

CASWELL COUNTY LANDFILL
Yanceyville, North Carolina
Semi-Annual Water Quality Monitoring Report
December 2012 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:

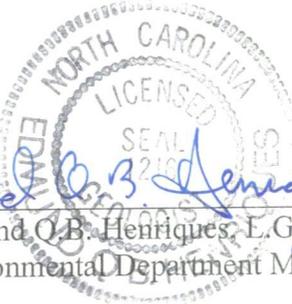
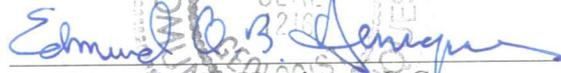


S&ME, Inc.
3718 Old Battleground Road
Greensboro, North Carolina 27410

January 21, 2013



I hereby certify this 21st day of January 2013 that this report was prepared by me or under my direct supervision.



Edmund O.B. Henriques, L.G.
Environmental Department Manager

Technical Review provided by:

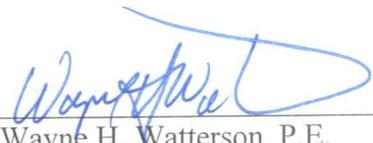

Wayne H. Watterson, P.E.
Senior Engineer

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1.0 EXECUTIVE SUMMARY

Five monitoring wells at the Caswell County Landfill were sampled on December 13, 2012. Monitoring well MW-1 was dry and not sampled. The 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. These sampling events were 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. Samples collected from monitoring wells MW-2, MW-3, MW-4, MW-5, and MW-6 were submitted for analysis of the North Carolina Landfill Appendix I volatile organic constituents plus eight RCRA Metals.

Analytical results of the five groundwater samples indicate that the metal cadmium was detected at a concentration exceeding the corresponding 15A North Carolina Administrative Code (NCAC) 2L.0200 groundwater quality standards (2L Standard) solely in monitoring well MW-2 during this event. Considering the fact that background monitoring well MW-1 had reported similar concentrations for cadmium in previous sampling events, the reported cadmium concentration may represent natural background conditions; which if validated, the 2L Standard would not be exceeded. There were no other metals detected at concentrations greater than the corresponding 2L Standards.

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. 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 corresponding 2L Standard of 6 µg/L. Vinyl Chloride was detected in MW-2 at an estimated concentration of 0.94 µg/L, which is above the corresponding 2L Standard of 0.03 µg/L. During this event, no other volatile organic compounds were detected in the monitoring wells sampled at concentrations greater than the corresponding 2L Standards.

During this monitoring event, no volatile organic constituents were detected above the method detection limit in either of the two stream sample locations. Barium was detected in up-gradient background surface water sample SW-1 and down-gradient sample location SW-2, at similar concentrations. The reported concentrations are below their 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 an assessment plan to address the 2L Standards exceedances in accordance with regulatory requirements.

2.0 INTRODUCTION

S&ME Inc. (S&ME) has completed the second semi-annual monitoring event for 2012 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 1584-12-P229 dated August 9, 2012. 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 water quality 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 eight RCRA metals. Groundwater monitoring wells were purged and groundwater samples were collected using new, disposable, Teflon bailers, or a sterile pump with new Teflon tubing.

The facility also typically monitors surface water quality at the stream that crosses the down-gradient 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 December 13, 2012 sampling event, stream samples were collected from both surface water monitoring points SW-1 and SW-2.

This report discusses the field procedures, summarizes the field measurements and analytical results for the second semi-annual water quality monitoring event for 2012.

3.0 SCOPE OF WORK

S&ME has performed the second semi-annual groundwater sampling five (5) of the six (6) network groundwater monitoring wells for the 2012 groundwater monitoring year. Monitoring well MW-1 was dry and not sampled. The groundwater monitoring wells were purged, sampled, and the collected groundwater samples collected from MW-2 through MW-6 were analyzed (in accordance with 15A NCAC 13B .0500 et seq) for the North Carolina Appendix I volatile organic constituents and all monitoring wells were analyzed for the eight RCRA metals. This semi-annual groundwater monitoring report has been prepared to summarize the December 13, 2012, groundwater monitoring event and includes:

- Summary Tables of the laboratory analytical data from each sampling event,
- Development of a current potentiometric map,
- 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 December 13, 2012. The monitoring well locations with respect to the Facility layout are shown on **Figure 1**. Prior to sample collection each well was opened and the static water level measured relative to the top edge of the PVC well casing. 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 well MW-1 was dry and no sample was obtained for analysis. Monitor wells 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 December 13, 2012. Two stream samples (SW-1 and SW-2) were 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-1) was collected from an upstream position with respect to the waste management unit and SW-2 was collected downstream of the waste management unit. The surface water samples were collected by immersing laboratory supplied containers directly into the stream at the locations to be sampled. After collection, the surface water samples were packed on ice and placed under chain-of-custody. All stream samples were 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. **Table 2** and **Table 3** also provide the corresponding 15A North Carolina Administrative Code (NCAC) 2L.0200 groundwater quality standards (2L Standard) for reference.

The complete laboratory reports are included in **Appendix B**. The following summarizes the groundwater sample analyses for the five compliance monitoring wells (MW-2, MW-3, MW-4, MW-5, and MW-6) sampled on December 13, 2012.

Metals:

- Arsenic was solely detected monitoring in well MW-2; the reported concentration of 7.8 J $\mu\text{g/L}$ is less than the 2L Standard for arsenic set at 10 $\mu\text{g/L}$.
- Barium was detected in each monitoring well sampled during the current event; however, at concentrations less than the corresponding 2L Standard.
- Cadmium was solely detected monitoring well MW-2 and the reported concentration of 6.1 $\mu\text{g/L}$ is greater than the 2L Standard for cadmium set at 2 $\mu\text{g/L}$.

There were no other metals detected above the method detection limit from any other groundwater monitoring wells during the December 13, 2012 monitoring event. The analytical results of the metals analyses are summarized in Table 3.

Volatile Organic Compounds:

- Benzene was detected in the groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-5, and the duplicate sample collected from MW-3. The reported concentrations at wells MW-2, MW-4, and MW-5 are above the 2L Standard of 1 $\mu\text{g/L}$ for benzene.
- 1,4-dichlorobenzene was detected in the groundwater samples collected from wells MW-2, MW-3, MW-4, MW-5, and the duplicate sample collected from MW-3. The concentrations reported at wells MW-2, MW-4, and MW-5 are above the 2L Standard of 6 $\mu\text{g/L}$ for 1,4-dichlorobenzene.
- Vinyl Chloride was detected in the groundwater sample from MW-2 at an estimated concentration of 0.94 J $\mu\text{g/L}$, which is greater than the 2L Standard of 0.03 $\mu\text{g/L}$. The laboratory reporting limit for Vinyl Chloride was 1.0 $\mu\text{g/L}$.
- Chlorobenzene, 1,2-Dichlorobenzene, 1,1-Dichloroethane, cis-1,2-Dichloroethene, 4-Methyl-2-pentanone (MIBK), Toluene, and Total Xylenes 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.

5.2 Surface Water Analytical Results

There were no volatile organic constituents detected above the method detection limit in the stream samples SW-1 or SW-2 during the December 13, 2012 groundwater monitoring event. The results are illustrated on **Table 4**.

The metal barium was detected in samples SW-1 and SW-2, at similar concentrations to previous monitoring events. The reported concentrations are 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 samples 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 December 13, 2012. The depth to the water table ranged from 12.16 to 25.52 feet below the top of well casing on this date. Monitor well MW-1 was dry¹. 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 December 13, 2012 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

A qualitative review of the data was performed to verify that the detected concentrations in the laboratory report were of known quality. A formal, quantitative data validation was not performed. Laboratory-assigned data qualifiers were evaluated to verify that rejected or unsupported data were not included in the dataset. Quality control data provided in the laboratory reports were also reviewed. No rejected or otherwise unacceptable quality data were reported from the laboratory.

During this event a duplicate sample was collected from monitoring well MW-3 and submitted for analysis. The results of the detected volatile organic constituents and metals from the duplicate sample were similar in concentration to the results reported in sample MW-3; suggesting reasonable accuracy between these analytical results. 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 December 13, 2012 monitoring event. The results of the method blank and laboratory QC sample analyses are included in **Appendix B**.

¹ Since MW-1 was dry during this event, the prior groundwater elevation was used for contouring

5.5 Preliminary Analysis of Cause and Significance of 2L Exceedances

During this event, the metal cadmium was detected at concentrations exceeding the corresponding 2L Standard solely in monitoring well MW-2. Considering the fact that monitoring well MW-1 is the background water quality well for the facility and since it has had concentrations of cadmium exceeding the 2L standard during previous sampling events, the reported cadmium concentration at monitoring well MW-2 may represent natural background conditions; which if validated, the 2L Standard would not be exceeded.

It is believed that the cause of the 2L Standard exceedances reported for benzene, vinyl chloride, and 1,4-dichlorobenzene 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. The NCDENR Environmental Monitoring Reporting Form is included in **Appendix C**.

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 Standard 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 2L Standard 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 an assessment plan to address the regulatory requirements associated with the 2L Standard 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
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)	December 13, 2012	
			(feet)	Elevation (feet)
MW-1	572	24.5	dry	dry
MW-2	526	22.3	21.24	504.8
MW-3	511	17.8	15.71	495.3
MW-4	526	36.0	25.52	500.5
MW-5	498	24.7	12.16	485.8
MW-6	489	16.2	12.87	476.1

*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 (rounded to nearest 0.1 foot)

TABLE 2
GROUNDWATER ANALYTICAL RESULTS SUMMARY (12/13/12)
APPENDIX I - VOLATILE ORGANIC COMPOUNDS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Compound	Sample Locations							NC SWSL (ug/L)	NCAC 2L stds. (ug/L)
	MW-1 (ug/L)	MW-2 (ug/L)	MW-3 (ug/L)	MW-4 (ug/L)	MW-5 (ug/L)	MW-6 (ug/L)	Duplicate (ug/L)		
Benzene	DW	2.0	0.32 J	1.2	1.1	ND	0.33 J	1	1
Chlorobenzene	DW	27.5	5.3	19.9	5.8	ND	5.2	3	50
1,2-Dichlorobenzene	DW	2.2	0.43 J	1.8	1.5	ND	0.40 J	5	20
1,4-Dichlorobenzene	DW	14.5	2.9	13.2	10.5	ND	2.7	1	6
1,1-Dichloroethane	DW	ND	ND	ND	1.0	ND	ND	5	6
cis-1,2-Dichloroethene	DW	0.37 J	ND	0.38 J	0.45 J	ND	ND	5	70
4-Methyl-2-pentanone(MIBK)	DW	ND	ND	0.85 J	ND	ND	ND	100	560*
Toluene	DW	0.90 J	ND	ND	ND	ND	ND	1	600
Vinyl Chloride	DW	0.94 J	ND	ND	ND	ND	ND	1	0.03
Xylene (Total)	DW	0.25 J	ND	ND	ND	ND	ND	5	500

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

* = Interim Maximum Allowable Concentration (IMAC) listed in NCAC 2L, December 1, 2010

Orange highlights indicate a measurement higher than 2L standards.

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

DW = Dry well. No sample obtained for analysis

NC SWSL = North Carolina Solid Waste Section Limit

TABLE 3
GROUNDWATER ANALYTICAL RESULTS SUMMARY (12/13/12)
8-RCRA METALS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Constituent	Sample Locations							NC SWSL (ug/L)	NCAC 2L stds. (ug/L)
	MW-1 (ug/L)	MW-2 (ug/L)	MW-3 (ug/L)	MW-4 (ug/L)	MW-5 (ug/L)	MW-6 (ug/L)	Duplicate (ug/L)		
Arsenic	DW	7.8 J	ND	ND	ND	ND	ND	10	10
Barium	DW	595	66.6	46.5	38.7	14.4	65.3	100	700
Cadmium	DW	6.1	ND	ND	ND	ND	ND	1	2

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, GW Quality Standards for Class GA groundwater.

ns = no standard listed according to NCAC 2L

Orange highlights indicate a measurement higher than 2L standards.

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

DW = Dry well. No sample obtained for analysis

TABLE 4
SURFACE WATER ANALYTICAL RESULTS SUMMARY (12/13/12)
APPENDIX I - VOLATILE ORGANIC COMPOUNDS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Compound	Sample Locations		NC SWSL (ug/L)	15A NCAC 2B Standards* (ug/L)
	SW-1 (ug/L) up-stream	SW-2 (ug/L) down-stream		
All Target Compounds	ND	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*

TABLE 5
SURFACE WATER ANALYTICAL RESULTS SUMMARY (12/13/12)
8-RCRA METALS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Constituent	Sample Locations		NC SWSL (ug/L)	15A NCAC 2B Standards* (ug/L)
	SW-1 (ug/L) up-stream	SW-2 (ug/L) down-stream		
Barium	32.1	26.6	100	1000

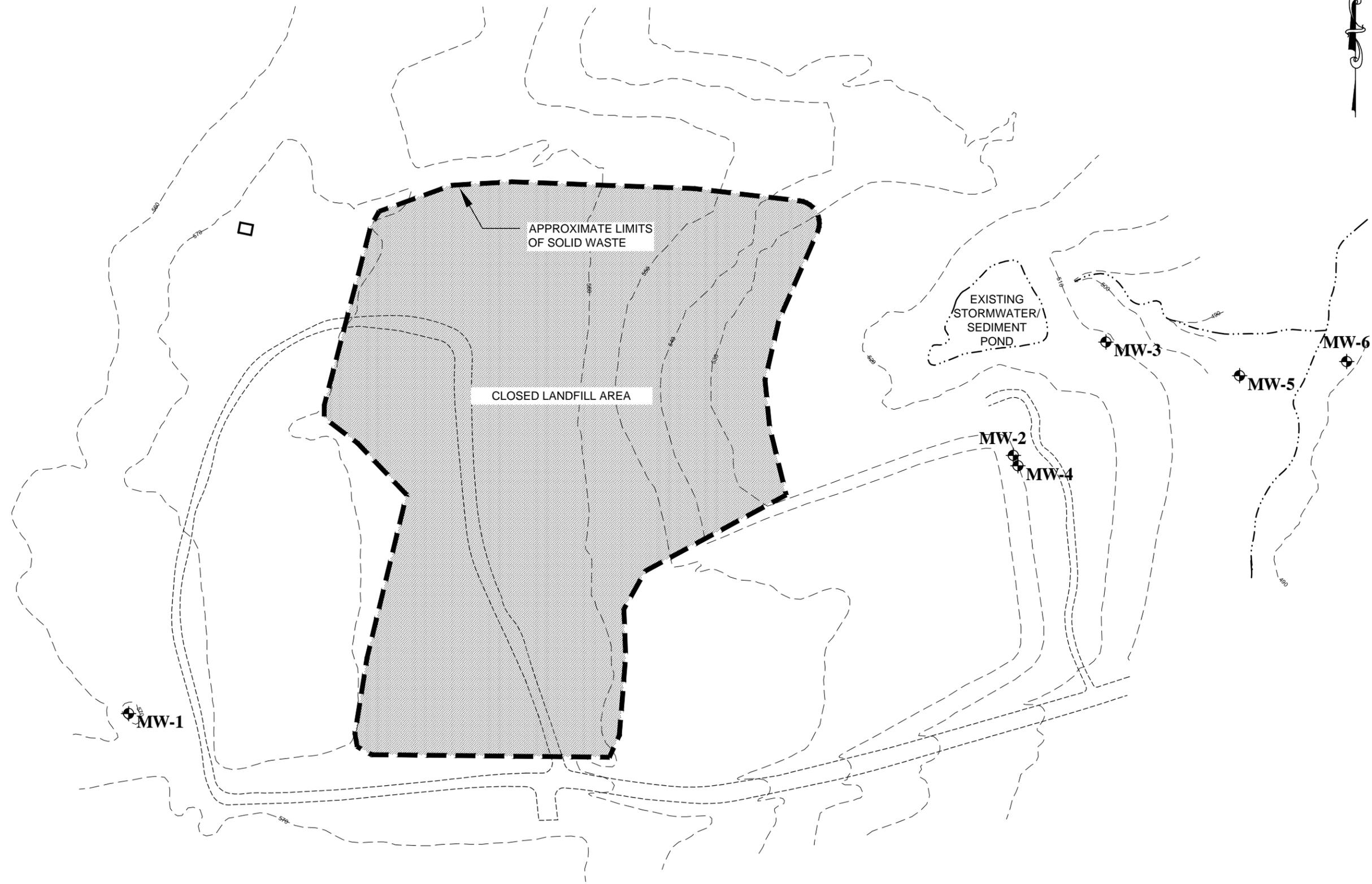
NC SWSL = North Carolina Solid Waste Section Limit

ND = Parameter not detected

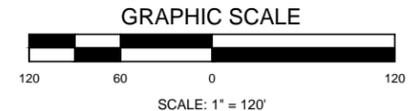
** = Title 15A NCAC 2B Standards for Class B, C surface water*

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

FIGURES



KEY
 ◆ - MONITORING WELL LOCATION

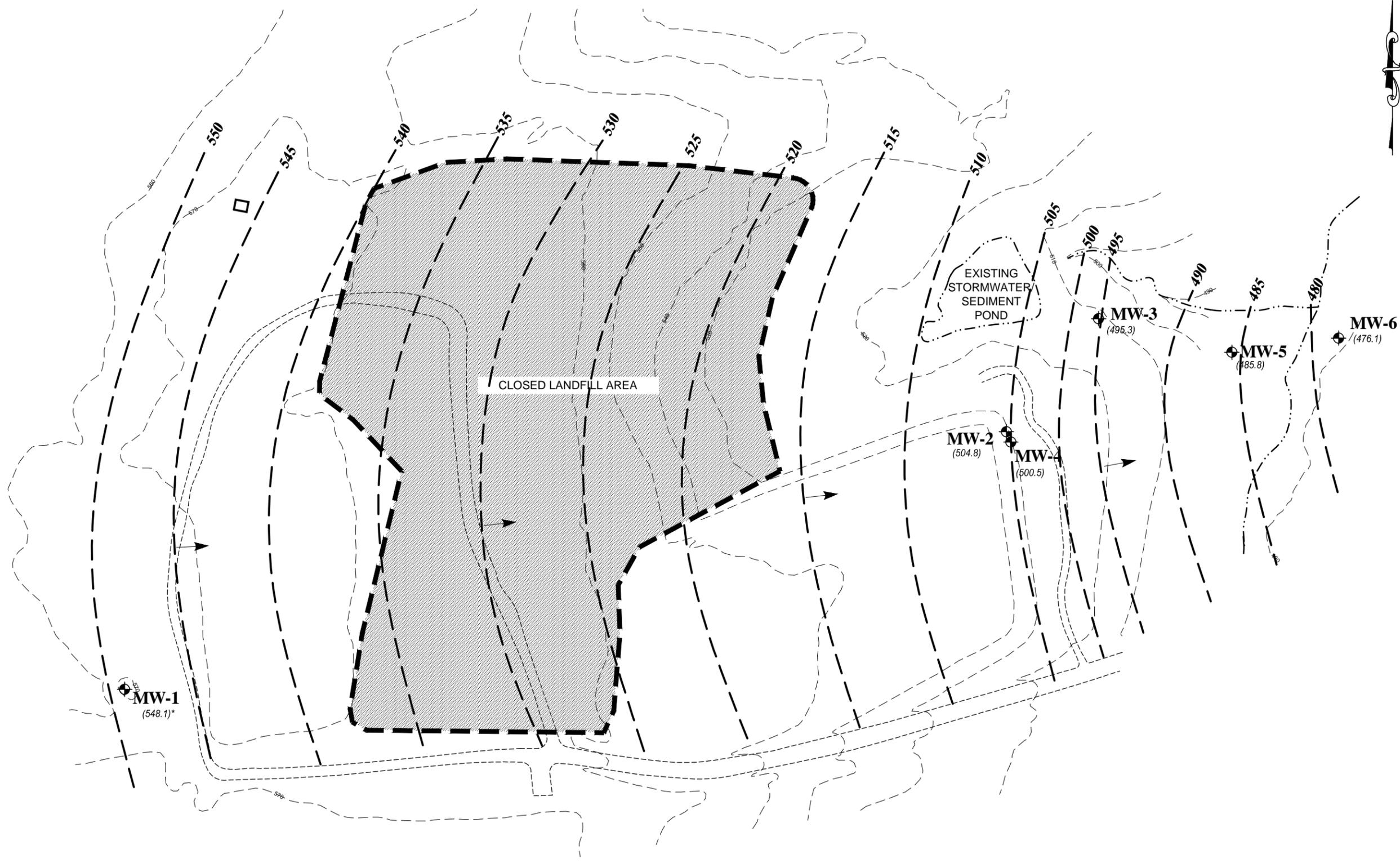


SITE PLAN
 CASWELL COUNTY LANDFILL
 YANCEYVILLE, NORTH CAROLINA

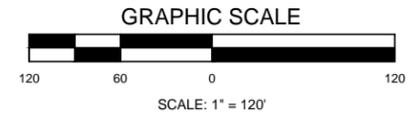
SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: CDW
JOB NO. 1584-07-034	DATE: DECEMBER 2010	FIGURE NO. 1

3718 OLD BATTLEGROUND ROAD
 GREENSBORO, NC 27410
 PH. 336-288-7180
 FAX. 336-288-8980
 WWW.SMEINC.COM





- KEY**
- ◉ - MONITORING WELL LOCATION
 - - - - - GROUNDWATER CONTOUR
 - (500.7) - GROUNDWATER ELEVATION MEASURED IN MONITORING WELL
 - ← - GROUNDWATER FLOW DIRECTION
 - * - WELL DRY ON 12/13/12. ASSUMED SIMILAR ELEVATION FOR CONTOURING.



GROUNDWATER CONTOUR MAP
 CASWELL COUNTY LANDFILL
 YANCEYVILLE, NORTH CAROLINA

SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: EQBH
JOB NO. 1584-07-034	DATE: JANUARY 2013	FIGURE NO. 2

3718 OLD BATTLEGROUND ROAD
 GREENSBORO, NC 27410
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APPENDIX A
Groundwater Sampling Field Data Sheets

APPENDIX B
Laboratory Analytical Reports



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

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2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

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

December 27, 2012

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

RE: Project: Caswell County Landfill
Pace Project No.: 92141984

Dear Mr. Howard:

Enclosed are the analytical results for sample(s) received by the laboratory on December 14, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted 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,

Jon D Bradley for
Kevin Herring
kevin.herring@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..



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(828)254-7176

Pace Analytical Services, Inc.
9800 Kinsey Ave. Suite 100
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(704)875-9092

CERTIFICATIONS

Project: Caswell County Landfill
Pace Project No.: 92141984

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

Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

Asheville Certification IDs

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

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
West Virginia Certification #: 356
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

SAMPLE SUMMARY

Project: Caswell County Landfill

Pace Project No.: 92141984

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92141984001	1701 MW2	Water	12/13/12 09:00	12/14/12 14:00
92141984002	1701 MW3	Water	12/13/12 09:30	12/14/12 14:00
92141984003	1701 MW4	Water	12/13/12 10:35	12/14/12 14:00
92141984004	1701 MW5	Water	12/13/12 11:45	12/14/12 14:00
92141984005	1701 MW6	Water	12/13/12 12:45	12/14/12 14:00
92141984006	1701 SW1	Water	12/13/12 13:10	12/14/12 14:00
92141984007	1701 SW2	Water	12/13/12 12:35	12/14/12 14:00
92141984008	1701 Duplicate	Water	12/13/12 08:00	12/14/12 14:00
92141984009	1701 Trip Blank	Water	12/13/12 00:00	12/14/12 14:00

REPORT OF LABORATORY ANALYSIS

SAMPLE ANALYTE COUNT

Project: Caswell County Landfill

Pace Project No.: 92141984

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92141984001	1701 MW2	EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8260	KJM	53	PASI-C
92141984002	1701 MW3	EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8260	KJM	53	PASI-C
92141984003	1701 MW4	EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8260	KJM	53	PASI-C
92141984004	1701 MW5	EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8260	KJM	53	PASI-C
92141984005	1701 MW6	EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8260	KJM	53	PASI-C
92141984006	1701 SW1	EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8260	KJM	53	PASI-C
92141984007	1701 SW2	EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8260	KJM	53	PASI-C
92141984008	1701 Duplicate	EPA 6010	JMW	7	PASI-A
		EPA 7470	SH1	1	PASI-A
		EPA 8260	KJM	53	PASI-C
92141984009	1701 Trip Blank	EPA 8260	KJM	53	PASI-C

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: Caswell County Landfill
Pace Project No.: 92141984

Method: EPA 6010
Description: 6010 ICP Groundwater
Client: Caswell County Landfill
Date: December 27, 2012

General Information:

8 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project: Caswell County Landfill
Pace Project No.: 92141984

Method: EPA 7470
Description: 7470 Mercury
Client: Caswell County Landfill
Date: December 27, 2012

General Information:

8 samples were analyzed for EPA 7470. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MERP/4774

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92141878002

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

- MS (Lab ID: 892705)
 - Mercury
- MSD (Lab ID: 892706)
 - Mercury

Additional Comments:

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: Caswell County Landfill
Pace Project No.: 92141984

Method: EPA 8260
Description: 8260 MSV Low Level
Client: Caswell County Landfill
Date: December 27, 2012

General Information:

9 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 MW2 **Lab ID: 92141984001** Collected: 12/13/12 09:00 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	7.8J	ug/L	10.0	5.0	1	12/15/12 12:00	12/19/12 22:03	7440-38-2	
Barium	595	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:03	7440-39-3	
Cadmium	6.1	ug/L	1.0	1.0	1	12/15/12 12:00	12/19/12 22:03	7440-43-9	
Chromium	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:03	7440-47-3	
Lead	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:03	7439-92-1	
Selenium	ND	ug/L	10.0	10.0	1	12/15/12 12:00	12/19/12 22:03	7782-49-2	
Silver	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:03	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	0.10	1	12/18/12 17:00	12/26/12 16:39	7439-97-6	
8260 MSV Low Level		Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	10.0	1		12/22/12 22:04	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		12/22/12 22:04	107-13-1	
Benzene	2.0	ug/L	1.0	0.25	1		12/22/12 22:04	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/22/12 22:04	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/22/12 22:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/22/12 22:04	75-25-2	
Bromomethane	ND	ug/L	2.0	0.29	1		12/22/12 22:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/22/12 22:04	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		12/22/12 22:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/22/12 22:04	56-23-5	
Chlorobenzene	27.5	ug/L	1.0	0.23	1		12/22/12 22:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/22/12 22:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/22/12 22:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/22/12 22:04	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.5	1		12/22/12 22:04	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/22/12 22:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		12/22/12 22:04	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/22/12 22:04	74-95-3	
1,2-Dichlorobenzene	2.2	ug/L	1.0	0.30	1		12/22/12 22:04	95-50-1	
1,4-Dichlorobenzene	14.5	ug/L	1.0	0.33	1		12/22/12 22:04	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		12/22/12 22:04	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/22/12 22:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		12/22/12 22:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/22/12 22:04	75-35-4	
cis-1,2-Dichloroethene	0.37J	ug/L	1.0	0.19	1		12/22/12 22:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/22/12 22:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/22/12 22:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/22/12 22:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/22/12 22:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/22/12 22:04	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/22/12 22:04	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		12/22/12 22:04	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/22/12 22:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/22/12 22:04	108-10-1	

ANALYTICAL RESULTS

Project: Caswell County Landfill
Pace Project No.: 92141984

Sample: 1701 MW2 **Lab ID: 92141984001** Collected: 12/13/12 09:00 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 MSV Low Level									
Analytical Method: EPA 8260									
Styrene	ND	ug/L	1.0	0.26	1		12/22/12 22:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/22/12 22:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/22/12 22:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/22/12 22:04	127-18-4	
Toluene	0.90J	ug/L	1.0	0.26	1		12/22/12 22:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/22/12 22:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/22/12 22:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/22/12 22:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/22/12 22:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/22/12 22:04	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/22/12 22:04	108-05-4	
Vinyl chloride	0.94J	ug/L	1.0	0.62	1		12/22/12 22:04	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		12/22/12 22:04	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/22/12 22:04	179601-23-1	
o-Xylene	0.25J	ug/L	1.0	0.23	1		12/22/12 22:04	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99 %		70-130		1		12/22/12 22:04	460-00-4	
Dibromofluoromethane (S)	105 %		70-130		1		12/22/12 22:04	1868-53-7	
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		12/22/12 22:04	17060-07-0	
Toluene-d8 (S)	101 %		70-130		1		12/22/12 22:04	2037-26-5	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 MW3 **Lab ID: 92141984002** Collected: 12/13/12 09:30 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	5.0	1	12/15/12 12:00	12/19/12 22:07	7440-38-2	
Barium	66.6	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:07	7440-39-3	
Cadmium	ND	ug/L	1.0	1.0	1	12/15/12 12:00	12/19/12 22:07	7440-43-9	
Chromium	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:07	7440-47-3	
Lead	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:07	7439-92-1	
Selenium	ND	ug/L	10.0	10.0	1	12/15/12 12:00	12/19/12 22:07	7782-49-2	
Silver	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:07	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	0.10	1	12/18/12 17:00	12/26/12 16:41	7439-97-6	
8260 MSV Low Level		Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	10.0	1		12/22/12 22:20	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		12/22/12 22:20	107-13-1	
Benzene	0.32J	ug/L	1.0	0.25	1		12/22/12 22:20	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/22/12 22:20	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/22/12 22:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/22/12 22:20	75-25-2	
Bromomethane	ND	ug/L	2.0	0.29	1		12/22/12 22:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/22/12 22:20	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		12/22/12 22:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/22/12 22:20	56-23-5	
Chlorobenzene	5.3	ug/L	1.0	0.23	1		12/22/12 22:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/22/12 22:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/22/12 22:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/22/12 22:20	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.5	1		12/22/12 22:20	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/22/12 22:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		12/22/12 22:20	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/22/12 22:20	74-95-3	
1,2-Dichlorobenzene	0.43J	ug/L	1.0	0.30	1		12/22/12 22:20	95-50-1	
1,4-Dichlorobenzene	2.9	ug/L	1.0	0.33	1		12/22/12 22:20	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		12/22/12 22:20	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/22/12 22:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		12/22/12 22:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/22/12 22:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/22/12 22:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/22/12 22:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/22/12 22:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/22/12 22:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/22/12 22:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/22/12 22:20	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/22/12 22:20	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		12/22/12 22:20	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/22/12 22:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/22/12 22:20	108-10-1	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 MW3 **Lab ID: 92141984002** Collected: 12/13/12 09:30 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 MSV Low Level									
Analytical Method: EPA 8260									
Styrene	ND ug/L		1.0	0.26	1		12/22/12 22:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	0.33	1		12/22/12 22:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	0.40	1		12/22/12 22:20	79-34-5	
Tetrachloroethene	ND ug/L		1.0	0.46	1		12/22/12 22:20	127-18-4	
Toluene	ND ug/L		1.0	0.26	1		12/22/12 22:20	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	0.48	1		12/22/12 22:20	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	0.29	1		12/22/12 22:20	79-00-5	
Trichloroethene	ND ug/L		1.0	0.47	1		12/22/12 22:20	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	0.20	1		12/22/12 22:20	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	0.41	1		12/22/12 22:20	96-18-4	
Vinyl acetate	ND ug/L		2.0	0.35	1		12/22/12 22:20	108-05-4	
Vinyl chloride	ND ug/L		1.0	0.62	1		12/22/12 22:20	75-01-4	
Xylene (Total)	ND ug/L		2.0	0.66	1		12/22/12 22:20	1330-20-7	
m&p-Xylene	ND ug/L		2.0	0.66	1		12/22/12 22:20	179601-23-1	
o-Xylene	ND ug/L		1.0	0.23	1		12/22/12 22:20	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	95 %		70-130		1		12/22/12 22:20	460-00-4	
Dibromofluoromethane (S)	108 %		70-130		1		12/22/12 22:20	1868-53-7	
1,2-Dichloroethane-d4 (S)	98 %		70-130		1		12/22/12 22:20	17060-07-0	
Toluene-d8 (S)	104 %		70-130		1		12/22/12 22:20	2037-26-5	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 MW4 **Lab ID: 92141984003** Collected: 12/13/12 10:35 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	5.0	1	12/15/12 12:00	12/19/12 22:12	7440-38-2	
Barium	46.5	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:12	7440-39-3	
Cadmium	ND	ug/L	1.0	1.0	1	12/15/12 12:00	12/19/12 22:12	7440-43-9	
Chromium	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:12	7440-47-3	
Lead	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:12	7439-92-1	
Selenium	ND	ug/L	10.0	10.0	1	12/15/12 12:00	12/19/12 22:12	7782-49-2	
Silver	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:12	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	0.10	1	12/18/12 17:00	12/26/12 16:44	7439-97-6	
8260 MSV Low Level		Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	10.0	1		12/22/12 22:36	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		12/22/12 22:36	107-13-1	
Benzene	1.2	ug/L	1.0	0.25	1		12/22/12 22:36	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/22/12 22:36	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/22/12 22:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/22/12 22:36	75-25-2	
Bromomethane	ND	ug/L	2.0	0.29	1		12/22/12 22:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/22/12 22:36	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		12/22/12 22:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/22/12 22:36	56-23-5	
Chlorobenzene	19.9	ug/L	1.0	0.23	1		12/22/12 22:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/22/12 22:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/22/12 22:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/22/12 22:36	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.5	1		12/22/12 22:36	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/22/12 22:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		12/22/12 22:36	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/22/12 22:36	74-95-3	
1,2-Dichlorobenzene	1.8	ug/L	1.0	0.30	1		12/22/12 22:36	95-50-1	
1,4-Dichlorobenzene	13.2	ug/L	1.0	0.33	1		12/22/12 22:36	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		12/22/12 22:36	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/22/12 22:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		12/22/12 22:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/22/12 22:36	75-35-4	
cis-1,2-Dichloroethene	0.38J	ug/L	1.0	0.19	1		12/22/12 22:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/22/12 22:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/22/12 22:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/22/12 22:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/22/12 22:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/22/12 22:36	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/22/12 22:36	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		12/22/12 22:36	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/22/12 22:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	0.85J	ug/L	5.0	0.33	1		12/22/12 22:36	108-10-1	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 MW4 **Lab ID: 92141984003** Collected: 12/13/12 10:35 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 MSV Low Level									
Analytical Method: EPA 8260									
Styrene	ND ug/L		1.0	0.26	1		12/22/12 22:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	0.33	1		12/22/12 22:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	0.40	1		12/22/12 22:36	79-34-5	
Tetrachloroethene	ND ug/L		1.0	0.46	1		12/22/12 22:36	127-18-4	
Toluene	ND ug/L		1.0	0.26	1		12/22/12 22:36	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	0.48	1		12/22/12 22:36	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	0.29	1		12/22/12 22:36	79-00-5	
Trichloroethene	ND ug/L		1.0	0.47	1		12/22/12 22:36	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	0.20	1		12/22/12 22:36	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	0.41	1		12/22/12 22:36	96-18-4	
Vinyl acetate	ND ug/L		2.0	0.35	1		12/22/12 22:36	108-05-4	
Vinyl chloride	ND ug/L		1.0	0.62	1		12/22/12 22:36	75-01-4	
Xylene (Total)	ND ug/L		2.0	0.66	1		12/22/12 22:36	1330-20-7	
m&p-Xylene	ND ug/L		2.0	0.66	1		12/22/12 22:36	179601-23-1	
o-Xylene	ND ug/L		1.0	0.23	1		12/22/12 22:36	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99 %		70-130		1		12/22/12 22:36	460-00-4	
Dibromofluoromethane (S)	108 %		70-130		1		12/22/12 22:36	1868-53-7	
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		12/22/12 22:36	17060-07-0	
Toluene-d8 (S)	101 %		70-130		1		12/22/12 22:36	2037-26-5	

ANALYTICAL RESULTS

Project: Caswell County Landfill
Pace Project No.: 92141984

Sample: 1701 MW5		Lab ID: 92141984004		Collected: 12/13/12 11:45	Received: 12/14/12 14:00	Matrix: Water			
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 ICP Groundwater		Analytical Method: EPA 6010			Preparation Method: EPA 3010				
Arsenic	ND	ug/L	10.0	5.0	1	12/15/12 12:00	12/19/12 22:16	7440-38-2	
Barium	38.7	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:16	7440-39-3	
Cadmium	ND	ug/L	1.0	1.0	1	12/15/12 12:00	12/19/12 22:16	7440-43-9	
Chromium	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:16	7440-47-3	
Lead	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:16	7439-92-1	
Selenium	ND	ug/L	10.0	10.0	1	12/15/12 12:00	12/19/12 22:16	7782-49-2	
Silver	ND	ug/L	5.0	5.0	1	12/15/12 12:00	12/19/12 22:16	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470			Preparation Method: EPA 7470				
Mercury	ND	ug/L	0.20	0.10	1	12/18/12 17:00	12/26/12 16:47	7439-97-6	
8260 MSV Low Level		Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	10.0	1		12/22/12 22:51	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		12/22/12 22:51	107-13-1	
Benzene	1.1	ug/L	1.0	0.25	1		12/22/12 22:51	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/22/12 22:51	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/22/12 22:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/22/12 22:51	75-25-2	
Bromomethane	ND	ug/L	2.0	0.29	1		12/22/12 22:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/22/12 22:51	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		12/22/12 22:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/22/12 22:51	56-23-5	
Chlorobenzene	5.8	ug/L	1.0	0.23	1		12/22/12 22:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/22/12 22:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/22/12 22:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/22/12 22:51	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.5	1		12/22/12 22:51	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/22/12 22:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		12/22/12 22:51	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/22/12 22:51	74-95-3	
1,2-Dichlorobenzene	1.5	ug/L	1.0	0.30	1		12/22/12 22:51	95-50-1	
1,4-Dichlorobenzene	10.5	ug/L	1.0	0.33	1		12/22/12 22:51	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		12/22/12 22:51	110-57-6	
1,1-Dichloroethane	1.0	ug/L	1.0	0.32	1		12/22/12 22:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		12/22/12 22:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/22/12 22:51	75-35-4	
cis-1,2-Dichloroethene	0.45J	ug/L	1.0	0.19	1		12/22/12 22:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/22/12 22:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/22/12 22:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/22/12 22:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/22/12 22:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/22/12 22:51	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/22/12 22:51	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		12/22/12 22:51	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/22/12 22:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/22/12 22:51	108-10-1	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 MW5 **Lab ID: 92141984004** Collected: 12/13/12 11:45 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 MSV Low Level									
Analytical Method: EPA 8260									
Styrene	ND ug/L		1.0	0.26	1		12/22/12 22:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	0.33	1		12/22/12 22:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	0.40	1		12/22/12 22:51	79-34-5	
Tetrachloroethene	ND ug/L		1.0	0.46	1		12/22/12 22:51	127-18-4	
Toluene	ND ug/L		1.0	0.26	1		12/22/12 22:51	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	0.48	1		12/22/12 22:51	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	0.29	1		12/22/12 22:51	79-00-5	
Trichloroethene	ND ug/L		1.0	0.47	1		12/22/12 22:51	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	0.20	1		12/22/12 22:51	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	0.41	1		12/22/12 22:51	96-18-4	
Vinyl acetate	ND ug/L		2.0	0.35	1		12/22/12 22:51	108-05-4	
Vinyl chloride	ND ug/L		1.0	0.62	1		12/22/12 22:51	75-01-4	
Xylene (Total)	ND ug/L		2.0	0.66	1		12/22/12 22:51	1330-20-7	
m&p-Xylene	ND ug/L		2.0	0.66	1		12/22/12 22:51	179601-23-1	
o-Xylene	ND ug/L		1.0	0.23	1		12/22/12 22:51	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99 %		70-130		1		12/22/12 22:51	460-00-4	
Dibromofluoromethane (S)	105 %		70-130		1		12/22/12 22:51	1868-53-7	
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		12/22/12 22:51	17060-07-0	
Toluene-d8 (S)	102 %		70-130		1		12/22/12 22:51	2037-26-5	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 MW6 **Lab ID: 92141984005** Collected: 12/13/12 12:45 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	5.0	1	12/22/12 11:35	12/26/12 19:47	7440-38-2	
Barium	14.4	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 19:47	7440-39-3	
Cadmium	ND	ug/L	1.0	1.0	1	12/22/12 11:35	12/26/12 19:47	7440-43-9	
Chromium	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 19:47	7440-47-3	
Lead	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 19:47	7439-92-1	
Selenium	ND	ug/L	10.0	10.0	1	12/22/12 11:35	12/26/12 19:47	7782-49-2	
Silver	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 19:47	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	0.10	1	12/18/12 17:00	12/26/12 16:49	7439-97-6	
8260 MSV Low Level		Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	10.0	1		12/22/12 23:07	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		12/22/12 23:07	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		12/22/12 23:07	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/22/12 23:07	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/22/12 23:07	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/22/12 23:07	75-25-2	
Bromomethane	ND	ug/L	2.0	0.29	1		12/22/12 23:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/22/12 23:07	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		12/22/12 23:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/22/12 23:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/22/12 23:07	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/22/12 23:07	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/22/12 23:07	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/22/12 23:07	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.5	1		12/22/12 23:07	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/22/12 23:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		12/22/12 23:07	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/22/12 23:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/22/12 23:07	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/22/12 23:07	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		12/22/12 23:07	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/22/12 23:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		12/22/12 23:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/22/12 23:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/22/12 23:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/22/12 23:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/22/12 23:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/22/12 23:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/22/12 23:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/22/12 23:07	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/22/12 23:07	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		12/22/12 23:07	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/22/12 23:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/22/12 23:07	108-10-1	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 MW6 **Lab ID: 92141984005** Collected: 12/13/12 12:45 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 MSV Low Level									
Analytical Method: EPA 8260									
Styrene	ND ug/L		1.0	0.26	1		12/22/12 23:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	0.33	1		12/22/12 23:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	0.40	1		12/22/12 23:07	79-34-5	
Tetrachloroethene	ND ug/L		1.0	0.46	1		12/22/12 23:07	127-18-4	
Toluene	ND ug/L		1.0	0.26	1		12/22/12 23:07	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	0.48	1		12/22/12 23:07	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	0.29	1		12/22/12 23:07	79-00-5	
Trichloroethene	ND ug/L		1.0	0.47	1		12/22/12 23:07	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	0.20	1		12/22/12 23:07	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	0.41	1		12/22/12 23:07	96-18-4	
Vinyl acetate	ND ug/L		2.0	0.35	1		12/22/12 23:07	108-05-4	
Vinyl chloride	ND ug/L		1.0	0.62	1		12/22/12 23:07	75-01-4	
Xylene (Total)	ND ug/L		2.0	0.66	1		12/22/12 23:07	1330-20-7	
m&p-Xylene	ND ug/L		2.0	0.66	1		12/22/12 23:07	179601-23-1	
o-Xylene	ND ug/L		1.0	0.23	1		12/22/12 23:07	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97 %		70-130		1		12/22/12 23:07	460-00-4	
Dibromofluoromethane (S)	108 %		70-130		1		12/22/12 23:07	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		70-130		1		12/22/12 23:07	17060-07-0	
Toluene-d8 (S)	99 %		70-130		1		12/22/12 23:07	2037-26-5	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 SW1 **Lab ID: 92141984006** Collected: 12/13/12 13:10 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	5.0	1	12/22/12 11:35	12/26/12 19:53	7440-38-2	
Barium	32.1	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 19:53	7440-39-3	
Cadmium	ND	ug/L	1.0	1.0	1	12/22/12 11:35	12/26/12 19:53	7440-43-9	
Chromium	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 19:53	7440-47-3	
Lead	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 19:53	7439-92-1	
Selenium	ND	ug/L	10.0	10.0	1	12/22/12 11:35	12/26/12 19:53	7782-49-2	
Silver	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 19:53	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	0.10	1	12/18/12 17:00	12/26/12 16:52	7439-97-6	
8260 MSV Low Level		Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	10.0	1		12/22/12 23:23	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		12/22/12 23:23	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		12/22/12 23:23	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/22/12 23:23	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/22/12 23:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/22/12 23:23	75-25-2	
Bromomethane	ND	ug/L	2.0	0.29	1		12/22/12 23:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/22/12 23:23	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		12/22/12 23:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/22/12 23:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/22/12 23:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/22/12 23:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/22/12 23:23	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/22/12 23:23	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.5	1		12/22/12 23:23	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/22/12 23:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		12/22/12 23:23	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/22/12 23:23	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/22/12 23:23	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/22/12 23:23	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		12/22/12 23:23	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/22/12 23:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		12/22/12 23:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/22/12 23:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/22/12 23:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/22/12 23:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/22/12 23:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/22/12 23:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/22/12 23:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/22/12 23:23	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/22/12 23:23	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		12/22/12 23:23	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/22/12 23:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/22/12 23:23	108-10-1	

ANALYTICAL RESULTS

Project: Caswell County Landfill
Pace Project No.: 92141984

Sample: 1701 SW1 **Lab ID: 92141984006** Collected: 12/13/12 13:10 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 MSV Low Level									
Analytical Method: EPA 8260									
Styrene	ND ug/L		1.0	0.26	1		12/22/12 23:23	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	0.33	1		12/22/12 23:23	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	0.40	1		12/22/12 23:23	79-34-5	
Tetrachloroethene	ND ug/L		1.0	0.46	1		12/22/12 23:23	127-18-4	
Toluene	ND ug/L		1.0	0.26	1		12/22/12 23:23	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	0.48	1		12/22/12 23:23	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	0.29	1		12/22/12 23:23	79-00-5	
Trichloroethene	ND ug/L		1.0	0.47	1		12/22/12 23:23	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	0.20	1		12/22/12 23:23	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	0.41	1		12/22/12 23:23	96-18-4	
Vinyl acetate	ND ug/L		2.0	0.35	1		12/22/12 23:23	108-05-4	
Vinyl chloride	ND ug/L		1.0	0.62	1		12/22/12 23:23	75-01-4	
Xylene (Total)	ND ug/L		2.0	0.66	1		12/22/12 23:23	1330-20-7	
m&p-Xylene	ND ug/L		2.0	0.66	1		12/22/12 23:23	179601-23-1	
o-Xylene	ND ug/L		1.0	0.23	1		12/22/12 23:23	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96 %		70-130		1		12/22/12 23:23	460-00-4	
Dibromofluoromethane (S)	109 %		70-130		1		12/22/12 23:23	1868-53-7	
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		12/22/12 23:23	17060-07-0	
Toluene-d8 (S)	105 %		70-130		1		12/22/12 23:23	2037-26-5	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 SW2 **Lab ID: 92141984007** Collected: 12/13/12 12:35 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	5.0	1	12/22/12 11:35	12/26/12 20:08	7440-38-2	
Barium	26.6	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 20:08	7440-39-3	
Cadmium	ND	ug/L	1.0	1.0	1	12/22/12 11:35	12/26/12 20:08	7440-43-9	
Chromium	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 20:08	7440-47-3	
Lead	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 20:08	7439-92-1	
Selenium	ND	ug/L	10.0	10.0	1	12/22/12 11:35	12/26/12 20:08	7782-49-2	
Silver	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 20:08	7440-22-4	
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	0.10	1	12/18/12 17:00	12/26/12 16:54	7439-97-6	
8260 MSV Low Level		Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	10.0	1		12/22/12 23:39	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		12/22/12 23:39	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		12/22/12 23:39	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/22/12 23:39	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/22/12 23:39	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		12/22/12 23:39	75-25-2	
Bromomethane	ND	ug/L	2.0	0.29	1		12/22/12 23:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/22/12 23:39	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		12/22/12 23:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/22/12 23:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		12/22/12 23:39	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		12/22/12 23:39	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		12/22/12 23:39	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		12/22/12 23:39	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.5	1		12/22/12 23:39	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/22/12 23:39	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		12/22/12 23:39	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		12/22/12 23:39	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		12/22/12 23:39	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		12/22/12 23:39	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		12/22/12 23:39	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/22/12 23:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		12/22/12 23:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/22/12 23:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/22/12 23:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/22/12 23:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/22/12 23:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/22/12 23:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/22/12 23:39	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/22/12 23:39	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		12/22/12 23:39	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		12/22/12 23:39	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/22/12 23:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/22/12 23:39	108-10-1	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 SW2 **Lab ID: 92141984007** Collected: 12/13/12 12:35 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 MSV Low Level									
Analytical Method: EPA 8260									
Styrene	ND ug/L		1.0	0.26	1		12/22/12 23:39	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	0.33	1		12/22/12 23:39	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	0.40	1		12/22/12 23:39	79-34-5	
Tetrachloroethene	ND ug/L		1.0	0.46	1		12/22/12 23:39	127-18-4	
Toluene	ND ug/L		1.0	0.26	1		12/22/12 23:39	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	0.48	1		12/22/12 23:39	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	0.29	1		12/22/12 23:39	79-00-5	
Trichloroethene	ND ug/L		1.0	0.47	1		12/22/12 23:39	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	0.20	1		12/22/12 23:39	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	0.41	1		12/22/12 23:39	96-18-4	
Vinyl acetate	ND ug/L		2.0	0.35	1		12/22/12 23:39	108-05-4	
Vinyl chloride	ND ug/L		1.0	0.62	1		12/22/12 23:39	75-01-4	
Xylene (Total)	ND ug/L		2.0	0.66	1		12/22/12 23:39	1330-20-7	
m&p-Xylene	ND ug/L		2.0	0.66	1		12/22/12 23:39	179601-23-1	
o-Xylene	ND ug/L		1.0	0.23	1		12/22/12 23:39	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	92 %		70-130		1		12/22/12 23:39	460-00-4	
Dibromofluoromethane (S)	109 %		70-130		1		12/22/12 23:39	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		70-130		1		12/22/12 23:39	17060-07-0	
Toluene-d8 (S)	103 %		70-130		1		12/22/12 23:39	2037-26-5	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 Duplicate		Lab ID: 92141984008	Collected: 12/13/12 08:00	Received: 12/14/12 14:00	Matrix: Water	Report				
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6010 ICP Groundwater		Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Arsenic	ND	ug/L	10.0	5.0	1	12/22/12 11:35	12/26/12 20:11	7440-38-2		
Barium	65.3	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 20:11	7440-39-3		
Cadmium	ND	ug/L	1.0	1.0	1	12/22/12 11:35	12/26/12 20:11	7440-43-9		
Chromium	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 20:11	7440-47-3		
Lead	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 20:11	7439-92-1		
Selenium	ND	ug/L	10.0	10.0	1	12/22/12 11:35	12/26/12 20:11	7782-49-2		
Silver	ND	ug/L	5.0	5.0	1	12/22/12 11:35	12/26/12 20:11	7440-22-4		
7470 Mercury		Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	12/20/12 17:00	12/21/12 14:54	7439-97-6		
8260 MSV Low Level		Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	10.0	1		12/22/12 23:55	67-64-1		
Acrylonitrile	ND	ug/L	10.0	1.9	1		12/22/12 23:55	107-13-1		
Benzene	0.33J	ug/L	1.0	0.25	1		12/22/12 23:55	71-43-2		
Bromochloromethane	ND	ug/L	1.0	0.17	1		12/22/12 23:55	74-97-5		
Bromodichloromethane	ND	ug/L	1.0	0.18	1		12/22/12 23:55	75-27-4		
Bromoform	ND	ug/L	1.0	0.26	1		12/22/12 23:55	75-25-2		
Bromomethane	ND	ug/L	2.0	0.29	1		12/22/12 23:55	74-83-9		
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		12/22/12 23:55	78-93-3		
Carbon disulfide	ND	ug/L	2.0	1.2	1		12/22/12 23:55	75-15-0		
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		12/22/12 23:55	56-23-5		
Chlorobenzene	5.2	ug/L	1.0	0.23	1		12/22/12 23:55	108-90-7		
Chloroethane	ND	ug/L	1.0	0.54	1		12/22/12 23:55	75-00-3		
Chloroform	ND	ug/L	1.0	0.14	1		12/22/12 23:55	67-66-3		
Chloromethane	ND	ug/L	1.0	0.11	1		12/22/12 23:55	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	2.5	1		12/22/12 23:55	96-12-8		
Dibromochloromethane	ND	ug/L	1.0	0.21	1		12/22/12 23:55	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		12/22/12 23:55	106-93-4		
Dibromomethane	ND	ug/L	1.0	0.21	1		12/22/12 23:55	74-95-3		
1,2-Dichlorobenzene	0.40J	ug/L	1.0	0.30	1		12/22/12 23:55	95-50-1		
1,4-Dichlorobenzene	2.7	ug/L	1.0	0.33	1		12/22/12 23:55	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		12/22/12 23:55	110-57-6		
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		12/22/12 23:55	75-34-3		
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		12/22/12 23:55	107-06-2		
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		12/22/12 23:55	75-35-4		
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		12/22/12 23:55	156-59-2		
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		12/22/12 23:55	156-60-5		
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		12/22/12 23:55	78-87-5		
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		12/22/12 23:55	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		12/22/12 23:55	10061-02-6		
Ethylbenzene	ND	ug/L	1.0	0.30	1		12/22/12 23:55	100-41-4		
2-Hexanone	ND	ug/L	5.0	0.46	1		12/22/12 23:55	591-78-6		
Iodomethane	ND	ug/L	5.0	0.32	1		12/22/12 23:55	74-88-4		
Methylene Chloride	ND	ug/L	2.0	0.97	1		12/22/12 23:55	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		12/22/12 23:55	108-10-1		

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 Duplicate		Lab ID: 92141984008	Collected: 12/13/12 08:00	Received: 12/14/12 14:00	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	0.26	1		12/22/12 23:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		12/22/12 23:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		12/22/12 23:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		12/22/12 23:55	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		12/22/12 23:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		12/22/12 23:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		12/22/12 23:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		12/22/12 23:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		12/22/12 23:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		12/22/12 23:55	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		12/22/12 23:55	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		12/22/12 23:55	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		12/22/12 23:55	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		12/22/12 23:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		12/22/12 23:55	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	95 %		70-130		1		12/22/12 23:55	460-00-4	
Dibromofluoromethane (S)	110 %		70-130		1		12/22/12 23:55	1868-53-7	
1,2-Dichloroethane-d4 (S)	103 %		70-130		1		12/22/12 23:55	17060-07-0	
Toluene-d8 (S)	102 %		70-130		1		12/22/12 23:55	2037-26-5	

ANALYTICAL RESULTS

Project: Caswell County Landfill

Pace Project No.: 92141984

Sample: 1701 Trip Blank **Lab ID: 92141984009** Collected: 12/13/12 00:00 Received: 12/14/12 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 MSV Low Level									
Analytical Method: EPA 8260									
Acetone	ND ug/L		25.0	10.0	1		12/23/12 00:10	67-64-1	
Acrylonitrile	ND ug/L		10.0	1.9	1		12/23/12 00:10	107-13-1	
Benzene	ND ug/L		1.0	0.25	1		12/23/12 00:10	71-43-2	
Bromochloromethane	ND ug/L		1.0	0.17	1		12/23/12 00:10	74-97-5	
Bromodichloromethane	ND ug/L		1.0	0.18	1		12/23/12 00:10	75-27-4	
Bromoform	ND ug/L		1.0	0.26	1		12/23/12 00:10	75-25-2	
Bromomethane	ND ug/L		2.0	0.29	1		12/23/12 00:10	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	0.96	1		12/23/12 00:10	78-93-3	
Carbon disulfide	ND ug/L		2.0	1.2	1		12/23/12 00:10	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	0.25	1		12/23/12 00:10	56-23-5	
Chlorobenzene	ND ug/L		1.0	0.23	1		12/23/12 00:10	108-90-7	
Chloroethane	ND ug/L		1.0	0.54	1		12/23/12 00:10	75-00-3	
Chloroform	ND ug/L		1.0	0.14	1		12/23/12 00:10	67-66-3	
Chloromethane	ND ug/L		1.0	0.11	1		12/23/12 00:10	74-87-3	
1,2-Dibromo-3-chloropropane	ND ug/L		5.0	2.5	1		12/23/12 00:10	96-12-8	
Dibromochloromethane	ND ug/L		1.0	0.21	1		12/23/12 00:10	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	0.27	1		12/23/12 00:10	106-93-4	
Dibromomethane	ND ug/L		1.0	0.21	1		12/23/12 00:10	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	0.30	1		12/23/12 00:10	95-50-1	
1,4-Dichlorobenzene	ND ug/L		1.0	0.33	1		12/23/12 00:10	106-46-7	
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1.0	1		12/23/12 00:10	110-57-6	
1,1-Dichloroethane	ND ug/L		1.0	0.32	1		12/23/12 00:10	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	0.12	1		12/23/12 00:10	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	0.56	1		12/23/12 00:10	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	0.19	1		12/23/12 00:10	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	0.49	1		12/23/12 00:10	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	0.27	1		12/23/12 00:10	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		1.0	0.13	1		12/23/12 00:10	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	0.26	1		12/23/12 00:10	10061-02-6	
Ethylbenzene	ND ug/L		1.0	0.30	1		12/23/12 00:10	100-41-4	
2-Hexanone	ND ug/L		5.0	0.46	1		12/23/12 00:10	591-78-6	
Iodomethane	ND ug/L		5.0	0.32	1		12/23/12 00:10	74-88-4	
Methylene Chloride	ND ug/L		2.0	0.97	1		12/23/12 00:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	0.33	1		12/23/12 00:10	108-10-1	
Styrene	ND ug/L		1.0	0.26	1		12/23/12 00:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	0.33	1		12/23/12 00:10	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND ug/L		1.0	0.40	1		12/23/12 00:10	79-34-5	
Tetrachloroethene	ND ug/L		1.0	0.46	1		12/23/12 00:10	127-18-4	
Toluene	ND ug/L		1.0	0.26	1		12/23/12 00:10	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	0.48	1		12/23/12 00:10	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	0.29	1		12/23/12 00:10	79-00-5	
Trichloroethene	ND ug/L		1.0	0.47	1		12/23/12 00:10	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	0.20	1		12/23/12 00:10	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	0.41	1		12/23/12 00:10	96-18-4	
Vinyl acetate	ND ug/L		2.0	0.35	1		12/23/12 00:10	108-05-4	
Vinyl chloride	ND ug/L		1.0	0.62	1		12/23/12 00:10	75-01-4	



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ANALYTICAL RESULTS

Project: Caswell County Landfill
 Pace Project No.: 92141984

Sample: 1701 Trip Blank		Lab ID: 92141984009	Collected: 12/13/12 00:00	Received: 12/14/12 14:00	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260							
Xylene (Total)	ND ug/L		2.0	0.66	1		12/23/12 00:10	1330-20-7	
m&p-Xylene	ND ug/L		2.0	0.66	1		12/23/12 00:10	179601-23-1	
o-Xylene	ND ug/L		1.0	0.23	1		12/23/12 00:10	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96 %		70-130		1		12/23/12 00:10	460-00-4	
Dibromofluoromethane (S)	108 %		70-130		1		12/23/12 00:10	1868-53-7	
1,2-Dichloroethane-d4 (S)	100 %		70-130		1		12/23/12 00:10	17060-07-0	
Toluene-d8 (S)	102 %		70-130		1		12/23/12 00:10	2037-26-5	



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QUALITY CONTROL DATA

Project: Caswell County Landfill
 Pace Project No.: 92141984

QC Batch: MERP/4774 Analysis Method: EPA 7470
 QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
 Associated Lab Samples: 92141984001, 92141984002, 92141984003, 92141984004, 92141984005, 92141984006, 92141984007

METHOD BLANK: 892371 Matrix: Water
 Associated Lab Samples: 92141984001, 92141984002, 92141984003, 92141984004, 92141984005, 92141984006, 92141984007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	12/26/12 15:40	

LABORATORY CONTROL SAMPLE: 892372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.2	88	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 892705 892706

Parameter	Units	92141878002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Spike Conc.	MSD Result						
Mercury	ug/L	ND	2.5	1.5	2.5	1.3	59	53	75-125	10	25	M1



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QUALITY CONTROL DATA

Project: Caswell County Landfill
 Pace Project No.: 92141984

QC Batch: MERP/4780 Analysis Method: EPA 7470
 QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
 Associated Lab Samples: 92141984008

METHOD BLANK: 894098 Matrix: Water
 Associated Lab Samples: 92141984008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	12/21/12 13:45	

LABORATORY CONTROL SAMPLE: 894099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.7	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 894100 894101

Parameter	Units	92142109001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
Mercury	ug/L	ND	2.5	2.5	2.6	2.6	104	102	75-125	2	25	

QUALITY CONTROL DATA

Project: Caswell County Landfill
Pace Project No.: 92141984

QC Batch: MPRP/12212 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 92141984001, 92141984002, 92141984003, 92141984004

METHOD BLANK: 891434 Matrix: Water
Associated Lab Samples: 92141984001, 92141984002, 92141984003, 92141984004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	12/19/12 20:32	
Barium	ug/L	ND	5.0	12/19/12 20:32	
Cadmium	ug/L	ND	1.0	12/19/12 20:32	
Chromium	ug/L	ND	5.0	12/19/12 20:32	
Lead	ug/L	ND	5.0	12/19/12 20:32	
Selenium	ug/L	ND	10.0	12/19/12 20:32	
Silver	ug/L	ND	5.0	12/19/12 20:32	

LABORATORY CONTROL SAMPLE: 891435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	500	478	96	80-120	
Barium	ug/L	500	480	96	80-120	
Cadmium	ug/L	500	490	98	80-120	
Chromium	ug/L	500	496	99	80-120	
Lead	ug/L	500	485	97	80-120	
Selenium	ug/L	500	479	96	80-120	
Silver	ug/L	250	246	98	80-120	

MATRIX SPIKE SAMPLE: 891436

Parameter	Units	92141862020 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	ND	500	469	94	75-125	
Barium	ug/L	32.1J	500	523	98	75-125	
Cadmium	ug/L	ND	500	483	97	75-125	
Chromium	ug/L	12.0	500	511	100	75-125	
Lead	ug/L	ND	500	472	94	75-125	
Selenium	ug/L	ND	500	474	95	75-125	
Silver	ug/L	ND	250	245	98	75-125	

SAMPLE DUPLICATE: 891437

Parameter	Units	92141862021 Result	Dup Result	RPD	Max RPD	Qualifiers
Arsenic	ug/L	ND	ND		25	
Barium	ug/L	69.7J	67.2	4	25	
Cadmium	ug/L	ND	ND		25	
Chromium	ug/L	ND	ND		25	
Lead	ug/L	ND	ND		25	



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QUALITY CONTROL DATA

Project: Caswell County Landfill
Pace Project No.: 92141984

SAMPLE DUPLICATE: 891437

Parameter	Units	92141862021 Result	Dup Result	RPD	Max RPD	Qualifiers
Selenium	ug/L	ND	ND		25	
Silver	ug/L	ND	ND		25	

QUALITY CONTROL DATA

Project: Caswell County Landfill
Pace Project No.: 92141984

QC Batch: MPRP/12261 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 92141984005, 92141984006, 92141984007, 92141984008

METHOD BLANK: 895964 Matrix: Water
Associated Lab Samples: 92141984005, 92141984006, 92141984007, 92141984008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	12/26/12 19:41	
Barium	ug/L	ND	5.0	12/26/12 19:41	
Cadmium	ug/L	ND	1.0	12/26/12 19:41	
Chromium	ug/L	ND	5.0	12/26/12 19:41	
Lead	ug/L	ND	5.0	12/26/12 19:41	
Selenium	ug/L	ND	10.0	12/26/12 19:41	
Silver	ug/L	ND	5.0	12/26/12 19:41	

LABORATORY CONTROL SAMPLE: 895965

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	500	487	97	80-120	
Barium	ug/L	500	466	93	80-120	
Cadmium	ug/L	500	481	96	80-120	
Chromium	ug/L	500	486	97	80-120	
Lead	ug/L	500	481	96	80-120	
Selenium	ug/L	500	486	97	80-120	
Silver	ug/L	250	245	98	80-120	

MATRIX SPIKE SAMPLE: 895966

Parameter	Units	92141984005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	ND	500	492	98	75-125	
Barium	ug/L	14.4	500	485	94	75-125	
Cadmium	ug/L	ND	500	483	97	75-125	
Chromium	ug/L	ND	500	489	98	75-125	
Lead	ug/L	ND	500	480	96	75-125	
Selenium	ug/L	ND	500	492	98	75-125	
Silver	ug/L	ND	250	243	97	75-125	

SAMPLE DUPLICATE: 895967

Parameter	Units	92141984006 Result	Dup Result	RPD	Max RPD	Qualifiers
Arsenic	ug/L	ND	ND		25	
Barium	ug/L	32.1	32.6	1	25	
Cadmium	ug/L	ND	ND		25	
Chromium	ug/L	ND	ND		25	
Lead	ug/L	ND	ND		25	



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QUALITY CONTROL DATA

Project: Caswell County Landfill
Pace Project No.: 92141984

SAMPLE DUPLICATE: 895967

Parameter	Units	92141984006 Result	Dup Result	RPD	Max RPD	Qualifiers
Selenium	ug/L	ND	ND		25	
Silver	ug/L	ND	ND		25	

QUALITY CONTROL DATA

Project: Caswell County Landfill

Pace Project No.: 92141984

QC Batch: MSV/21554 Analysis Method: EPA 8260
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
 Associated Lab Samples: 92141984001, 92141984002, 92141984003, 92141984004, 92141984005, 92141984006, 92141984007, 92141984008, 92141984009

METHOD BLANK: 896020 Matrix: Water
 Associated Lab Samples: 92141984001, 92141984002, 92141984003, 92141984004, 92141984005, 92141984006, 92141984007, 92141984008, 92141984009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/22/12 17:34	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/22/12 17:34	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/22/12 17:34	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/22/12 17:34	
1,1-Dichloroethane	ug/L	ND	1.0	12/22/12 17:34	
1,1-Dichloroethene	ug/L	ND	1.0	12/22/12 17:34	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/22/12 17:34	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	12/22/12 17:34	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/22/12 17:34	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/22/12 17:34	
1,2-Dichloroethane	ug/L	ND	1.0	12/22/12 17:34	
1,2-Dichloropropane	ug/L	ND	1.0	12/22/12 17:34	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/22/12 17:34	
2-Butanone (MEK)	ug/L	ND	5.0	12/22/12 17:34	
2-Hexanone	ug/L	ND	5.0	12/22/12 17:34	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/22/12 17:34	
Acetone	ug/L	ND	25.0	12/22/12 17:34	
Acrylonitrile	ug/L	ND	10.0	12/22/12 17:34	
Benzene	ug/L	ND	1.0	12/22/12 17:34	
Bromochloromethane	ug/L	ND	1.0	12/22/12 17:34	
Bromodichloromethane	ug/L	ND	1.0	12/22/12 17:34	
Bromoform	ug/L	ND	1.0	12/22/12 17:34	
Bromomethane	ug/L	ND	2.0	12/22/12 17:34	
Carbon disulfide	ug/L	ND	2.0	12/22/12 17:34	
Carbon tetrachloride	ug/L	ND	1.0	12/22/12 17:34	
Chlorobenzene	ug/L	ND	1.0	12/22/12 17:34	
Chloroethane	ug/L	ND	1.0	12/22/12 17:34	
Chloroform	ug/L	ND	1.0	12/22/12 17:34	
Chloromethane	ug/L	ND	1.0	12/22/12 17:34	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/22/12 17:34	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/22/12 17:34	
Dibromochloromethane	ug/L	ND	1.0	12/22/12 17:34	
Dibromomethane	ug/L	ND	1.0	12/22/12 17:34	
Ethylbenzene	ug/L	ND	1.0	12/22/12 17:34	
Iodomethane	ug/L	ND	5.0	12/22/12 17:34	
m&p-Xylene	ug/L	ND	2.0	12/22/12 17:34	
Methylene Chloride	ug/L	ND	2.0	12/22/12 17:34	
o-Xylene	ug/L	ND	1.0	12/22/12 17:34	
Styrene	ug/L	ND	1.0	12/22/12 17:34	
Tetrachloroethene	ug/L	ND	1.0	12/22/12 17:34	
Toluene	ug/L	ND	1.0	12/22/12 17:34	

QUALITY CONTROL DATA

Project: Caswell County Landfill
Pace Project No.: 92141984

METHOD BLANK: 896020

Matrix: Water

Associated Lab Samples: 92141984001, 92141984002, 92141984003, 92141984004, 92141984005, 92141984006, 92141984007, 92141984008, 92141984009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/22/12 17:34	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/22/12 17:34	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	12/22/12 17:34	
Trichloroethene	ug/L	ND	1.0	12/22/12 17:34	
Trichlorofluoromethane	ug/L	ND	1.0	12/22/12 17:34	
Vinyl acetate	ug/L	ND	2.0	12/22/12 17:34	
Vinyl chloride	ug/L	ND	1.0	12/22/12 17:34	
Xylene (Total)	ug/L	ND	2.0	12/22/12 17:34	
1,2-Dichloroethane-d4 (S)	%	98	70-130	12/22/12 17:34	
4-Bromofluorobenzene (S)	%	100	70-130	12/22/12 17:34	
Dibromofluoromethane (S)	%	103	70-130	12/22/12 17:34	
Toluene-d8 (S)	%	104	70-130	12/22/12 17:34	

LABORATORY CONTROL SAMPLE: 896021

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.4	99	70-130	
1,1,1-Trichloroethane	ug/L	50	48.0	96	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	45.2	90	70-130	
1,1,2-Trichloroethane	ug/L	50	46.4	93	70-130	
1,1-Dichloroethane	ug/L	50	47.9	96	70-130	
1,1-Dichloroethene	ug/L	50	40.4	81	70-132	
1,2,3-Trichloropropane	ug/L	50	45.7	91	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	47.7	95	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	47.5	95	70-130	
1,2-Dichlorobenzene	ug/L	50	48.3	97	70-130	
1,2-Dichloroethane	ug/L	50	43.5	87	70-130	
1,2-Dichloropropane	ug/L	50	46.9	94	70-130	
1,4-Dichlorobenzene	ug/L	50	49.3	99	70-130	
2-Butanone (MEK)	ug/L	100	96.5	97	70-145	
2-Hexanone	ug/L	100	90.2	90	70-144	
4-Methyl-2-pentanone (MIBK)	ug/L	100	87.2	87	70-140	
Acetone	ug/L	100	88.6	89	50-175	
Acrylonitrile	ug/L	250	227	91	70-143	
Benzene	ug/L	50	48.9	98	70-130	
Bromochloromethane	ug/L	50	47.3	95	70-130	
Bromodichloromethane	ug/L	50	45.4	91	70-130	
Bromoform	ug/L	50	48.2	96	70-130	
Bromomethane	ug/L	50	34.4	69	54-130	
Carbon disulfide	ug/L	50	48.6	97	70-131	
Carbon tetrachloride	ug/L	50	45.5	91	70-132	
Chlorobenzene	ug/L	50	49.5	99	70-130	
Chloroethane	ug/L	50	55.0	110	64-134	
Chloroform	ug/L	50	47.7	95	70-130	

QUALITY CONTROL DATA

Project: Caswell County Landfill
Pace Project No.: 92141984

LABORATORY CONTROL SAMPLE: 896021

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	50	46.6	93	64-130	
cis-1,2-Dichloroethene	ug/L	50	44.7	89	70-131	
cis-1,3-Dichloropropene	ug/L	50	47.4	95	70-130	
Dibromochloromethane	ug/L	50	48.7	97	70-130	
Dibromomethane	ug/L	50	45.0	90	70-131	
Ethylbenzene	ug/L	50	50.6	101	70-130	
Iodomethane	ug/L	100	87.4	87	49-180	
m&p-Xylene	ug/L	100	105	105	70-130	
Methylene Chloride	ug/L	50	46.4	93	63-130	
o-Xylene	ug/L	50	47.7	95	70-130	
Styrene	ug/L	50	49.8	100	70-130	
Tetrachloroethene	ug/L	50	51.2	102	70-130	
Toluene	ug/L	50	49.4	99	70-130	
trans-1,2-Dichloroethene	ug/L	50	41.9	84	70-130	
trans-1,3-Dichloropropene	ug/L	50	46.9	94	70-132	
trans-1,4-Dichloro-2-butene	ug/L	50	42.6	85	70-141	
Trichloroethene	ug/L	50	46.8	94	70-130	
Trichlorofluoromethane	ug/L	50	44.2	88	62-133	
Vinyl acetate	ug/L	100	103	103	66-157	
Vinyl chloride	ug/L	50	49.9	100	69-130	
Xylene (Total)	ug/L	150	152	102	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Dibromofluoromethane (S)	%			97	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 896022 896023

Parameter	Units	92141984001		896022		896023		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
1,1-Dichloroethene	ug/L	ND	50	50	55.1	53.7	110	107	70-166	3	30		
Benzene	ug/L	2.0	50	50	51.0	51.4	98	99	70-148	1	30		
Chlorobenzene	ug/L	27.5	50	50	85.1	84.5	115	114	70-146	1	30		
Toluene	ug/L	0.90J	50	50	59.7	59.8	118	118	70-155	0	30		
Trichloroethene	ug/L	ND	50	50	57.6	55.8	115	112	69-151	3	30		
1,2-Dichloroethane-d4 (S)	%						100	97	70-130				
4-Bromofluorobenzene (S)	%						97	96	70-130				
Dibromofluoromethane (S)	%						107	103	70-130				
Toluene-d8 (S)	%						100	102	70-130				



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 Kinsey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Caswell County Landfill
Pace Project No.: 92141984

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.

PRL - Pace Reporting Limit.

RL - Reporting 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.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

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

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Caswell County Landfill

Pace Project No.: 92141984

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92141984001	1701 MW2	EPA 3010	MPRP/12212	EPA 6010	ICP/11160
92141984002	1701 MW3	EPA 3010	MPRP/12212	EPA 6010	ICP/11160
92141984003	1701 MW4	EPA 3010	MPRP/12212	EPA 6010	ICP/11160
92141984004	1701 MW5	EPA 3010	MPRP/12212	EPA 6010	ICP/11160
92141984005	1701 MW6	EPA 3010	MPRP/12261	EPA 6010	ICP/11205
92141984006	1701 SW1	EPA 3010	MPRP/12261	EPA 6010	ICP/11205
92141984007	1701 SW2	EPA 3010	MPRP/12261	EPA 6010	ICP/11205
92141984008	1701 Duplicate	EPA 3010	MPRP/12261	EPA 6010	ICP/11205
92141984001	1701 MW2	EPA 7470	MERP/4774	EPA 7470	MERC/4667
92141984002	1701 MW3	EPA 7470	MERP/4774	EPA 7470	MERC/4667
92141984003	1701 MW4	EPA 7470	MERP/4774	EPA 7470	MERC/4667
92141984004	1701 MW5	EPA 7470	MERP/4774	EPA 7470	MERC/4667
92141984005	1701 MW6	EPA 7470	MERP/4774	EPA 7470	MERC/4667
92141984006	1701 SW1	EPA 7470	MERP/4774	EPA 7470	MERC/4667
92141984007	1701 SW2	EPA 7470	MERP/4774	EPA 7470	MERC/4667
92141984008	1701 Duplicate	EPA 7470	MERP/4780	EPA 7470	MERC/4675
92141984001	1701 MW2	EPA 8260	MSV/21554		
92141984002	1701 MW3	EPA 8260	MSV/21554		
92141984003	1701 MW4	EPA 8260	MSV/21554		
92141984004	1701 MW5	EPA 8260	MSV/21554		
92141984005	1701 MW6	EPA 8260	MSV/21554		
92141984006	1701 SW1	EPA 8260	MSV/21554		
92141984007	1701 SW2	EPA 8260	MSV/21554		
92141984008	1701 Duplicate	EPA 8260	MSV/21554		
92141984009	1701 Trip Blank	EPA 8260	MSV/21554		



Document Name:
Sample Condition Upon Receipt (SCUR)
 Document Number:
F-CHR-CS-03-rev.08

Document Revised: October 31, 2012
 Page 1 of 2
 Issuing Authority:
 Pace Huntersville Quality Office

Client Name: SEMA Project # 92141984

Where Received: Huntersville Asheville Eden Raleigh

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 T1101 T1102 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Temp Correction Factor T1101: No Correction T1102: No Correction

Corrected Cooler Temp.: 2.1 C Biological Tissue is Frozen: Yes No N/A

Date and Initials of person examining contents: [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 checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. Analysis is not marked on cool
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. Preserve metals + 8260
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:	<u>WST</u>	
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 type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16. Received 7 to 10 blank not owned
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2-40 ^{mg} vials HCL w/Seal
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____ Field Data Required? Y / N
 Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: _____

SCURF Review: [Signature] Date: 12/14/12 SRF Review: [Signature] Date: 12/14/12

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: Edmund Q.B. Henriques

Phone: (336) 288-7180

E-mail: ehenriques@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	Landfill Road, Yanceyville, North Carolina	17-01	500	December 13, 2012

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

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, L.G.

S&ME Inc. - Senior Geologist

336-288-7180

Facility Representative Name (Print)

Title

(Area Code) Telephone Number

Edmund Q.B. Henriques
Signature

1-21-13
Date

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

