metals.

4.2 Surface Water Sampling

Surface water sampling took place on August 3, 2011. One stream samples (SW-2) was collected from an unnamed tributary of Moon Creek, which flows along the eastern portion of the Facility and flows easterly away from the Landfill. Surface water sample SW-2 was collected from a downstream position with respect to the waste management unit. The surface water sample was collected by immersing laboratory supplied containers directly into the stream at the location to be sampled. After collection, the surface water sample was packed on ice and placed under chain-of-custody. The stream sample was analyzed for the North Carolina Appendix I volatile organic constituents as well as the 8 RCRA metals by PACE Analytical Services, Inc.; a North Carolina certified laboratory.

5.0 RESULTS

5.1 Groundwater Analytical Results

The results of the laboratory analyses for the groundwater monitoring well samples are summarized in **Tables 2 & 3**.

S&ME prepared the analytical results summary tables included in this report following the conventions set forth by the NC DENR Solid Waste Section in that any value reported at a concentration below the North Carolina SWSLs is flagged as a “J” or estimated value on the summary tables.

The complete laboratory report is included in **Appendix B**. The following summarizes the groundwater sample analyses for the six compliance monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6) sampled on August 3, 2011.

Metals:

Analytical results of the six groundwater samples indicate that none of the 8-RCRA metals were detected at concentrations exceeding the corresponding 15A NCAC 2L groundwater quality standards during this event. The metal barium was detected in the samples collected from one or more groundwater monitoring wells during the August 3, 2011 monitoring event; however, at concentrations less than the corresponding NCAC 2L groundwater quality standard. There were no other metals detected above the method detection limit from any other groundwater monitoring wells during the August 3, 2011 monitoring event. The analytical results of the metals analyses are summarized in Table 3.

Volatile Organic Compounds:

As summarized in Table 2, the volatile organic constituent benzene was detected in monitoring wells MW-2, MW-4, and MW-5 at reported concentrations above the NCAC 2L groundwater quality standard of 1 µg/L. The volatile organic constituent 1,4-dichlorobenzene was detected in the groundwater samples collected from wells MW-2, MW-4, and MW-5 at reported concentrations above the NCAC 2L groundwater quality standard of 6 µg/L.

Chlorobenzene, chloroethane, 1,2-dichlorobenzene, and 1,1-dichloroethane were detected in one or more groundwater samples during this monitoring event; however, each of the reported concentrations of these constituents were less than their respective NCAC 2L groundwater quality standard. No other volatile organic compounds were detected in the monitoring wells sampled during this event.

5.2 Surface Water Analytical Results

There were no volatile organic constituents detected above the method detection limit in the stream sample SW-2 during the August 3, 2011 groundwater monitoring event. The results are illustrated on **Table 4**.

The metal barium was detected in SW-2, at similar concentrations to previous monitoring events. The reported concentration is below the respective 15A NCAC 2B Surface Water Standard for barium for Class C surface waters. There were no other metals detected

above the method detection limit in the surface water sample collected during this sampling event. The results of the metals analyses are summarized on **Table 5**.

5.3 Groundwater Flow Direction

The static water levels in the monitoring wells were measured on August 3, 2011. The depth to the water table ranged from 9.85 to 24.59 feet below the top of well casing on this date. Groundwater elevation data are presented in Table 1. Ground surface elevations were taken from surface topography illustrated on Plan Sheet No. 3 of the Caswell County Landfill Closure Plans prepared by Dewberry and Davis in March 1994. The groundwater elevation at each monitoring well was approximated by taking the difference of the ground surface elevation (topography) and the depth to static water in each monitoring well. A groundwater contour map was constructed using the calculated groundwater elevation data from the August 3, 2011 sampling event and is presented as **Figure 2**. The groundwater elevation data collected during this monitoring event indicates that the groundwater beneath the landfill generally flows easterly toward the unnamed tributary of Moon Creek.

5.4 Quality Assurance

The monitoring wells were sampled using new, sterile Teflon disposable bailers or new Teflon and silicon tubing. For Quality Assurance a Duplicate sample was collected from monitoring well MW-3. The results of the detected volatile organic constituents from the duplicate sample were similar in concentration to the results of the detected volatile organic constituents reported in MW-3.

A Laboratory QC Method Blank was also analyzed for the Appendix I Volatile Organic Compounds as well as the RCRA 8 metals. No monitored constituents were detected in the method blank during the August 3, 2011 monitoring event. The results of the method blank and laboratory QC sample analyses are included in **Appendix B**.

5.5 Preliminary Analysis of Cause and Significance of 2L Exceedances

It is believed that the cause of the 2L exceedances within the hydrogeologic regime at the Caswell County Landfill is caused from percolation of landfill constituents from the waste management units into the uppermost groundwater aquifer.

Previously, S&ME reviewed the 2000 aerial photograph of the Caswell County Landfill and surrounding vicinity as a preliminary analysis of the proximity of potential receptor water well users to the compliance monitoring wells in which 2L exceedances occurred during the July 2010 groundwater monitoring event. Based on the aerial photograph for the year 2000, the nearest suspect residential home is located approximately 900 feet northeast of compliance monitoring well MW-5, which is the furthest downgradient monitoring well on the landfill side of the unnamed tributary of Moon Creek. The observed suspect homes are topographically up-gradient and on the other side of the unnamed tributary of Moon Creek from the Caswell County Landfill. At this time, S&ME has no information regarding the current use of groundwater as a potable water source for these homes, in the surrounding area.

Due to the detection of exceedances of the NCAC 2L groundwater quality standards in the compliance wells, S&ME recommends that a detailed water supply well receptor

survey be completed for the Caswell County Landfill and the development of plans to address the NCAC 2L exceedances.

6.0 REFERENCES

Fetter, C. W., 1988, Applied Hydrogeology, New York; Macmillian Publishing Company, 1988, 592 pp.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, subchapter 13B, Solid Waste Management, Section .1600 (January 1, 1997).

TABLES

Table 1
Groundwater Elevation Data Summary (8/3/11)
Caswell County Landfill
Yanceyville, North Carolina
S&ME Project No. 1584-07-034

Static Water Levels				
Well No.	Ground Surface Elevation (topographic)	Depth of Well (feet)	August 3, 2011	
			(feet)	Elevation (feet)
MW-1	572	24.5	20.26	551.74
MW-2	526	22.3	20.51	505.49
MW-3	511	17.8	12.84	498.16
MW-4	526	36.0	24.59	501.41
MW-5	498	24.7	10.89	487.11
MW-6	489	16.2	9.85	479.15

*Topographic = ground elevation estimated from topographic map w/2 foot contour interval,
not a surveyed elevation*

Depth of well data as measured by S&ME Inc. personnel on date of sampling

DTGW = Depth to Groundwater

Elevation = calculated groundwater elevation

TABLE 2
GROUNDWATER ANALYTICAL RESULTS SUMMARY (8/3/11)
APPENDIX I - VOLATILE ORGANIC COMPOUNDS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Compound	Sample Locations							NC SWSL	NCAC 2L stds.
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	Duplicate		
Benzene	ND	1.8	ND	2.2	1.4	ND	ND	1	1
Chlorobenzene	ND	20.8	12.8	18.5	7.8	ND	12.2	3	50
Chloroethane	ND	ND	ND	ND	1.5J	ND	ND	10	3,000
1,4-Dichlorobenzene	ND	11.8	4.9	12.5	15.9	ND	4.9	1	6
1,2-Dichlorobenzene	ND	1.7J	ND	1.9J	2.5J	ND	ND	5	20
1,1-Dichloroethane	ND	ND	ND	ND	1.2J	ND	ND	5	6

reported concentrations = micrograms per liter (ug/L)

NC SWSL = North Carolina Solid Waste Section Limit

ND = Analyte not detected

NE = No established 2L Standard for this constituent

NCAC 2L stds. = 15A North Carolina Administrative Code 2L .0200, GW Quality

Standards for Class GA groundwater.

Yellow highlights indicate a measurement higher than the NC SWSL

Orange highlights indicate a measurement higher than 2L standards.

J = Parameters are values between the detection limit and the NC SWSL.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS SUMMARY (8/3/11)
8-RCRA METALS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Constituent	Sample Locations							NC SWSL	NCAC 2L stds.
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	Duplicate		
Barium	27.3J	128	72.3J	44.4J	68.9J	14.6J	80.3J	100	700

all concentrations reported in micrograms per liter (ug/L)

NC SWSL = North Carolina Solid Waste Section Limit

ND = Analyte not detected

NCAC 2L stds. = 15A North Carolina Administrative Code 2L .0200, Groundwater Quality Standards for Class GA groundwater.

ns = no standard listed according to NCAC 2L

Yellow highlights indicate a measurement higher than the NC SWSL

Orange highlights indicate a measurement higher than 2L standards.

J = Parameters are values between the detection limit and the NC SWSL.

TABLE 4
SURFACE WATER ANALYTICAL RESULTS SUMMARY (8/3/11)
APPENDIX I - VOLATILE ORGANIC COMPOUNDS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Compound	Sample Locations		NC SWSL	15A NCAC 2B Standards*
	SW-1	SW-2		
All Target Compounds	NA	ND	--	--

NC SWSL= North Carolina Solid Waste Section Limit

ND = compound not detected in sample

** = Title 15A NCAC 2B Standards for Class B, C surface water*

NA= Not analyzed because creek was dry at this location at the time of this sampling event.

TABLE 5
SURFACE WATER ANALYTICAL RESULTS SUMMARY (8/3/11)
8-RCRA METALS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Constituent	Sample Locations		NC SWSL	15A NCAC 2B Standards*
	SW-1	SW-2		
Barium	NA	59.8 J	100	1000

NC SWSL = North Carolina Solid Waste Section Limit

ND = Parameter not detected

** = Title 15A NCAC 2B Standards for Class B, C surface water*

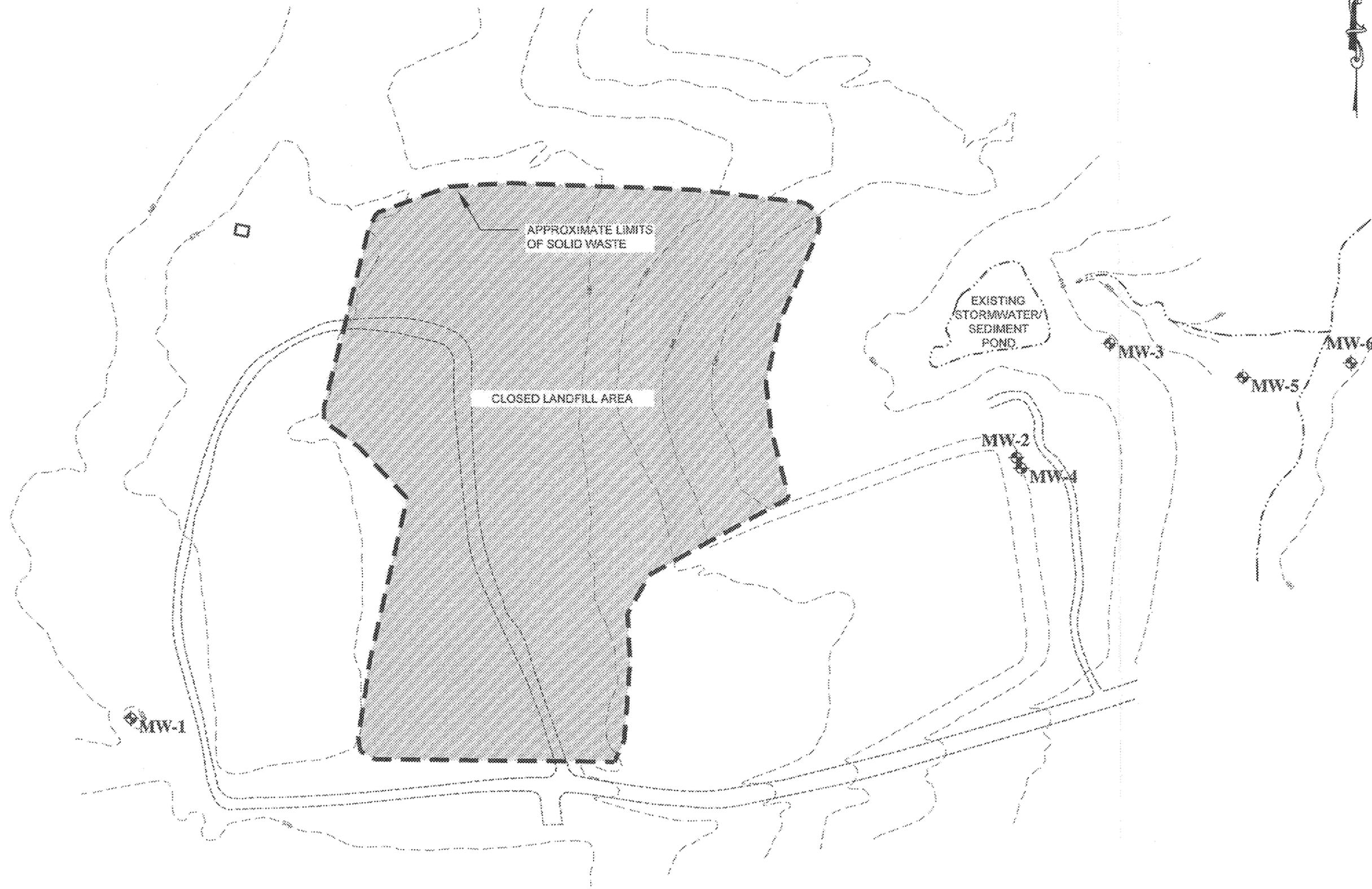
J = Parameters are estimated values between the detection limit and the NC SWSL.

NA= Not analyzed because the creek was dry at this location during this sampling event.

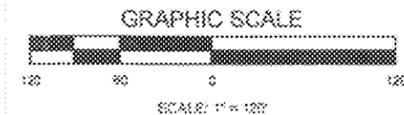
Yellow highlights indicate a measurement higher than the NC SWSL

Orange highlights indicate a measurement higher than 2B standards.

FIGURES



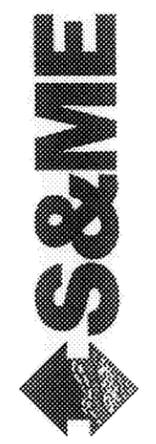
◆ KEY
- MONITORING WELL LOCATION

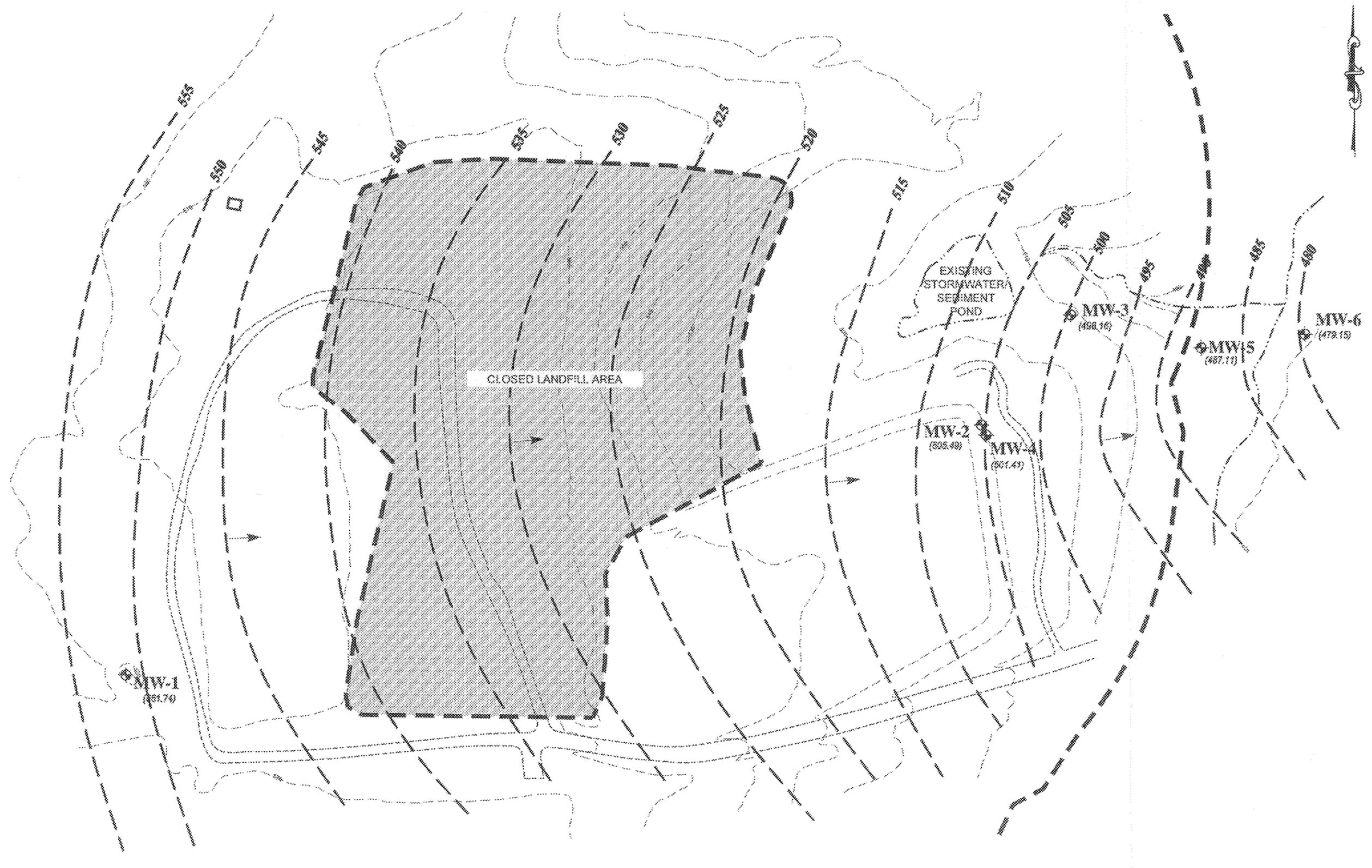


SITE PLAN
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA

SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: CDW
JOB NO. 1584-07-034	DATE: DECEMBER 2010	FIGURE NO. 1

8718 OLD BATTLEGROUND ROAD
GREENSBORO, NC 27410
PH: 336-233-7150
FAX: 336-238-9380
WWW.S&ME.COM





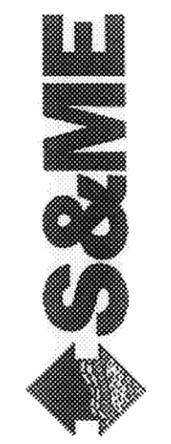
- KEY**
- ◆ - MONITORING WELL LOCATION
 - - - GROUNDWATER CONTOUR
 - (552.64) - GROUNDWATER ELEVATION MEASURED IN MONITORING WELL
 - ← - GROUNDWATER FLOW DIRECTION



GROUNDWATER CONTOUR MAP
 CASWELL COUNTY LANDFILL
 YANCEYVILLE, NORTH CAROLINA

CHECKED BY: CDW
 DRAWN BY: RDM
 DATE: OCTOBER 2011
 FIGURE NO. 2

8718 OLD BATTLEGROUND ROAD
 GREENSBORO, NC 27410
 PH: 336-288-1780
 FAX: 336-288-0886
 WWW.S&MEINC.COM



APPENDIX A
Groundwater Sampling Field Data Sheets

Caswell County Landfill

1584-07-034

Date: Wednesday, August 03, 2011

Collected By: Gary Simcox

<u>Location</u>	<u>Water Level</u>
MW-1	20.26
MW-2	20.51
MW-3	12.84
MW-4	24.59
MW-5	10.89
MW-6	9.85

APPENDIX B
Laboratory Analytical Reports



Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

August 23, 2011

Mr. Kevin Howard
Caswell County Landfill
162 Landfill Road
Yanceyville, NC 27379

RE: Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9299764

Dear Mr. Howard:

Enclosed are the analytical results for sample(s) received by the laboratory on August 04, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Bonnie McKee for
Kevin Herring
kevin.herring@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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CERTIFICATIONS

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

Charlotte Certification IDs

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
 North Carolina Drinking Water Certification #: 37706
 North Carolina Field Services Certification #: 5342
 North Carolina Wastewater Certification #: 12
 South Carolina Certification #: 99006001
 South Carolina Drinking Water Cert. #: 99006003
 Virginia Drinking Water Certification #: 00213

Connecticut Certification #: PH-0104
 Florida/NELAP Certification #: E87627
 Kentucky UST Certification #: 84
 Louisiana DHH Drinking Water # LA 100031
 West Virginia Certification #: 357
 Virginia/VELAP Certification #: 460144

Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804
 Florida/NELAP Certification #: E87648
 Massachusetts Certification #: M-NC030
 North Carolina Bioassay Certification #: 9
 North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
 South Carolina Certification #: 99030001
 Virginia Certification #: 00072
 West Virginia Certification #: 356
 Virginia/VELAP Certification #: 460147

REPORT OF LABORATORY ANALYSIS



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SAMPLE ANALYTE COUNT

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9299764001	1701 MW1	EPA 6010	SHB	7	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9299764002	1701 MW2	EPA 6010	SHB	7	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9299764003	1701 MW3	EPA 6010	SHB	7	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9299764004	1701 MW4	EPA 6010	SHB	7	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9299764005	1701 MW5	EPA 6010	SHB	7	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9299764006	1701 MW6	EPA 6010	SHB	7	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9299764007	1701 SW2	EPA 6010	SHB	7	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9299764008	1701 DUP	EPA 6010	SHB	7	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	53	PASI-C

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9299764

Sample:	Lab ID:	Collected:	Received:	Matrix:									
1701 MW1	9299764001	08/03/11 14:35	08/04/11 14:05	Water	Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater					Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Arsenic	ND	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:16	7440-38-2						
Barium	27.3	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:16	7440-39-3						
Cadmium	ND	ug/L	1.0	1	08/11/11 18:05	08/12/11 17:16	7440-43-9						
Chromium	ND	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:16	7440-47-3						
Lead	ND	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:16	7439-92-1						
Selenium	ND	ug/L	10.0	1	08/11/11 18:05	08/12/11 17:16	7782-49-2						
Silver	ND	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:16	7440-22-4						
7470 Mercury					Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	1	08/10/11 15:00	08/15/11 15:54	7439-97-6						
8260 MSV Low Level Landfill					Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	1		08/07/11 02:03	67-64-1						
Acrylonitrile	ND	ug/L	10.0	1		08/07/11 02:03	107-13-1						
Benzene	ND	ug/L	1.0	1		08/07/11 02:03	71-43-2						
Bromochloromethane	ND	ug/L	1.0	1		08/07/11 02:03	74-97-5						
Bromodichloromethane	ND	ug/L	1.0	1		08/07/11 02:03	75-27-4						
Bromoform	ND	ug/L	1.0	1		08/07/11 02:03	75-25-2						
Bromomethane	ND	ug/L	2.0	1		08/07/11 02:03	74-83-9						
2-Butanone (MEK)	ND	ug/L	5.0	1		08/07/11 02:03	78-93-3						
Carbon disulfide	ND	ug/L	2.0	1		08/07/11 02:03	75-15-0						
Carbon tetrachloride	ND	ug/L	1.0	1		08/07/11 02:03	56-23-5						
Chlorobenzene	ND	ug/L	1.0	1		08/07/11 02:03	108-90-7						
Chloroethane	ND	ug/L	1.0	1		08/07/11 02:03	75-00-3						
Chloroform	ND	ug/L	1.0	1		08/07/11 02:03	67-66-3						
Chloromethane	ND	ug/L	1.0	1		08/07/11 02:03	74-87-3						
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		08/07/11 02:03	96-12-8						
Dibromochloromethane	ND	ug/L	1.0	1		08/07/11 02:03	124-48-1						
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/07/11 02:03	106-93-4						
Dibromomethane	ND	ug/L	1.0	1		08/07/11 02:03	74-95-3						
1,2-Dichlorobenzene	ND	ug/L	1.0	1		08/07/11 02:03	95-50-1						
1,4-Dichlorobenzene	ND	ug/L	1.0	1		08/07/11 02:03	106-46-7						
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		08/07/11 02:03	110-57-6						
1,1-Dichloroethane	ND	ug/L	1.0	1		08/07/11 02:03	75-34-3						
1,2-Dichloroethane	ND	ug/L	1.0	1		08/07/11 02:03	107-06-2						
1,1-Dichloroethene	ND	ug/L	1.0	1		08/07/11 02:03	75-35-4						
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 02:03	156-59-2						
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 02:03	156-60-5						
1,2-Dichloropropane	ND	ug/L	1.0	1		08/07/11 02:03	78-87-5						
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 02:03	10061-01-5						
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 02:03	10061-02-6						
Ethylbenzene	ND	ug/L	1.0	1		08/07/11 02:03	100-41-4						
2-Hexanone	ND	ug/L	5.0	1		08/07/11 02:03	591-78-6						
Iodomethane	ND	ug/L	5.0	1		08/07/11 02:03	74-88-4						
Methylene Chloride	ND	ug/L	1.0	1		08/07/11 02:03	75-09-2						
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		08/07/11 02:03	108-10-1						

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL

Pace Project No.: 9299764

Sample: 1701 MW1		Lab ID: 9299764001	Collected: 08/03/11 14:35	Received: 08/04/11 14:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Styrene	ND	ug/L	1.0	1		08/07/11 02:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 02:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 02:03	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/07/11 02:03	127-18-4	
Toluene	ND	ug/L	1.0	1		08/07/11 02:03	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/07/11 02:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/07/11 02:03	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/07/11 02:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/07/11 02:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		08/07/11 02:03	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		08/07/11 02:03	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		08/07/11 02:03	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		08/07/11 02:03	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		08/07/11 02:03	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		08/07/11 02:03	95-47-6	
4-Bromofluorobenzene (S)	94 %		70-130	1		08/07/11 02:03	460-00-4	
Dibromofluoromethane (S)	107 %		70-130	1		08/07/11 02:03	1868-53-7	
1,2-Dichloroethane-d4 (S)	107 %		70-130	1		08/07/11 02:03	17060-07-0	
Toluene-d8 (S)	100 %		70-130	1		08/07/11 02:03	2037-26-5	

Sample: 1701 MW2		Lab ID: 9299764002	Collected: 08/03/11 09:30	Received: 08/04/11 14:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	ND	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:20	7440-38-2	
Barium	128	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:20	7440-39-3	
Cadmium	ND	ug/L	1.0	1	08/11/11 18:05	08/12/11 17:20	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:20	7440-47-3	
Lead	ND	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:20	7439-92-1	
Selenium	ND	ug/L	10.0	1	08/11/11 18:05	08/12/11 17:20	7782-49-2	
Silver	ND	ug/L	5.0	1	08/11/11 18:05	08/12/11 17:20	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND	ug/L	0.20	1	08/10/11 15:00	08/15/11 16:02	7439-97-6	
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Acetone	ND	ug/L	25.0	1		08/07/11 02:27	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		08/07/11 02:27	107-13-1	
Benzene	1.8	ug/L	1.0	1		08/07/11 02:27	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		08/07/11 02:27	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		08/07/11 02:27	75-27-4	
Bromoform	ND	ug/L	1.0	1		08/07/11 02:27	75-25-2	
Bromomethane	ND	ug/L	2.0	1		08/07/11 02:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		08/07/11 02:27	78-93-3	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

Sample: 1701 MW2 Lab ID: 9299764002 Collected: 08/03/11 09:30 Received: 08/04/11 14:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Carbon disulfide	ND	ug/L	2.0	1		08/07/11 02:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		08/07/11 02:27	56-23-5	
Chlorobenzene	20.8	ug/L	1.0	1		08/07/11 02:27	108-90-7	
Chloroethane	ND	ug/L	1.0	1		08/07/11 02:27	75-00-3	
Chloroform	ND	ug/L	1.0	1		08/07/11 02:27	67-66-3	
Chloromethane	ND	ug/L	1.0	1		08/07/11 02:27	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		08/07/11 02:27	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		08/07/11 02:27	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/07/11 02:27	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		08/07/11 02:27	74-95-3	
1,2-Dichlorobenzene	1.7	ug/L	1.0	1		08/07/11 02:27	95-50-1	
1,4-Dichlorobenzene	11.8	ug/L	1.0	1		08/07/11 02:27	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		08/07/11 02:27	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		08/07/11 02:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/07/11 02:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/07/11 02:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 02:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 02:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/07/11 02:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 02:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 02:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		08/07/11 02:27	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		08/07/11 02:27	591-78-6	
Iodomethane	ND	ug/L	5.0	1		08/07/11 02:27	74-88-4	
Methylene Chloride	ND	ug/L	1.0	1		08/07/11 02:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		08/07/11 02:27	108-10-1	
Styrene	ND	ug/L	1.0	1		08/07/11 02:27	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 02:27	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 02:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/07/11 02:27	127-18-4	
Toluene	ND	ug/L	1.0	1		08/07/11 02:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/07/11 02:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/07/11 02:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/07/11 02:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/07/11 02:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		08/07/11 02:27	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		08/07/11 02:27	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		08/07/11 02:27	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		08/07/11 02:27	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		08/07/11 02:27	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		08/07/11 02:27	95-47-6	
4-Bromofluorobenzene (S)	96	%	70-130	1		08/07/11 02:27	460-00-4	
Dibromofluoromethane (S)	106	%	70-130	1		08/07/11 02:27	1868-53-7	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		08/07/11 02:27	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		08/07/11 02:27	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

Sample: 1701 MW3	Lab ID: 9299764003	Collected: 08/03/11 11:15	Received: 08/04/11 14:05	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	ND ug/L		5.0	1	08/11/11 18:05	08/12/11 17:23	7440-38-2	
Barium	72.3 ug/L		5.0	1	08/11/11 18:05	08/12/11 17:23	7440-39-3	
Cadmium	ND ug/L		1.0	1	08/11/11 18:05	08/12/11 17:23	7440-43-9	
Chromium	ND ug/L		5.0	1	08/11/11 18:05	08/12/11 17:23	7440-47-3	
Lead	ND ug/L		5.0	1	08/11/11 18:05	08/12/11 17:23	7439-92-1	
Selenium	ND ug/L		10.0	1	08/11/11 18:05	08/12/11 17:23	7782-49-2	
Silver	ND ug/L		5.0	1	08/11/11 18:05	08/12/11 17:23	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		0.20	1	08/10/11 15:00	08/15/11 16:10	7439-97-6	
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Acetone	ND ug/L		25.0	1		08/07/11 02:52	67-64-1	
Acrylonitrile	ND ug/L		10.0	1		08/07/11 02:52	107-13-1	
Benzene	ND ug/L		1.0	1		08/07/11 02:52	71-43-2	
Bromochloromethane	ND ug/L		1.0	1		08/07/11 02:52	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		08/07/11 02:52	75-27-4	
Bromoform	ND ug/L		1.0	1		08/07/11 02:52	75-25-2	
Bromomethane	ND ug/L		2.0	1		08/07/11 02:52	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		08/07/11 02:52	78-93-3	
Carbon disulfide	ND ug/L		2.0	1		08/07/11 02:52	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		08/07/11 02:52	56-23-5	
Chlorobenzene	12.8 ug/L		1.0	1		08/07/11 02:52	108-90-7	
Chloroethane	ND ug/L		1.0	1		08/07/11 02:52	75-00-3	
Chloroform	ND ug/L		1.0	1		08/07/11 02:52	67-66-3	
Chloromethane	ND ug/L		1.0	1		08/07/11 02:52	74-87-3	
1,2-Dibromo-3-chloropropane	ND ug/L		5.0	1		08/07/11 02:52	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		08/07/11 02:52	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		08/07/11 02:52	106-93-4	
Dibromomethane	ND ug/L		1.0	1		08/07/11 02:52	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		08/07/11 02:52	95-50-1	
1,4-Dichlorobenzene	4.9 ug/L		1.0	1		08/07/11 02:52	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1		08/07/11 02:52	110-57-6	
1,1-Dichloroethane	ND ug/L		1.0	1		08/07/11 02:52	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		08/07/11 02:52	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		08/07/11 02:52	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		08/07/11 02:52	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		08/07/11 02:52	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		08/07/11 02:52	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		08/07/11 02:52	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		08/07/11 02:52	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		08/07/11 02:52	100-41-4	
2-Hexanone	ND ug/L		5.0	1		08/07/11 02:52	591-78-6	
Iodomethane	ND ug/L		5.0	1		08/07/11 02:52	74-88-4	
Methylene Chloride	ND ug/L		1.0	1		08/07/11 02:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		08/07/11 02:52	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9299764

Sample: 1701 MW3		Lab ID: 9299764003	Collected: 08/03/11 11:15	Received: 08/04/11 14:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Styrene	ND ug/L		1.0	1		08/07/11 02:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		08/07/11 02:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		08/07/11 02:52	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		08/07/11 02:52	127-18-4	
Toluene	ND ug/L		1.0	1		08/07/11 02:52	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	1		08/07/11 02:52	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		08/07/11 02:52	79-00-5	
Trichloroethene	ND ug/L		1.0	1		08/07/11 02:52	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		08/07/11 02:52	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		08/07/11 02:52	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		08/07/11 02:52	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		08/07/11 02:52	75-01-4	
Xylene (Total)	ND ug/L		2.0	1		08/07/11 02:52	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		08/07/11 02:52	179601-23-1	
o-Xylene	ND ug/L		1.0	1		08/07/11 02:52	95-47-6	
4-Bromofluorobenzene (S)	98 %		70-130	1		08/07/11 02:52	460-00-4	
Dibromofluoromethane (S)	106 %		70-130	1		08/07/11 02:52	1868-53-7	
1,2-Dichloroethane-d4 (S)	106 %		70-130	1		08/07/11 02:52	17060-07-0	
Toluene-d8 (S)	100 %		70-130	1		08/07/11 02:52	2037-26-5	

Sample: 1701 MW4		Lab ID: 9299764004	Collected: 08/03/11 10:05	Received: 08/04/11 14:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 00:58	7440-38-2	
Barium	44.4 ug/L		5.0	1	08/17/11 11:40	08/19/11 00:58	7440-39-3	
Cadmium	ND ug/L		1.0	1	08/17/11 11:40	08/19/11 00:58	7440-43-9	
Chromium	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 00:58	7440-47-3	
Lead	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 00:58	7439-92-1	
Selenium	ND ug/L		10.0	1	08/17/11 11:40	08/19/11 13:33	7782-49-2	
Silver	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 00:58	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		0.20	1	08/10/11 15:00	08/15/11 16:12	7439-97-6	
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Acetone	ND ug/L		25.0	1		08/07/11 03:16	67-64-1	
Acrylonitrile	ND ug/L		10.0	1		08/07/11 03:16	107-13-1	
Benzene	2.2 ug/L		1.0	1		08/07/11 03:16	71-43-2	
Bromochloromethane	ND ug/L		1.0	1		08/07/11 03:16	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		08/07/11 03:16	75-27-4	
Bromoform	ND ug/L		1.0	1		08/07/11 03:16	75-25-2	
Bromomethane	ND ug/L		2.0	1		08/07/11 03:16	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		08/07/11 03:16	78-93-3	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL

Pace Project No.: 9299764

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8260 MSV Low Level Landfill

Analytical Method: EPA 8260

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Carbon disulfide	ND	ug/L	2.0	1		08/07/11 03:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		08/07/11 03:16	56-23-5	
Chlorobenzene	18.5	ug/L	1.0	1		08/07/11 03:16	108-90-7	
Chloroethane	ND	ug/L	1.0	1		08/07/11 03:16	75-00-3	
Chloroform	ND	ug/L	1.0	1		08/07/11 03:16	67-66-3	
Chloromethane	ND	ug/L	1.0	1		08/07/11 03:16	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		08/07/11 03:16	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		08/07/11 03:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/07/11 03:16	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		08/07/11 03:16	74-95-3	
1,2-Dichlorobenzene	1.9	ug/L	1.0	1		08/07/11 03:16	95-50-1	
1,4-Dichlorobenzene	12.5	ug/L	1.0	1		08/07/11 03:16	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		08/07/11 03:16	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		08/07/11 03:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/07/11 03:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/07/11 03:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 03:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 03:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/07/11 03:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 03:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 03:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		08/07/11 03:16	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		08/07/11 03:16	591-78-6	
Iodomethane	ND	ug/L	5.0	1		08/07/11 03:16	74-88-4	
Methylene Chloride	ND	ug/L	1.0	1		08/07/11 03:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		08/07/11 03:16	108-10-1	
Styrene	ND	ug/L	1.0	1		08/07/11 03:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 03:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 03:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/07/11 03:16	127-18-4	
Toluene	ND	ug/L	1.0	1		08/07/11 03:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/07/11 03:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/07/11 03:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/07/11 03:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/07/11 03:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		08/07/11 03:16	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		08/07/11 03:16	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		08/07/11 03:16	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		08/07/11 03:16	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		08/07/11 03:16	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		08/07/11 03:16	95-47-6	
4-Bromofluorobenzene (S)	96 %		70-130	1		08/07/11 03:16	460-00-4	
Dibromofluoromethane (S)	108 %		70-130	1		08/07/11 03:16	1868-53-7	
1,2-Dichloroethane-d4 (S)	104 %		70-130	1		08/07/11 03:16	17060-07-0	
Toluene-d8 (S)	100 %		70-130	1		08/07/11 03:16	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9299764

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Sample: 1701 MW5								
Lab ID: 9299764005 Collected: 08/03/11 12:25 Received: 08/04/11 14:05 Matrix: Water								
6010 ICP Groundwater								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Arsenic	ND	ug/L	5.0	1	08/17/11 11:40	08/19/11 01:02	7440-38-2	
Barium	68.9	ug/L	5.0	1	08/17/11 11:40	08/19/11 01:02	7440-39-3	
Cadmium	ND	ug/L	1.0	1	08/17/11 11:40	08/19/11 01:02	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/17/11 11:40	08/19/11 01:02	7440-47-3	
Lead	ND	ug/L	5.0	1	08/17/11 11:40	08/19/11 01:02	7439-92-1	
Selenium	ND	ug/L	10.0	1	08/17/11 11:40	08/19/11 13:36	7782-49-2	
Silver	ND	ug/L	5.0	1	08/17/11 11:40	08/19/11 01:02	7440-22-4	
7470 Mercury								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	1	08/10/11 15:00	08/15/11 16:15	7439-97-6	
8260 MSV Low Level Landfill								
Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	1		08/07/11 03:41	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		08/07/11 03:41	107-13-1	
Benzene	1.4	ug/L	1.0	1		08/07/11 03:41	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		08/07/11 03:41	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		08/07/11 03:41	75-27-4	
Bromoform	ND	ug/L	1.0	1		08/07/11 03:41	75-25-2	
Bromomethane	ND	ug/L	2.0	1		08/07/11 03:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		08/07/11 03:41	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		08/07/11 03:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		08/07/11 03:41	56-23-5	
Chlorobenzene	7.8	ug/L	1.0	1		08/07/11 03:41	108-90-7	
Chloroethane	1.5	ug/L	1.0	1		08/07/11 03:41	75-00-3	
Chloroform	ND	ug/L	1.0	1		08/07/11 03:41	67-66-3	
Chloromethane	ND	ug/L	1.0	1		08/07/11 03:41	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		08/07/11 03:41	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		08/07/11 03:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/07/11 03:41	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		08/07/11 03:41	74-95-3	
1,2-Dichlorobenzene	2.5	ug/L	1.0	1		08/07/11 03:41	95-50-1	
1,4-Dichlorobenzene	15.9	ug/L	1.0	1		08/07/11 03:41	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		08/07/11 03:41	110-57-6	
1,1-Dichloroethane	1.2	ug/L	1.0	1		08/07/11 03:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/07/11 03:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/07/11 03:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 03:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 03:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/07/11 03:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 03:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 03:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		08/07/11 03:41	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		08/07/11 03:41	591-78-6	
Iodomethane	ND	ug/L	5.0	1		08/07/11 03:41	74-88-4	
Methylene Chloride	ND	ug/L	1.0	1		08/07/11 03:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		08/07/11 03:41	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9299764

Sample: 1701 MW5	Lab ID: 9299764005	Collected: 08/03/11 12:25	Received: 08/04/11 14:05	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Styrene	ND ug/L		1.0	1		08/07/11 03:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		08/07/11 03:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		08/07/11 03:41	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		08/07/11 03:41	127-18-4	
Toluene	ND ug/L		1.0	1		08/07/11 03:41	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	1		08/07/11 03:41	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		08/07/11 03:41	79-00-5	
Trichloroethene	ND ug/L		1.0	1		08/07/11 03:41	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		08/07/11 03:41	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		08/07/11 03:41	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		08/07/11 03:41	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		08/07/11 03:41	75-01-4	
Xylene (Total)	ND ug/L		2.0	1		08/07/11 03:41	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		08/07/11 03:41	179601-23-1	
o-Xylene	ND ug/L		1.0	1		08/07/11 03:41	95-47-6	
4-Bromofluorobenzene (S)	97 %		70-130	1		08/07/11 03:41	460-00-4	
Dibromofluoromethane (S)	106 %		70-130	1		08/07/11 03:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		70-130	1		08/07/11 03:41	17060-07-0	
Toluene-d8 (S)	100 %		70-130	1		08/07/11 03:41	2037-26-5	

Sample: 1701 MW6	Lab ID: 9299764006	Collected: 08/03/11 13:20	Received: 08/04/11 14:05	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:05	7440-38-2	
Barium	14.6 ug/L		5.0	1	08/17/11 11:40	08/19/11 01:05	7440-39-3	
Cadmium	ND ug/L		1.0	1	08/17/11 11:40	08/19/11 01:05	7440-43-9	
Chromium	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:05	7440-47-3	
Lead	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:05	7439-92-1	
Selenium	ND ug/L		10.0	1	08/17/11 11:40	08/19/11 13:50	7782-49-2	
Silver	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:05	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		0.20	1	08/10/11 15:00	08/15/11 16:18	7439-97-6	
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Acetone	ND ug/L		25.0	1		08/07/11 04:05	67-64-1	
Acrylonitrile	ND ug/L		10.0	1		08/07/11 04:05	107-13-1	
Benzene	ND ug/L		1.0	1		08/07/11 04:05	71-43-2	
Bromochloromethane	ND ug/L		1.0	1		08/07/11 04:05	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		08/07/11 04:05	75-27-4	
Bromoform	ND ug/L		1.0	1		08/07/11 04:05	75-25-2	
Bromomethane	ND ug/L		2.0	1		08/07/11 04:05	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		08/07/11 04:05	78-93-3	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL

Pace Project No.: 9299764

Sample: 1701 MW6	Lab ID: 9299764006	Collected: 08/03/11 13:20	Received: 08/04/11 14:05	Matrix: Water
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Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Carbon disulfide	ND	ug/L	2.0	1		08/07/11 04:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		08/07/11 04:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		08/07/11 04:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		08/07/11 04:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		08/07/11 04:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		08/07/11 04:05	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		08/07/11 04:05	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		08/07/11 04:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/07/11 04:05	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		08/07/11 04:05	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		08/07/11 04:05	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		08/07/11 04:05	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		08/07/11 04:05	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		08/07/11 04:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/07/11 04:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/07/11 04:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 04:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 04:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/07/11 04:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 04:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 04:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		08/07/11 04:05	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		08/07/11 04:05	591-78-6	
Iodomethane	ND	ug/L	5.0	1		08/07/11 04:05	74-88-4	
Methylene Chloride	ND	ug/L	1.0	1		08/07/11 04:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		08/07/11 04:05	108-10-1	
Styrene	ND	ug/L	1.0	1		08/07/11 04:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 04:05	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 04:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/07/11 04:05	127-18-4	
Toluene	ND	ug/L	1.0	1		08/07/11 04:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/07/11 04:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/07/11 04:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/07/11 04:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/07/11 04:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		08/07/11 04:05	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		08/07/11 04:05	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		08/07/11 04:05	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		08/07/11 04:05	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		08/07/11 04:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		08/07/11 04:05	95-47-6	
4-Bromofluorobenzene (S)	98	%	70-130	1		08/07/11 04:05	460-00-4	
Dibromofluoromethane (S)	105	%	70-130	1		08/07/11 04:05	1868-53-7	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		08/07/11 04:05	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		08/07/11 04:05	2037-26-5	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Sample: 1701 SW2								
Lab ID: 9299764007								
Collected: 08/03/11 13:35 Received: 08/04/11 14:05 Matrix: Water								
6010 ICP Groundwater								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Arsenic	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:08	7440-38-2	
Barium	59.8 ug/L		5.0	1	08/17/11 11:40	08/19/11 01:08	7440-39-3	
Cadmium	ND ug/L		1.0	1	08/17/11 11:40	08/19/11 01:08	7440-43-9	
Chromium	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:08	7440-47-3	
Lead	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:08	7439-92-1	
Selenium	ND ug/L		10.0	1	08/17/11 11:40	08/19/11 13:53	7782-49-2	
Silver	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:08	7440-22-4	
7470 Mercury								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND ug/L		0.20	1	08/10/11 15:00	08/15/11 16:20	7439-97-6	
8260 MSV Low Level Landfill								
Analytical Method: EPA 8260								
Acetone	ND ug/L		25.0	1		08/07/11 04:30	67-64-1	
Acrylonitrile	ND ug/L		10.0	1		08/07/11 04:30	107-13-1	
Benzene	ND ug/L		1.0	1		08/07/11 04:30	71-43-2	
Bromochloromethane	ND ug/L		1.0	1		08/07/11 04:30	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		08/07/11 04:30	75-27-4	
Bromoform	ND ug/L		1.0	1		08/07/11 04:30	75-25-2	
Bromomethane	ND ug/L		2.0	1		08/07/11 04:30	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		08/07/11 04:30	78-93-3	
Carbon disulfide	ND ug/L		2.0	1		08/07/11 04:30	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		08/07/11 04:30	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		08/07/11 04:30	108-90-7	
Chloroethane	ND ug/L		1.0	1		08/07/11 04:30	75-00-3	
Chloroform	ND ug/L		1.0	1		08/07/11 04:30	67-66-3	
Chloromethane	ND ug/L		1.0	1		08/07/11 04:30	74-87-3	
1,2-Dibromo-3-chloropropane	ND ug/L		5.0	1		08/07/11 04:30	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		08/07/11 04:30	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		08/07/11 04:30	106-93-4	
Dibromomethane	ND ug/L		1.0	1		08/07/11 04:30	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		08/07/11 04:30	95-50-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		08/07/11 04:30	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1		08/07/11 04:30	110-57-6	
1,1-Dichloroethane	ND ug/L		1.0	1		08/07/11 04:30	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		08/07/11 04:30	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		08/07/11 04:30	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		08/07/11 04:30	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		08/07/11 04:30	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		08/07/11 04:30	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		08/07/11 04:30	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		08/07/11 04:30	10061-02-6	
Ethylbenzene	ND ug/L		1.0	1		08/07/11 04:30	100-41-4	
2-Hexanone	ND ug/L		5.0	1		08/07/11 04:30	591-78-6	
Iodomethane	ND ug/L		5.0	1		08/07/11 04:30	74-88-4	
Methylene Chloride	ND ug/L		1.0	1		08/07/11 04:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		08/07/11 04:30	108-10-1	



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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9299764

Sample: 1701 SW2	Lab ID: 9299764007	Collected: 08/03/11 13:35	Received: 08/04/11 14:05	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Styrene	ND ug/L		1.0	1		08/07/11 04:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		08/07/11 04:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		08/07/11 04:30	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		08/07/11 04:30	127-18-4	
Toluene	ND ug/L		1.0	1		08/07/11 04:30	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	1		08/07/11 04:30	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		08/07/11 04:30	79-00-5	
Trichloroethene	ND ug/L		1.0	1		08/07/11 04:30	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		08/07/11 04:30	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		08/07/11 04:30	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		08/07/11 04:30	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		08/07/11 04:30	75-01-4	
Xylene (Total)	ND ug/L		2.0	1		08/07/11 04:30	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		08/07/11 04:30	179601-23-1	
o-Xylene	ND ug/L		1.0	1		08/07/11 04:30	95-47-6	
4-Bromofluorobenzene (S)	97 %		70-130	1		08/07/11 04:30	460-00-4	
Dibromofluoromethane (S)	106 %		70-130	1		08/07/11 04:30	1868-53-7	
1,2-Dichloroethane-d4 (S)	106 %		70-130	1		08/07/11 04:30	17060-07-0	
Toluene-d8 (S)	101 %		70-130	1		08/07/11 04:30	2037-26-5	

Sample: 1701 DUP	Lab ID: 9299764008	Collected: 08/03/11 08:00	Received: 08/04/11 14:05	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Arsenic	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:12	7440-38-2	
Barium	80.3 ug/L		5.0	1	08/17/11 11:40	08/19/11 01:12	7440-39-3	
Cadmium	ND ug/L		1.0	1	08/17/11 11:40	08/19/11 01:12	7440-43-9	
Chromium	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:12	7440-47-3	
Lead	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:12	7439-92-1	
Selenium	ND ug/L		10.0	1	08/17/11 11:40	08/19/11 13:56	7782-49-2	
Silver	ND ug/L		5.0	1	08/17/11 11:40	08/19/11 01:12	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470						
Mercury	ND ug/L		0.20	1	08/10/11 15:00	08/15/11 16:23	7439-97-6	
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Acetone	ND ug/L		25.0	1		08/07/11 04:54	67-64-1	
Acrylonitrile	ND ug/L		10.0	1		08/07/11 04:54	107-13-1	
Benzene	ND ug/L		1.0	1		08/07/11 04:54	71-43-2	
Bromochloromethane	ND ug/L		1.0	1		08/07/11 04:54	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		08/07/11 04:54	75-27-4	
Bromoform	ND ug/L		1.0	1		08/07/11 04:54	75-25-2	
Bromomethane	ND ug/L		2.0	1		08/07/11 04:54	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		08/07/11 04:54	78-93-3	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL

Pace Project No.: 9299764

Sample: 1701 DUP	Lab ID: 9299764008	Collected: 08/03/11 08:00	Received: 08/04/11 14:05	Matrix: Water
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Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill		Analytical Method: EPA 8260						
Carbon disulfide	ND	ug/L	2.0	1		08/07/11 04:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		08/07/11 04:54	56-23-5	
Chlorobenzene	12.2	ug/L	1.0	1		08/07/11 04:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		08/07/11 04:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		08/07/11 04:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		08/07/11 04:54	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		08/07/11 04:54	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		08/07/11 04:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/07/11 04:54	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		08/07/11 04:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		08/07/11 04:54	95-50-1	
1,4-Dichlorobenzene	4.9	ug/L	1.0	1		08/07/11 04:54	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		08/07/11 04:54	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		08/07/11 04:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/07/11 04:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/07/11 04:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 04:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/07/11 04:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/07/11 04:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 04:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/07/11 04:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		08/07/11 04:54	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		08/07/11 04:54	591-78-6	
Iodomethane	ND	ug/L	5.0	1		08/07/11 04:54	74-88-4	
Methylene Chloride	ND	ug/L	1.0	1		08/07/11 04:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		08/07/11 04:54	108-10-1	
Styrene	ND	ug/L	1.0	1		08/07/11 04:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 04:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/07/11 04:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/07/11 04:54	127-18-4	
Toluene	ND	ug/L	1.0	1		08/07/11 04:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/07/11 04:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/07/11 04:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/07/11 04:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/07/11 04:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		08/07/11 04:54	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		08/07/11 04:54	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		08/07/11 04:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		08/07/11 04:54	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		08/07/11 04:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		08/07/11 04:54	95-47-6	
4-Bromofluorobenzene (S)	96	%	70-130	1		08/07/11 04:54	460-00-4	
Dibromofluoromethane (S)	105	%	70-130	1		08/07/11 04:54	1868-53-7	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		08/07/11 04:54	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		08/07/11 04:54	2037-26-5	

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

QC Batch: MPRP/8882 Analysis Method: EPA 6010
 QC Batch Method: EPA 3010 Analysis Description: 6010 MET NC Groundwater
 Associated Lab Samples: 9299764001, 9299764002, 9299764003

METHOD BLANK: 646630 Matrix: Water
 Associated Lab Samples: 9299764001, 9299764002, 9299764003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	5.0	08/12/11 15:42	
Barium	ug/L	ND	5.0	08/12/11 15:42	
Cadmium	ug/L	ND	1.0	08/12/11 15:42	
Chromium	ug/L	ND	5.0	08/12/11 15:42	
Lead	ug/L	ND	5.0	08/12/11 15:42	
Selenium	ug/L	ND	10.0	08/12/11 15:42	
Silver	ug/L	ND	5.0	08/12/11 15:42	

LABORATORY CONTROL SAMPLE: 646631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	500	491	98	80-120	
Barium	ug/L	500	494	99	80-120	
Cadmium	ug/L	500	515	103	80-120	
Chromium	ug/L	500	517	103	80-120	
Lead	ug/L	500	512	102	80-120	
Selenium	ug/L	500	501	100	80-120	
Silver	ug/L	250	255	102	80-120	

MATRIX SPIKE SAMPLE: 646632

Parameter	Units	9299105022 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	ND	500	474	95	75-125	
Barium	ug/L	134	500	597	93	75-125	
Cadmium	ug/L	ND	500	491	98	75-125	
Chromium	ug/L	ND	500	503	100	75-125	
Lead	ug/L	ND	500	477	95	75-125	
Selenium	ug/L	ND	500	483	96	75-125	
Silver	ug/L	ND	250	246	98	75-125	

SAMPLE DUPLICATE: 646633

Parameter	Units	9299105023 Result	Dup Result	RPD	Qualifiers
Arsenic	ug/L	ND	ND		
Barium	ug/L	473	458	3	
Cadmium	ug/L	ND	ND		
Chromium	ug/L	7.9	7.2	9	
Lead	ug/L	ND	ND		

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9299764

SAMPLE DUPLICATE: 646633

Parameter	Units	9299105023 Result	Dup Result	RPD	Qualifiers
Selenium	ug/L	ND	ND		
Silver	ug/L	ND	ND		



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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

QC Batch: MPRP/8913 Analysis Method: EPA 6010
 QC Batch Method: EPA 3010 Analysis Description: 6010 MET NC Groundwater
 Associated Lab Samples: 9299764004, 9299764005, 9299764006, 9299764007, 9299764008

METHOD BLANK: 648514 Matrix: Water
 Associated Lab Samples: 9299764004, 9299764005, 9299764006, 9299764007, 9299764008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	5.0	08/19/11 00:51	
Barium	ug/L	ND	5.0	08/19/11 00:51	
Cadmium	ug/L	ND	1.0	08/19/11 00:51	
Chromium	ug/L	ND	5.0	08/19/11 00:51	
Lead	ug/L	ND	5.0	08/19/11 00:51	
Selenium	ug/L	ND	10.0	08/19/11 00:51	
Silver	ug/L	ND	5.0	08/19/11 00:51	

LABORATORY CONTROL SAMPLE: 648515

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	500	471	94	80-120	
Barium	ug/L	500	468	94	80-120	
Cadmium	ug/L	500	486	97	80-120	
Chromium	ug/L	500	482	96	80-120	
Lead	ug/L	500	488	98	80-120	
Selenium	ug/L	500	470	94	80-120	
Silver	ug/L	250	247	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 648516 648517

Parameter	Units	92100060002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	Spike Conc.	MS Result	MSD Result					
Arsenic	ug/L	ND	500	500	495	489	98	97	75-125	1	
Barium	ug/L	455	500	500	899	899	89	89	75-125	0	
Cadmium	ug/L	ND	500	500	461	461	92	92	75-125	0	
Chromium	ug/L	ND	500	500	458	461	92	92	75-125	1	
Lead	ug/L	ND	500	500	456	457	91	91	75-125	0	
Selenium	ug/L	ND	500	500	476	481	95	96	75-125	1	
Silver	ug/L	ND	250	250	250	249	99	99	75-125	0	



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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

QC Batch: MERP/3676 Analysis Method: EPA 7470
 QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
 Associated Lab Samples: 9299764001, 9299764002, 9299764003, 9299764004, 9299764005, 9299764006, 9299764007, 9299764008

METHOD BLANK: 645643 Matrix: Water
 Associated Lab Samples: 9299764001, 9299764002, 9299764003, 9299764004, 9299764005, 9299764006, 9299764007, 9299764008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	08/15/11 15:41	

LABORATORY CONTROL SAMPLE: 645644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.2	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 645645 645646

Parameter	Units	9299893004 Result	MS		MSD		% Rec		% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
Mercury	ug/L	ND	2.5	2.5	1.8	1.8	69	67	75-125	2	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 645647 645648

Parameter	Units	9299764001 Result	MS		MSD		% Rec		% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
Mercury	ug/L	ND	2.5	2.5	1.3	1.3	52	51	75-125	3	M1



QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

QC Batch: MSV/16222 Analysis Method: EPA 8260
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level Landfill
 Associated Lab Samples: 9299764001, 9299764002, 9299764003, 9299764004, 9299764005, 9299764006, 9299764007, 9299764008

METHOD BLANK: 644261 Matrix: Water
 Associated Lab Samples: 9299764001, 9299764002, 9299764003, 9299764004, 9299764005, 9299764006, 9299764007, 9299764008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	08/06/11 21:10	
1,1,1-Trichloroethane	ug/L	ND	1.0	08/06/11 21:10	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	08/06/11 21:10	
1,1,2-Trichloroethane	ug/L	ND	1.0	08/06/11 21:10	
1,1-Dichloroethane	ug/L	ND	1.0	08/06/11 21:10	
1,1-Dichloroethene	ug/L	ND	1.0	08/06/11 21:10	
1,2,3-Trichloropropane	ug/L	ND	1.0	08/06/11 21:10	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	08/06/11 21:10	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	08/06/11 21:10	
1,2-Dichlorobenzene	ug/L	ND	1.0	08/06/11 21:10	
1,2-Dichloroethane	ug/L	ND	1.0	08/06/11 21:10	
1,2-Dichloropropane	ug/L	ND	1.0	08/06/11 21:10	
1,4-Dichlorobenzene	ug/L	ND	1.0	08/06/11 21:10	
2-Butanone (MEK)	ug/L	ND	5.0	08/06/11 21:10	
2-Hexanone	ug/L	ND	5.0	08/06/11 21:10	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	08/06/11 21:10	
Acetone	ug/L	ND	25.0	08/06/11 21:10	
Acrylonitrile	ug/L	ND	10.0	08/06/11 21:10	
Benzene	ug/L	ND	1.0	08/06/11 21:10	
Bromochloromethane	ug/L	ND	1.0	08/06/11 21:10	
Bromodichloromethane	ug/L	ND	1.0	08/06/11 21:10	
Bromoform	ug/L	ND	1.0	08/06/11 21:10	
Bromomethane	ug/L	ND	2.0	08/06/11 21:10	
Carbon disulfide	ug/L	ND	2.0	08/06/11 21:10	
Carbon tetrachloride	ug/L	ND	1.0	08/06/11 21:10	
Chlorobenzene	ug/L	ND	1.0	08/06/11 21:10	
Chloroethane	ug/L	ND	1.0	08/06/11 21:10	
Chloroform	ug/L	ND	1.0	08/06/11 21:10	
Chloromethane	ug/L	ND	1.0	08/06/11 21:10	
cis-1,2-Dichloroethene	ug/L	ND	1.0	08/06/11 21:10	
cis-1,3-Dichloropropene	ug/L	ND	1.0	08/06/11 21:10	
Dibromochloromethane	ug/L	ND	1.0	08/06/11 21:10	
Dibromomethane	ug/L	ND	1.0	08/06/11 21:10	
Ethylbenzene	ug/L	ND	1.0	08/06/11 21:10	
Iodomethane	ug/L	ND	5.0	08/06/11 21:10	
m&p-Xylene	ug/L	ND	2.0	08/06/11 21:10	
Methylene Chloride	ug/L	ND	1.0	08/06/11 21:10	
o-Xylene	ug/L	ND	1.0	08/06/11 21:10	
Styrene	ug/L	ND	1.0	08/06/11 21:10	
Tetrachloroethene	ug/L	ND	1.0	08/06/11 21:10	
Toluene	ug/L	ND	1.0	08/06/11 21:10	
trans-1,2-Dichloroethene	ug/L	ND	1.0	08/06/11 21:10	
trans-1,3-Dichloropropene	ug/L	ND	1.0	08/06/11 21:10	

Date: 08/23/2011 05:10 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9299764

METHOD BLANK: 644261 Matrix: Water
Associated Lab Samples: 9299764001, 9299764002, 9299764003, 9299764004, 9299764005, 9299764006, 9299764007, 9299764008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	08/06/11 21:10	
Trichloroethene	ug/L	ND	1.0	08/06/11 21:10	
Trichlorofluoromethane	ug/L	ND	1.0	08/06/11 21:10	
Vinyl acetate	ug/L	ND	2.0	08/06/11 21:10	
Vinyl chloride	ug/L	ND	1.0	08/06/11 21:10	
Xylene (Total)	ug/L	ND	2.0	08/06/11 21:10	
1,2-Dichloroethane-d4 (S)	%	105	70-130	08/06/11 21:10	
4-Bromofluorobenzene (S)	%	95	70-130	08/06/11 21:10	
Dibromofluoromethane (S)	%	105	70-130	08/06/11 21:10	
Toluene-d8 (S)	%	100	70-130	08/06/11 21:10	

LABORATORY CONTROL SAMPLE: 644262

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.2	102	70-130	
1,1,1-Trichloroethane	ug/L	50	48.6	97	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.9	96	70-130	
1,1,2-Trichloroethane	ug/L	50	49.7	99	70-130	
1,1-Dichloroethane	ug/L	50	46.3	93	70-130	
1,1-Dichloroethene	ug/L	50	45.3	91	70-132	
1,2,3-Trichloropropane	ug/L	50	48.5	97	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	47.3	95	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	49.4	99	70-130	
1,2-Dichlorobenzene	ug/L	50	48.4	97	70-130	
1,2-Dichloroethane	ug/L	50	47.6	95	70-130	
1,2-Dichloropropane	ug/L	50	46.6	93	70-130	
1,4-Dichlorobenzene	ug/L	50	46.3	93	70-130	
2-Butanone (MEK)	ug/L	100	88.4	88	70-145	
2-Hexanone	ug/L	100	96.3	96	70-144	
4-Methyl-2-pentanone (MIBK)	ug/L	100	92.4	92	70-140	
Acetone	ug/L	100	80.7	81	50-175	
Acrylonitrile	ug/L	250	241	96	70-143	
Benzene	ug/L	50	44.6	89	70-130	
Bromochloromethane	ug/L	50	48.8	98	70-130	
Bromodichloromethane	ug/L	50	49.3	99	70-130	
Bromoform	ug/L	50	48.9	98	70-130	
Bromomethane	ug/L	50	55.3	111	54-130	
Carbon disulfide	ug/L	50	49.9	100	70-131	
Carbon tetrachloride	ug/L	50	49.0	98	70-132	
Chlorobenzene	ug/L	50	49.0	98	70-130	
Chloroethane	ug/L	50	68.9	138	64-134 L0	
Chloroform	ug/L	50	49.7	99	70-130	
Chloromethane	ug/L	50	46.7	93	64-130	
cis-1,2-Dichloroethene	ug/L	50	46.1	92	70-131	
cis-1,3-Dichloropropene	ug/L	50	47.0	94	70-130	



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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
 Pace Project No.: 9299764

LABORATORY CONTROL SAMPLE: 644262

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/L	50	50.5	101	70-130	
Dibromomethane	ug/L	50	46.5	93	70-131	
Ethylbenzene	ug/L	50	47.7	95	70-130	
Iodomethane	ug/L	100	117	117	49-180	
m&p-Xylene	ug/L	100	95.9	96	70-130	
Methylene Chloride	ug/L	50	46.7	93	63-130	
o-Xylene	ug/L	50	49.8	100	70-130	
Styrene	ug/L	50	50.9	102	70-130	
Tetrachloroethene	ug/L	50	49.2	98	70-130	
Toluene	ug/L	50	44.3	89	70-130	
trans-1,2-Dichloroethene	ug/L	50	45.7	91	70-130	
trans-1,3-Dichloropropene	ug/L	50	47.1	94	70-132	
trans-1,4-Dichloro-2-butene	ug/L	50	55.5	111	70-141	
Trichloroethene	ug/L	50	47.4	95	70-130	
Trichlorofluoromethane	ug/L	50	50.2	100	62-133	
Vinyl acetate	ug/L	100	86.3	86	66-157	
Vinyl chloride	ug/L	50	52.6	105	69-130	
Xylene (Total)	ug/L	150	146	97	70-130	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			99	70-130	



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QUALIFIERS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9299764

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-A Pace Analytical Services - Asheville
PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.



Document Name: **Sample Condition Upon Receipt (SCUR)**

Document Revised: July 29, 2011

Page 1 of 2

Document Number: **F-CHR-CS-03-rev.05**

Issuing Authority: **Pace Huntersville Quality Office**

Client Name: **S+ME, INC.**

Project # **9299764**

Where Received: Huntersville Asheville Eden

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used: **IR Gun T1102**

Type of Ice: **Wet** Blue None Samples on ice, cooling process has begun

Temp Correction Factor Add / Subtract _____ °C

Corrected Cooler Temp.: **4.7** °C

Biological Tissue is Frozen: Yes No N/A

Date and initials of person examining contents: **8/4/11 [Signature]**

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	W-T	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review: **[Signature]** Date: **8/4/11** SRF Review: **[Signature]** Date: **8/5/11**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

APPENDIX C
NC DENR Environmental Monitoring Reporting
Form and Electronic Data

NC DENR
Division of Waste Management - Solid Waste

**Environmental Monitoring
Reporting Form**

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i)).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

S&ME, Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Connel Ware Phone: (336) 288-7180
E-mail: cware@smeinc.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Caswell County Landfill	State Route 1367 Yanceyville, NC 27379	1701	.0500	August 3, 2011

Environmental Status: (Check all that apply)

- Initial/Background Monitoring Detection Monitoring Assessment Monitoring Corrective Action

Type of data submitted: (Check all that apply)

- Groundwater monitoring data from monitoring wells Methane gas monitoring data
 Groundwater monitoring data from private water supply wells Corrective action data (specify) _____
 Leachate monitoring data Other(specify) _____
 Surface water monitoring data

Notification attached?

- No. No groundwater or surface water standards were exceeded.
 Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
 Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Edmund Q. B. Henriques III, L.G. Environmental Department Manager 336-288-7180

Facility Representative Name (Print) Edmund Q. B. Henriques III Title _____ (Area Code) Telephone Number _____
 Signature [Signature] Date 10/25/11 Affix NC Licensed/Professional Geologist/Engineer Seal here:

