DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

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

Instructions:

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

Solid Waste Monitoring Data Submittal Information

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

S&ME, Inc.

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

Name: Connel Ware Phone: (336) 288-7180

E-mail: cware@smeinc.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Caswell County Landfill	State Route 1367 Yanceyville, NC 27379	1701	.0500	December 10, 2009

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. MW-2,4,5 >2L VOCs
☐ 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 — Facility Representative Name (Print)

Environmental Department Manager — Title

(336) 288-7180 — (Area Code) Telephone Number

Edmund Q.B. Henriques — Signature

4/5/10 — Date

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

NORTH CAROLINA LICENSED SEAL 1216 GEOLOGIST EDMUND Q.B. HENRIQUES

Revised 01/2007

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DWM SOLID WASTE SECTION

CASWELL COUNTY LANDFILL
Yanceyville, North Carolina
Semi-Annual Water Quality Monitoring Report
December 2009 Sampling Event

S&ME Project No. 1584-07-034

Prepared For:

Caswell County
P.O. Box 98
144 Court Square
Yanceyville, NC 27379

Prepared By:

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

March 31, 2010

S&ME

I hereby certify this 31st day of March 2010, that this report was prepared by me or under my direct supervision.

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

Report prepared by:

Connel D. Ware
Senior Project Manager

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1
2.0 INTRODUCTION 2
3.0 SCOPE OF WORK 2
4.0 METHODS EMPLOYED 3
4.1 Monitoring Well Sampling 3
4.2 Surface Water Sampling 3
5.0 RESULTS 4
5.1 Groundwater Analytical Results 4
5.2 Surface Water Analytical Results 5
5.3 Groundwater Flow Direction 5
5.4 Quality Assurance 5
5.5 Preliminary Analysis of Cause and Significance of 2L Exceedances 5
6.0 REFERENCES 6
TABLES I
FIGURES II
APPENDIX A III
APPENDIX B IV
APPENDIX C V

1.0 EXECUTIVE SUMMARY

Six monitoring wells at the Caswell County Landfill were sampled on December 10, 2009. These six wells (MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6) comprise the groundwater monitoring system for the closed Caswell County Landfill. This sampling event was conducted according to North Carolina Solid Waste Management Guidelines. Samples were analyzed by PACE Analytical Services, Inc. of Huntersville, North Carolina, a North Carolina certified laboratory. The six samples collected from the on-site monitoring wells were submitted for analysis of the North Carolina Landfill Appendix I volatile organic constituents and eight RCRA Metals.

Analytical results of the six water samples indicate that none of the 8-RCRA metals were detected at concentrations exceeding the corresponding 15A North Carolina Administrative Code (NCAC) 2L.0200 groundwater quality standards (2L Standard) during this event. The metals arsenic and barium were detected in the samples collected from one or more groundwater monitoring wells during the December 10, 2009 monitoring event; however, at concentrations less than the corresponding NCAC 2L groundwater quality standards. There were no other metals detected above the method detection limit from any other groundwater monitoring wells during the December 10, 2009 monitoring event.

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

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

2.0 INTRODUCTION

S&ME Inc. (S&ME) has completed the December 2009 semi-annual monitoring event at the closed Caswell County Landfill site. The monitoring activities were authorized by Caswell County Manager, Mr. Kevin Howard and were completed in general accordance with S&ME proposal 1584-09-P075 dated May 20, 2009. This report summarizes our understanding of the project, our field services, and the results of laboratory analyses performed on the samples collected.

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

The facility also typically monitors surface water quality at the stream that crosses the downgradient region of the Facility. As conditions allow, during each semi-annual monitoring event, two surface water samples are collected from this stream at designated sampling points. Stream sampling location SW-1 is the upstream sampling location to the south of the waste management unit. Stream sampling location SW-2 is the downstream sampling location. During the December 10, 2009 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 December 10, 2009 water quality monitoring event.

3.0 SCOPE OF WORK

S&ME has performed the second semi-annual groundwater sampling of the six (6) network groundwater monitoring wells for the 2009 groundwater monitoring year. The groundwater monitoring wells were purged, sampled, and the collected groundwater samples analyzed (in accordance with 15A NCAC 13B .0500 et seq) for the North Carolina Appendix I volatile organic constituents and the eight RCRA metals. This semi-annual groundwater monitoring report has been prepared to summarize the December 2009 groundwater monitoring event and includes:

- Summary Tables of the laboratory analytical data from each sampling event,
- Development of a potentiometric map incorporating the latest groundwater elevation data, and
- 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 10, 2009. The monitoring well locations with respect to the Facility layout are shown on **Figure 1**. A representative from S&ME opened each well and measured the static water level from the top edge of the PVC casing in the wells. The total well depth was used to determine the volume of water in the wells at the time of the sampling event. These data are summarized in **Table 1**.

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

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, temperature, and turbidity (qualitative).

The field data collected during sampling was recorded on the groundwater sampling field data sheets included in **Appendix A** and summarized in **Table 2** 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 10, 2009. 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 3** & **4**.

It should be noted that the PACE Analytical Laboratories Reporting Limits (RLs) do not match the North Carolina Solid Waste Section Limits (SWSLs) for the targeted parameters. S&ME contacted PACE regarding this issue and requested that the laboratory report be revised such that the laboratory RLs matched the SWSLs. PACE informed S&ME that their LIM system would not support revising the laboratory RLs to match the North Carolina SWSLs without causing any detected value below the overridden laboratory RL to be reported as a non-detect. S&ME prepared the analytical results summary tables included in this report following the conventions set forth by the NC DENR Solid Waste Section in that any value reported at a concentration below the North Carolina SWSLs is flagged as a "J" or estimated value on the summary tables.

The complete laboratory report is included in **Appendix B**. The following summarizes the groundwater sample analyses for the six wells (MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6) sampled on December 10, 2009.

Metals:

Analytical results of the six groundwater samples indicate that none of the 8-RCRA metals were detected at concentrations exceeding the corresponding 15A NCAC 2L groundwater quality standards during this event. The metals arsenic and barium were detected in the samples collected from one or more groundwater monitoring wells during the December 10, 2009 monitoring event; however, at concentrations less than the corresponding NCAC 2L groundwater quality standards. There were no other metals detected above the method detection limit from any other groundwater monitoring wells during the December 10, 2009 monitoring event.

Volatile Organic Compounds:

As summarized in Table 3, the volatile organic constituent benzene was detected in monitoring wells MW-2, MW-4, and MW-5 at reported concentrations above the NCAC 2L groundwater quality standard of 1 μg/L. Volatile organic constituent 1,4-dichlorobenzene was detected in the groundwater samples collected from wells MW-2, MW-4, and MW-5 at reported concentrations above the NCAC 2L groundwater quality standard of 6 μg/L. The concentration of 1,4- dichlorobenzene reported for monitoring well MW-3 is less than the NCAC 2L groundwater quality standard.

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

5.2 Surface Water Analytical Results

There were no volatile organic constituents detected above the method detection limit in either of the stream sampling locations. During the December 10, 2009 groundwater monitoring event barium was detected in the up-gradient background surface water sample SW-1 and the down-gradient sample location SW-2, at similar concentrations. The reported concentrations are below there 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 during this sampling event.

5.3 Groundwater Flow Direction

The static water levels in the monitoring wells were measured on December 10, 2009. The depth to the water table ranged from 8.19 to 24.57 feet below the top of well casing on this date. Groundwater elevation data are presented in Table 1. Ground surface elevations were taken from surface topography illustrated on Plan Sheet No. 3 of the Caswell County Landfill Closure Plans prepared by Dewberry and Davis in March 1994. The groundwater elevation at each monitoring well was approximated by taking the difference of the ground surface elevation (topography) and the depth to static water in each monitoring well. A groundwater contour map was constructed using the calculated groundwater elevation data from the December 10, 2009 sampling event and is presented as **Figure 2**. The groundwater elevation data collected during this monitoring event indicates that the groundwater beneath the landfill generally flows easterly toward the unnamed tributary of Moon Creek.

5.4 Quality Assurance

The monitoring wells were sampled using new, sterile Teflon disposable bailers or new Teflon and silicon tubing. For Quality Assurance a Duplicate sample was collected from monitoring well MW-3. The results of the detected constituents from the duplicate sample were similar in concentration to the results of the detected constituents reported in MW-3. A Laboratory QC Method Blank was also analyzed for the Appendix I Volatile Organic Compounds as well as the RCRA 8 metals. No monitored constituents were detected in the method blank during the December 2009 monitoring event. The results of the method blank and laboratory QC sample analyses are included in **Appendix B**.

5.5 Preliminary Analysis of Cause and Significance of 2L Exceedances

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

Previously, S&ME reviewed the 2000 aerial photograph of the Caswell County Landfill and surrounding vicinity as a preliminary analysis of the proximity of potential receptor water well users to the compliance monitoring wells in which 2L exceedances occurred during the December 2009 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.

Analytical results for stream sampling location SW-2 detected no target constituents other than naturally occurring barium, which was found at a similar concentration in the surface water sample collected up-gradient of the landfill (e.g. SW-1). It is on this basis that the current data set provides no evidence of the groundwater quality impacts stemming from a release from the landfill, impacting adjacent surface water.

Due to the detection of exceedances of the NCAC 2L groundwater quality standards in the compliance wells, S&ME recommends that a detailed water supply well receptor survey be completed for the Caswell County Landfill and the development of plans to address the NCAC 2L exceedances.

6.0 REFERENCES

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

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

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

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

TABLES

Table 1
Groundwater Elevation Data Summary (12/10/09)
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 10, 2009	
			(feet)	Elevation (feet)
MW-1	572	24.5	14.72	557.28
MW-2	526	22.3	20.55	505.45
MW-3	511	17.8	10.75	500.25
MW-4	526	36.0	24.57	501.43
MW-5	498	24.7	9.22	488.78
MW-6	489	16.2	8.19	480.81

Topographic = ground elevation estimated from topographic map w/2 foot contour interval, not a surveyed elevation
Depth of well data as measured by S&ME Inc. personnel on date of sampling
DTGW = Depth to Groundwater
Elevation = calculated groundwater elevation

Table 2
Groundwater & Surface Water Field Data Summary (12/10/09)
Caswell County Landfill
Yanceyville, North Carolina
S&ME Project No. 1584-07-034

Location:	MW-1						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1410	10-Dec-09	14.8	58.6	5.84	102.1	1	14.72
1415	10-Dec-09	15.4	59.7	5.82	102	1	
1420	10-Dec-09	15.5	59.9	5.89	103.1	1	

Location:	MW-2						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
0925	10-Dec-09	11.8	53.2	6.56	128.1	1	20.55

Location:	MW-3						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1050	10-Dec-09	11.5	52.7	6.43	72.3	1	10.75
1100	10-Dec-09	12.3	54.1	6.44	70.3	1	
1110	10-Dec-09	11.9	53.4	6.45	69.9	1	

Location:	MW-4						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1010	10-Dec-09	14.0	57.2	6.72	124.2	1	24.57
1015	10-Dec-09	14.1	57.4	6.82	118.6	1	
1020	10-Dec-09	14.2	57.6	6.74	122.8	1	

Location:	MW-5						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1140	10-Dec-09	11.9	53.4	6.67	96.9	1	9.22
1150	10-Dec-09	13.2	55.8	6.67	97.1	1	
1200	10-Dec-09	12.8	55.0	6.68	97.1	1	

Location:	MW-6						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1245	10-Dec-09	12.9	55.2	7.03	16.88	1	8.19
1255	10-Dec-09	13.9	57.0	7.08	16.60	1	
1305	10-Dec-09	13.6	56.5	7.06	16.49	1	

Location:	SW-1						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1345	10-Dec-09	8.4	47.1	7.33	4.59	1	N/A

Location:	SW-2						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1330	10-Dec-09	8.4	47.1	7.86	5.06	1	N/A

N/A = Not Applicable
NM = Not Measured/recorded
Qualitative Turbidity; 1 = clear, 2 = slight, 3 = moderate, 4 = high

TABLE 3
GROUNDWATER ANALYTICAL RESULTS SUMMARY (12/10/09)
APPENDIX I - VOLATILE ORGANIC COMPOUNDS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Compound	Sample Locations							NC SWSL	NCAC 2L stds.
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	Duplicate		
Benzene	ND	**2.4**	ND	**1.8**	**1.3**	ND	ND	1	1
Chlorobenzene	ND	**32.6**	**5.2**	**16.0**	**5.8**	ND	**4.9**	3	50
Chloroethane	ND	**2.1 J**	**2.2 J**	ND	**2.7 J**	ND	**2.2 J**	10	3,000
1,4-Dichlorobenzene	ND	**16.7**	**3.8**	**14.4**	**12.8**	ND	**3.6**	1	6
1,2-Dichlorobenzene	ND	**2.9 J**	ND	**2.2 J**	**1.9 J**	ND	ND	5	20
1,1-Dichloroethane	ND	ND	ND	ND	**1.1 J**	ND	ND	5	6

reported concentrations = micrograms per liter (ug/L)
NC SWSL = North Carolina Solid Waste Section Limit
ND = Analyte not detected
NE = No established 2L Standard for this constituent
NCAC 2L stds. = 15A North Carolina Administrative Code 2L .0200, GW Quality Standards for Class GA groundwater.
Yellow highlights indicate a measurement higher than the NC SWSL
Orange highlights indicate a measurement higher than 2L standards.
J = Parameters are estimated values between the detection limit and the NC SWSL.

TABLE 4
GROUNDWATER ANALYTICAL RESULTS SUMMARY (12/10/10)
8-RCRA METALS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Constituent	Sample Locations							NC SWSL	NCAC 2L stds.
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	Duplicate		
Arsenic	ND	7.3 J	ND	ND	ND	ND	ND	10	10
Barium	20.8 J	158	76.1 J	49.7 J	49.5 J	22.0 J	75.1J	100	700

all concentrations reported in micrograms per liter (ug/L)
NC SWSL = North Carolina Solid Waste Section Limit
ND = Analyate not detected
NCAC 2L stds. = 15A North Carolina Administrative Code 2L .0200, Groundwater Quality Standards for Class GA groundwater.
ns = no standard listed according to NCAC 2L
Yellow highlights indicate a measurement higher than the NC SWSL
Orange highlights indicate a measurement higher than 2L standards.
J = Parameters are estimated values between the detection limit and the NC SWSL.

TABLE 5
SURFACE WATER ANALYTICAL RESULTS SUMMARY (12/10/09)
APPENDIX I - VOLATILE ORGANIC COMPOUNDS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

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

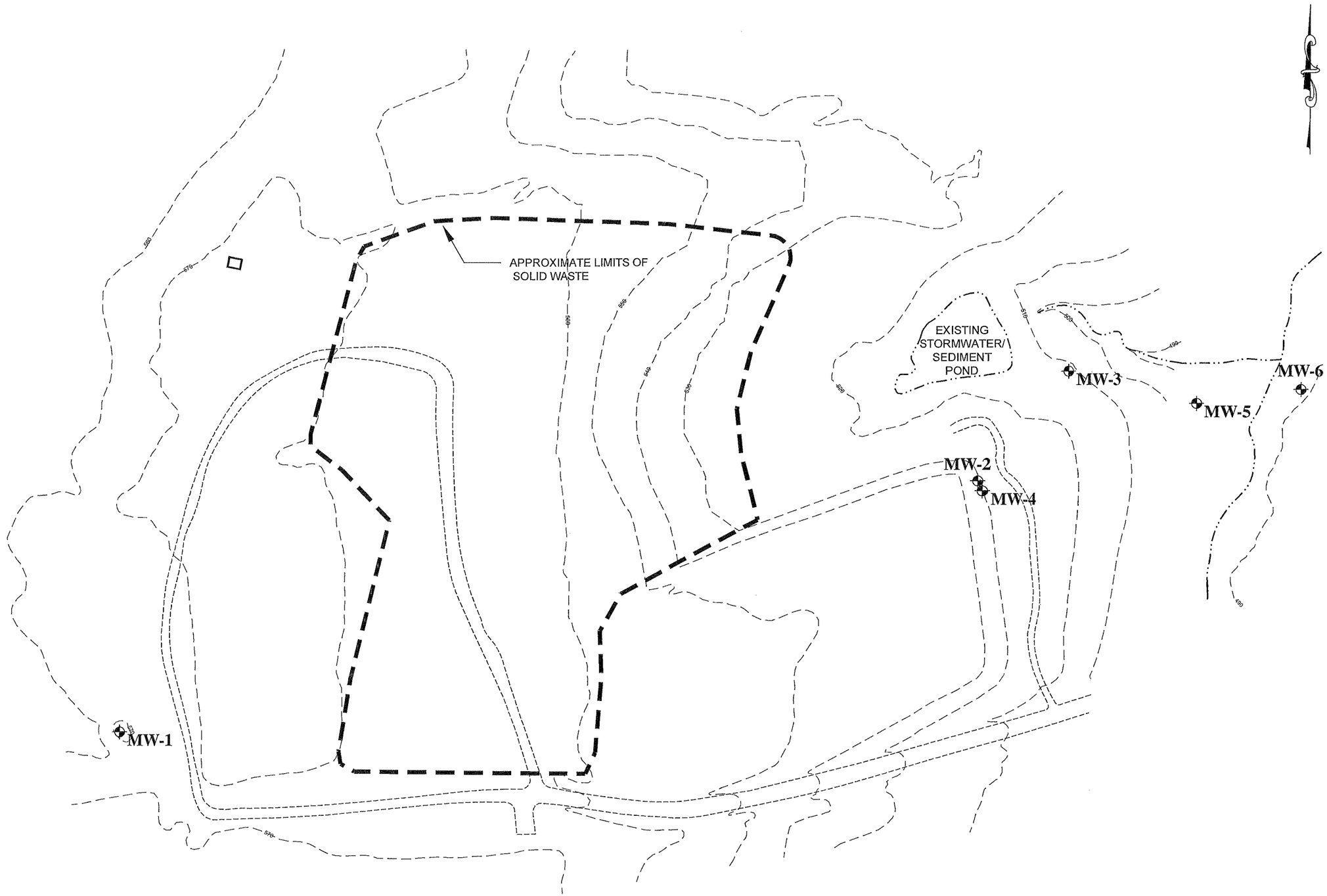
TABLE 6
SURFACE WATER ANALYTICAL RESULTS SUMMARY (12/10/09)
8-RCRA METALS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Constituent	Sample Locations		NC SWSL	15A NCAC 2B Standards*
	SW-1	SW-2		
Barium	**25.9 J**	**27.1 J**	100	1000

NC SWSL = North Carolina Solid Waste Section Limit
ND = Parameter not detected
** = Title 15A NCAC 2B Standards for Class B, C surface water*

J = Parameters are estimated values between the detection limit and the NC SWSL.
Yellow highlights indicate a measurement higher than the NC SWSL
Orange highlights indicate a measurement higher than 2B standards.

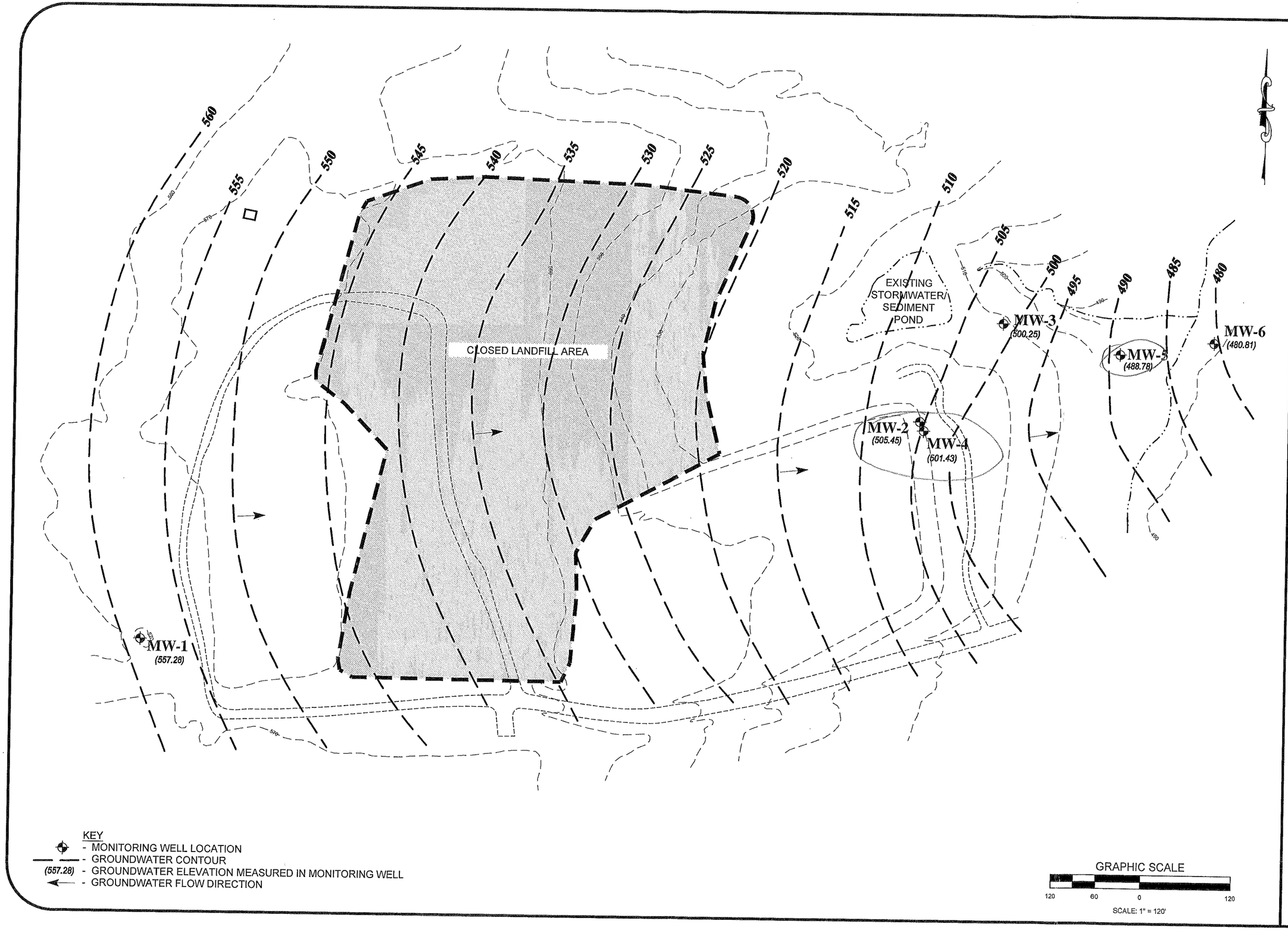
FIGURES



SITE PLAN
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA

SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: CDW	
JOB NO. 1584-07-034	DATE: JULY 2008	FIGURE NO. 1	

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



GROUNDWATER CONTOUR MAP

CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA

SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: CDW	
JOB NO. 1584-07-034	DATE: DECEMBER 2009	FIGURE NO. 2	

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

APPENDIX A

Groundwater Sampling Field Data Sheets

S&ME FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE 12/10/09
FIELD PERSONNEL Gary Simcox
FACILITY NAME Caswell County Landfill
EPA ID NO.
WELL ID NO. SW-1

☐ UPGRADIENT ☐ DOWNGRADIENT

WEATHER CONDITIONS RAINY/CLEAR/WINDY/PARTLY CLOUDY/WARM/HOT
AIR TEMPERATURE °F
TOTAL WELL DEPTH (TWD) 1/100 ft
DEPTH TO GROUNDWATER (DGW) 1/100 ft
LENGTH OF WATER COLUMN (LWC) = TWD − DGW = ft
1 CASING VOLUME (OCV) = LWC X = gal
3 CASING VOLUMES = GAL = STD EVACUATION VOLUME
METHOD OF WELL EVACUATION SUBMERSIBLE PUMP/GEL T BAILER/B-K PUMP
METHOD OF SAMPLE COLLECTION DEDICATED T BAILER/GEL-T BAILER/B-K BAILER
TOTAL VOLUME OF WATER REMOVED gal

CASING DIAMETER ☐ 2 INCHES ☐ 4 INCHES
CASING MATERIAL ☐ PVC ☐ TEFLON ☐ STEEL
MEASURING POINT ELEVATION (MSL) 1/100 ft
WATER TABLE ELEVATION (MSL) 1/100 ft
pH/SPECIAL CONDITION METER CAL (DATE/TIME)
pH BUFFER SOLUTION USED
STEEL GUARD PIPE AROUND CASING ☑ YES ☐ NO
LOCKING CAP ☑ YES ☐ NO
PROTECTIVE ABUTMENT ☐ YES ☑ NO
WELL INTEGRITY SATISFACTORY ☑ YES ☐ NO
WELL YIELD ☐ LOW ☐ MEDIUM ☐ HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV	PARAMETER
Gary Simcox	12/10/09	1345	4			

FIELD ANALYSIS

VOLUME PURGED (GAL.)							
TIME (MILITARY)							
pH (S.U.)	7.33						
CONDUCTIVITY	4.59						
WATER TEMP. (°C)	8.4						
TURBIDITY (SUBJECTIVE)*							
ODOR (SUBJECTIVE)**							

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high

S&ME FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE: 12/10/09
FIELD PERSONNEL: Gary Simcox
FACILITY NAME: Caswell County Landfill
EPA ID NO.:
WELL ID NO.: SW-2

☐ UPGRADIENT ☐ DOWNGRADIENT

WEATHER CONDITIONS: RAINY/(CLEAR)/WINDY/PARTLY CLOUDY/WARM/HOT
AIR TEMPERATURE: °F
TOTAL WELL DEPTH (TWD): 1/100 ft
DEPTH TO GROUNDWATER (DGW): 1/100 ft
LENGTH OF WATER COLUMN (LWC) = TWD − DGW = ___ ft
1 CASING VOLUME (OCV) = LWC X ___ = ___ gal
3 CASING VOLUMES = ___ GAL = STD EVACUATION VOLUME
METHOD OF WELL EVACUATION: SUBMERSIBLE PUMP/GEL T BAILER/B-K PUMP
METHOD OF SAMPLE COLLECTION: DEDICATED T BAILER/GEL-T BAILER/B-K BAILER
TOTAL VOLUME OF WATER REMOVED: ___ gal

CASING DIAMETER: ☐ 2 INCHES ☐ 4 INCHES
CASING MATERIAL: ☐ PVC ☐ TEFLON ☐ STEEL
MEASURING POINT ELEVATION (MSL): 1/100 ft
WATER TABLE ELEVATION (MSL): 1/100 ft
pH/SPECIAL CONDITION METER CAL (DATE/TIME):
pH BUFFER SOLUTION USED:
STEEL GUARD PIPE AROUND CASING: ☑ YES ☐ NO
LOCKING CAP: ☑ YES ☐ NO
PROTECTIVE ABUTMENT: ☐ YES ☑ NO
WELL INTEGRITY SATISFACTORY: ☑ YES ☐ NO
WELL YIELD: ☐ LOW ☐ MEDIUM ☐ HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV	PARAMETER
Gary Simcox	12/10/09	1336	4			

FIELD ANALYSIS

VOLUME PURGED (GAL.)							
TIME (MILITARY)							
pH (S.U.)	7.86						
CONDUCTIVITY	5.06						
WATER TEMP. (°C)	8.4						
TURBIDITY (SUBJECTIVE)*							
ODOR (SUBJECTIVE)**							

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high

S&ME FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE 12/10/09
FIELD PERSONNEL Gary Simcox
FACILITY NAME Caswell County Landfill
EPA ID NO.
WELL ID NO. MW-1

☐ UPGRADIENT ☐ DOWNGRADIENT

WEATHER CONDITIONS RAINY/CLEAR/WINDY/PARTLY CLOUDY/WARM/HOT
AIR TEMPERATURE °F
TOTAL WELL DEPTH (TWD) 24.5 1/100 ft
DEPTH TO GROUNDWATER (DGW) 14.72 1/100 ft
LENGTH OF WATER COLUMN (LWC) = TWD − DGW = ___ ft
1 CASING VOLUME (OCV) = LWC X .17 = gal
3 CASING VOLUMES = GAL. = STD EVACUATION VOLUME
METHOD OF WELL EVACUATION SUBMERSIBLE PUMP/GEL T BAILER/B-K PUMP
METHOD OF SAMPLE COLLECTION DEDICATED T BAILER/GEL-T BAILER/B-K BAILER
TOTAL VOLUME OF WATER REMOVED gal

CASING DIAMETER ☑ 2 INCHES ☐ 4 INCHES
CASING MATERIAL ☑ PVC ☐ TEFLON ☐ STEEL
MEASURING POINT ELEVATION (MSL) 1/100 ft
WATER TABLE ELEVATION (MSL) 1/100 ft
pH/SPECIAL CONDITION METER CAL (DATE/TIME)
pH BUFFER SOLUTION USED
STEEL GUARD PIPE AROUND CASING ☑ YES ☐ NO
LOCKING CAP ☑ YES ☐ NO
PROTECTIVE ABUTMENT ☐ YES ☑ NO
WELL INTEGRITY SATISFACTORY ☑ YES ☐ NO
WELL YIELD ☐ LOW ☐ MEDIUM ☐ HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV	PARAMETER
Gary Simcox	12/10/09	1420	4			

BAILER

FIELD ANALYSIS

VOLUME PURGED (GAL)							
TIME (MILITARY)							
pH (S.U.)	5.84	5.82	5.89				
CONDUCTIVITY	102.1	102.0	103.1				
WATER TEMP (°C)	14.8	15.4	15.5				
TURBIDITY (SUBJECTIVE)*	1	1	1				
ODOR (SUBJECTIVE)**							

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high

S&ME

FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE: 12/10/09
FIELD PERSONNEL: Grey Simcox
FACILITY NAME: Caswell County Landfill
EPA ID NO.:
WELL ID NO.: MW-2

☐ UPGRADIENT ☐ DOWNGRADIENT

WEATHER CONDITIONS: RAINY/(CLEAR)/WINDY/PARTLY CLOUDY/WARM/HOT
AIR TEMPERATURE: 40 °F
TOTAL WELL DEPTH (TWD): 22.3 1/100 ft
DEPTH TO GROUNDWATER (DGW): 20.55 1/100 ft
LENGTH OF WATER COLUMN (LWC) = TWD − DGW = 1.8 ft
1 CASING VOLUME (OCV) = LWC X .17 = .30 gal
3 CASING VOLUMES = .9 GAL. = STD EVACUATION VOLUME
METHOD OF WELL EVACUATION: SUBMERSIBLE PUMP/GEL T BAILER/B-K PUMP
METHOD OF SAMPLE COLLECTION: DEDICATED T BAILER/GEL-T BAILER/B-K BAILER
TOTAL VOLUME OF WATER REMOVED: gal

CASING DIAMETER: ☑ 2 INCHES ☐ 4 INCHES
CASING MATERIAL: ☑ PVC ☐ TEFLON ☐ STEEL
MEASURING POINT ELEVATION (MSL): 1/100 ft
WATER TABLE ELEVATION (MSL): 1/100 ft
pH/SPECIAL CONDITION METER CAL (DATE/TIME):
pH BUFFER SOLUTION USED:
STEEL GUARD PIPE AROUND CASING: ☑ YES ☐ NO
LOCKING CAP: ☑ YES ☐ NO
PROTECTIVE ABUTMENT: ☐ YES ☑ NO
WELL INTEGRITY SATISFACTORY: ☑ YES ☐ NO
WELL YIELD: ☐ LOW ☐ MEDIUM ☐ HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV	PARAMETER
Grey Simcox	12/10/09	0930	4			

BAILER

FIELD ANALYSIS

GRAB SAMPLE

VOLUME PURGED (GAL.)	0925						
TIME (MILITARY)							
pH (S.U.)	6.56						
CONDUCTIVITY m/s	128.1						
WATER TEMP. (°C)	11.8						
TURBIDITY (SUBJECTIVE)*	1						
ODOR (SUBJECTIVE)**							

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high

DUPLICATE TAKEN @ THIS LOCATION 0800 HRS

S&ME

FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE 12/10/09
FIELD PERSONNEL GARY SIMCOX
FACILITY NAME CASWELL COUNTY LANDFILL
EPA ID NO.
WELL ID NO. MW-3

☐ UPGRADIENT ☐ DOWNGRADIENT

WEATHER CONDITIONS RAINY/CLEAR/WINDY/PARTLY CLOUDY/WARM/HOT
AIR TEMPERATURE °F
TOTAL WELL DEPTH (TWD) 17.8 1/100 ft
DEPTH TO GROUNDWATER (DGW) 10.75 1/100 ft
LENGTH OF WATER COLUMN (LWC) = TWD − DGW = 7 ft
1 CASING VOLUME (OCV) = LWC X .17 = 1.2 gal
3 CASING VOLUMES = 3.6 GAL. = STD EVACUATION VOLUME
METHOD OF WELL EVACUATION SUBMERSIBLE PUMP/GEL T BAILER/B-K PUMP
METHOD OF SAMPLE COLLECTION DEDICATED T BAILER/GEL-T BAILER/B-K BAILER
TOTAL VOLUME OF WATER REMOVED gal

CASING DIAMETER ☑ 2 INCHES ☐ 4 INCHES
CASING MATERIAL ☑ PVC ☐ TEFLON ☐ STEEL
MEASURING POINT ELEVATION (MSL) 1/100 ft
WATER TABLE ELEVATION (MSL) 1/100 ft
pH/SPECIAL CONDITION METER CAL (DATE/TIME)
pH BUFFER SOLUTION USED
STEEL GUARD PIPE AROUND CASING ☑ YES ☐ NO
LOCKING CAP ☑ YES ☐ NO
PROTECTIVE ABUTMENT ☐ YES ☑ NO
WELL INTEGRITY SATISFACTORY ☑ YES ☐ NO
WELL YIELD ☐ LOW ☐ MEDIUM ☐ HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV	PARAMETER
GARY SIMCOX	12/10/09	1120	4			

PERISTALTIC PUMP

FIELD ANALYSIS

VOLUME PURGED (GAL) LITER	0	2	4	6			
TIME (MILITARY)	1040	1050	1100	1110			
pH (S.U.)		6.43	6.44	6.45			
CONDUCTIVITY mS/cm		72.3	70.3	69.9			
WATER TEMP (°C)		11.5	12.3	11.9			
TURBIDITY (SUBJECTIVE)*		1	1	1			
ODOR (SUBJECTIVE)**							

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high

S&ME

FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE: 12/10/09
FIELD PERSONNEL: Gary Simcox
FACILITY NAME: Caswell County Landfill
EPA ID NO.:
WELL ID NO.: MW-4

☐ UPGRADIENT ☐ DOWNGRADIENT

WEATHER CONDITIONS: RAINY/(CLEAR)/WINDY/PARTLY CLOUDY/WARM/HOT
AIR TEMPERATURE: °F
TOTAL WELL DEPTH (TWD): 36.0 1/100 ft
DEPTH TO GROUNDWATER (DGW): 24.57 1/100 ft
LENGTH OF WATER COLUMN (LWC) = TWD − DGW = 11.4 ft
1 CASING VOLUME (OCV) = LWC X .17 = 2.0 gal
3 CASING VOLUMES = 6.0 GAL. = STD EVACUATION VOLUME
METHOD OF WELL EVACUATION: SUBMERSIBLE PUMP/GEL T BAILER/B-K PUMP
METHOD OF SAMPLE COLLECTION: DEDICATED T BAILER/GEL-T BAILER/B-K BAILER
TOTAL VOLUME OF WATER REMOVED: gal

CASING DIAMETER: ☑ 2 INCHES ☐ 4 INCHES
CASING MATERIAL: ☑ PVC ☐ TEFLON ☐ STEEL
MEASURING POINT ELEVATION (MSL): 1/100 ft
WATER TABLE ELEVATION (MSL): 1/100 ft
pH/SPECIAL CONDITION METER CAL (DATE/TIME):
pH BUFFER SOLUTION USED:
STEEL GUARD PIPE AROUND CASING: ☑ YES ☐ NO
LOCKING CAP: ☑ YES ☐ NO
PROTECTIVE ABUTMENT: ☐ YES ☑ NO
WELL INTEGRITY SATISFACTORY: ☑ YES ☐ NO
WELL YIELD: ☐ LOW ☐ MEDIUM ☐ HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV	PARAMETER
Gary Simcox	12/10/09	1020	4			

BAILER

FIELD ANALYSIS

VOLUME PURGED (GAL)	1	2	3				
TIME (MILITARY)							
pH (S.U.)	6.72	6.82	6.74				
CONDUCTIVITY	124.2	118.6	122.8				
WATER TEMP (°C)	14.0	14.1	14.2				
TURBIDITY (SUBJECTIVE)*	1	1	1				
ODOR (SUBJECTIVE)**							

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high

S&ME FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE: 12/10/09
FIELD PERSONNEL: Gary Simcox
FACILITY NAME: Caswell County Landfill
EPA ID NO.:
WELL ID NO.: MW-5

☐ UPGRADIENT ☐ DOWNGRADIENT

WEATHER CONDITIONS: RAINY/(CLEAR)/WINDY/PARTLY CLOUDY/WARM/HOT
AIR TEMPERATURE: °F
TOTAL WELL DEPTH (TWD): 24.7 1/100 ft
DEPTH TO GROUNDWATER (DGW): 9.22 1/100 ft
LENGTH OF WATER COLUMN (LWC) = TWD − DGW = 15 ft
1 CASING VOLUME (OCV) = LWC X .17 = 1.6 gal
3 CASING VOLUMES = 4.9 GAL. = STD EVACUATION VOLUME
METHOD OF WELL EVACUATION: SUBMERSIBLE PUMP/GEL T BAILER/B-K PUMP
METHOD OF SAMPLE COLLECTION: DEDICATED T BAILER/GEL-T BAILER/B-K BAILER
TOTAL VOLUME OF WATER REMOVED: gal

CASING DIAMETER: ☑ 2 INCHES ☐ 4 INCHES
CASING MATERIAL: ☑ PVC ☐ TEFLON ☐ STEEL
MEASURING POINT ELEVATION (MSL): 1/100 ft
WATER TABLE ELEVATION (MSL): 1/100 ft
pH/SPECIAL CONDITION METER CAL (DATE/TIME):
pH BUFFER SOLUTION USED:
STEEL GUARD PIPE AROUND CASING: ☑ YES ☐ NO
LOCKING CAP: ☑ YES ☐ NO
PROTECTIVE ABUTMENT: ☐ YES ☑ NO
WELL INTEGRITY SATISFACTORY: ☑ YES ☐ NO
WELL YIELD: ☐ LOW ☐ MEDIUM ☐ HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV	PARAMETER
Gary Simcox	12/10/09	1215	4			

Peristaltic Pump

FIELD ANALYSIS

VOLUME PURGED	0	2	4	6	8		
TIME (MILITARY)	1130	1140	1150	1200	1210		
pH (S.U.)		6.67	6.67	6.68			
CONDUCTIVITY		96.9	97.1	97.1			
WATER TEMP. (°C)		11.9	13.2	12.8			
TURBIDITY (SUBJECTIVE)*		1	1	1			
ODOR (SUBJECTIVE)**							

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high

S&ME

FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE 12/10/09
FIELD PERSONNEL Gary Simcox
FACILITY NAME Caswell County Landfill
EPA ID NO.
WELL ID NO. MW-6

☐ UPGRADIENT ☐ DOWNGRADIENT

WEATHER CONDITIONS RAINY/(CLEAR)/WINDY/PARTLY CLOUDY/WARM/HOT
AIR TEMPERATURE °F
TOTAL WELL DEPTH (TWD) 16.2 1/100 ft
DEPTH TO GROUNDWATER (DGW) 8.19 1/100 ft
LENGTH OF WATER COLUMN (LWC) = TWD − DGW = 8.0 ft
1 CASING VOLUME (OCV) = LWC X .17 = 1.4 gal
3 CASING VOLUMES = 4.2 GAL. = STD EVACUATION VOLUME
METHOD OF WELL EVACUATION SUBMERSIBLE PUMP/GEL T BAILER/B-K PUMP
METHOD OF SAMPLE COLLECTION DEDICATED T BAILER/GEL-T BAILER/B-K BAILER
TOTAL VOLUME OF WATER REMOVED gal

CASING DIAMETER ☑ 2 INCHES ☐ 4 INCHES
CASING MATERIAL ☑ PVC ☐ TEFLON ☐ STEEL
MEASURING POINT ELEVATION (MSL) 1/100 ft
WATER TABLE ELEVATION (MSL) 1/100 ft
pH/SPECIAL CONDITION METER CAL (DATE/TIME)
pH BUFFER SOLUTION USED
STEEL GUARD PIPE AROUND CASING ☑ YES ☐ NO
LOCKING CAP ☑ YES ☐ NO
PROTECTIVE ABUTMENT ☐ YES ☑ NO
WELL INTEGRITY SATISFACTORY ☑ YES ☐ NO
WELL YIELD ☐ LOW ☐ MEDIUM ☐ HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV	PARAMETER
Gary Simcox	12/10/09	1315	4			

Peristaltic Pump

FIELD ANALYSIS

VOLUME PURGED (GAL)	0	2	4	6			
TIME (MILITARY)	1235	1245	1255	1305			
pH (S.U.)		7.03	7.08	7.06			
CONDUCTIVITY		16.88	16.60	16.49			
WATER TEMP (°C)		12.9	13.9	13.6			
TURBIDITY (SUBJECTIVE)*		1	1	1			
ODOR (SUBJECTIVE)**							

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high

APPENDIX B

Laboratory Analytical Reports

Pace Analytical®
www.pacelabs.com

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

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

December 24, 2009

Mr. Connel Ware
S&ME, Inc.
3718 Old Battleground Road
Greensboro, NC 27410

RE: Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Dear Mr. Ware:
Enclosed are the analytical results for sample(s) received by the laboratory on December 11, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com
Project Manager

Enclosures

cc: Wayne Watterson, S&ME, Inc.

REPORT OF LABORATORY ANALYSIS

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ACCREDITED IN ACCORDANCE WITH nelac

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Asheville, NC 28804
(828)254-7176

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

CERTIFICATIONS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Charlotte Certification IDs
9800 Kincey Ave. - Ste 100 Huntersville, NC 28078
West Virginia Certification #: 357
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 990060001
South Carolina Drinking Water Cert. #: 990060003
Tennessee Certification #: 04010
Virginia Certification #: 00213

Asheville Certification IDs
2225 Riverside Dr. Asheville, NC 28804
Connecticut Certification #: PH-0106
Louisiana/LELAP Certification #: 03095
Massachusetts Certification #: M-NC030
New Jersey Certification #: NC011
North Carolina Bioassay Certification #: 9
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
Pennsylvania Certification #: 68-03578
South Carolina Bioassay Certification #: 99030002
South Carolina Certification #: 99030001
Tennessee Certification #: 2980
Virginia Certification #: 00072
West Virginia Certification #: 356
Florida/NELAP Certification #: E87648

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-1 **Lab ID: 9259430001** Collected: 12/10/09 14:20 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:51	7440-38-2	
Barium	**20.8**	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:51	7440-39-3	
Cadmium	ND	ug/L	1.0	1	12/17/09 14:30	12/22/09 16:51	7440-43-9	
Chromium	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:51	7440-47-3	
Lead	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:51	7439-92-1	
Selenium	ND	ug/L	10.0	1	12/17/09 14:30	12/22/09 16:51	7782-49-2	
Silver	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:51	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	12/14/09 11:40	12/16/09 11:53	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/20/09 02:42	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		12/20/09 02:42	107-13-1	
Benzene	ND	ug/L	1.0	1		12/20/09 02:42	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/20/09 02:42	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/20/09 02:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/20/09 02:42	75-25-2	
Bromomethane	ND	ug/L	5.0	1		12/20/09 02:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/20/09 02:42	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		12/20/09 02:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/20/09 02:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/20/09 02:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/20/09 02:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/20/09 02:42	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/20/09 02:42	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		12/20/09 02:42	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/20/09 02:42	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/20/09 02:42	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/20/09 02:42	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 02:42	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 02:42	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		12/20/09 02:42	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/20/09 02:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/20/09 02:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/20/09 02:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 02:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 02:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/20/09 02:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 02:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 02:42	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		12/20/09 02:42	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		12/20/09 02:42	591-78-6	
Iodomethane	ND	ug/L	5.0	1		12/20/09 02:42	74-88-4	
Methylene Chloride	ND	ug/L	2.0	1		12/20/09 02:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/20/09 02:42	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-1 **Lab ID: 9259430001** Collected: 12/10/09 14:20 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	1		12/20/09 02:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 02:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 02:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/20/09 02:42	127-18-4	
Toluene	ND	ug/L	1.0	1		12/20/09 02:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/20/09 02:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/20/09 02:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/20/09 02:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/20/09 02:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/20/09 02:42	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/20/09 02:42	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/20/09 02:42	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		12/20/09 02:42	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/20/09 02:42	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		12/20/09 02:42	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109	1		12/20/09 02:42	460-00-4	
Dibromofluoromethane (S)	101	%	85-115	1		12/20/09 02:42	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	79-120	1		12/20/09 02:42	17060-07-0	
Toluene-d8 (S)	101	%	70-120	1		12/20/09 02:42	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-2 **Lab ID: 9259430002** Collected: 12/10/09 09:30 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**7.3**	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:59	7440-38-2	
Barium	**158**	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:59	7440-39-3	
Cadmium	ND	ug/L	1.0	1	12/17/09 14:30	12/22/09 16:59	7440-43-9	
Chromium	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:59	7440-47-3	
Lead	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:59	7439-92-1	
Selenium	ND	ug/L	10.0	1	12/17/09 14:30	12/22/09 16:59	7782-49-2	
Silver	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 16:59	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	12/14/09 11:40	12/16/09 11:56	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/20/09 03:01	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		12/20/09 03:01	107-13-1	
Benzene	**2.4**	ug/L	1.0	1		12/20/09 03:01	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/20/09 03:01	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/20/09 03:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/20/09 03:01	75-25-2	
Bromomethane	ND	ug/L	5.0	1		12/20/09 03:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/20/09 03:01	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		12/20/09 03:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/20/09 03:01	56-23-5	
Chlorobenzene	**32.6**	ug/L	1.0	1		12/20/09 03:01	108-90-7	
Chloroethane	**2.1**	ug/L	1.0	1		12/20/09 03:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/20/09 03:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/20/09 03:01	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		12/20/09 03:01	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/20/09 03:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/20/09 03:01	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/20/09 03:01	74-95-3	
1,2-Dichlorobenzene	**2.9**	ug/L	1.0	1		12/20/09 03:01	95-50-1	
1,4-Dichlorobenzene	**16.7**	ug/L	1.0	1		12/20/09 03:01	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		12/20/09 03:01	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/20/09 03:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/20/09 03:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/20/09 03:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 03:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 03:01	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		12/20/09 03:01	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		12/20/09 03:01	591-78-6	
Iodomethane	ND	ug/L	5.0	1		12/20/09 03:01	74-88-4	
Methylene Chloride	ND	ug/L	2.0	1		12/20/09 03:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/20/09 03:01	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-2 **Lab ID: 9259430002** Collected: 12/10/09 09:30 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	1		12/20/09 03:01	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 03:01	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 03:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/20/09 03:01	127-18-4	
Toluene	ND	ug/L	1.0	1		12/20/09 03:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/20/09 03:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/20/09 03:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/20/09 03:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/20/09 03:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/20/09 03:01	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/20/09 03:01	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/20/09 03:01	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		12/20/09 03:01	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/20/09 03:01	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		12/20/09 03:01	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109	1		12/20/09 03:01	460-00-4	
Dibromofluoromethane (S)	101	%	85-115	1		12/20/09 03:01	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	79-120	1		12/20/09 03:01	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		12/20/09 03:01	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-3 **Lab ID: 9259430003** Collected: 12/10/09 11:20 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:11	7440-38-2	
Barium	**76.1**	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:11	7440-39-3	
Cadmium	ND	ug/L	1.0	1	12/17/09 14:30	12/22/09 17:11	7440-43-9	
Chromium	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:11	7440-47-3	
Lead	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:11	7439-92-1	
Selenium	ND	ug/L	10.0	1	12/17/09 14:30	12/22/09 17:11	7782-49-2	
Silver	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:11	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	12/14/09 11:40	12/16/09 11:58	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/20/09 03:19	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		12/20/09 03:19	107-13-1	
Benzene	ND	ug/L	1.0	1		12/20/09 03:19	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/20/09 03:19	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/20/09 03:19	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/20/09 03:19	75-25-2	
Bromomethane	ND	ug/L	5.0	1		12/20/09 03:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/20/09 03:19	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		12/20/09 03:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/20/09 03:19	56-23-5	
Chlorobenzene	**5.2**	ug/L	1.0	1		12/20/09 03:19	108-90-7	
Chloroethane	**2.2**	ug/L	1.0	1		12/20/09 03:19	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/20/09 03:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/20/09 03:19	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		12/20/09 03:19	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/20/09 03:19	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/20/09 03:19	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/20/09 03:19	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 03:19	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 03:19	106-46-7	
trans-1,4-Dichloro-2-butene	**3.8**	ug/L	1.0	1		12/20/09 03:19	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/20/09 03:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/20/09 03:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/20/09 03:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 03:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 03:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		12/20/09 03:19	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		12/20/09 03:19	591-78-6	
Iodomethane	ND	ug/L	5.0	1		12/20/09 03:19	74-88-4	
Methylene Chloride	ND	ug/L	2.0	1		12/20/09 03:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/20/09 03:19	108-10-1	

Date: 12/24/2009 09:25 AM

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-3 **Lab ID: 9259430003** Collected: 12/10/09 11:20 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	1		12/20/09 03:19	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 03:19	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 03:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/20/09 03:19	127-18-4	
Toluene	ND	ug/L	1.0	1		12/20/09 03:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/20/09 03:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/20/09 03:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/20/09 03:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/20/09 03:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/20/09 03:19	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/20/09 03:19	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/20/09 03:19	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		12/20/09 03:19	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/20/09 03:19	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		12/20/09 03:19	95-47-6	
4-Bromofluorobenzene (S)	102	%	87-109	1		12/20/09 03:19	460-00-4	
Dibromofluoromethane (S)	102	%	85-115	1		12/20/09 03:19	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	79-120	1		12/20/09 03:19	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		12/20/09 03:19	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-4 **Lab ID: 9259430004** Collected: 12/10/09 10:20 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:27	7440-38-2	
Barium	**49.7**	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:27	7440-39-3	
Cadmium	ND	ug/L	1.0	1	12/17/09 14:30	12/22/09 17:27	7440-43-9	
Chromium	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:27	7440-47-3	
Lead	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:27	7439-92-1	
Selenium	ND	ug/L	10.0	1	12/17/09 14:30	12/22/09 17:27	7782-49-2	
Silver	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:27	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	12/14/09 11:40	12/16/09 12:01	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/20/09 03:37	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		12/20/09 03:37	107-13-1	
Benzene	**1.8**	ug/L	1.0	1		12/20/09 03:37	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/20/09 03:37	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/20/09 03:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/20/09 03:37	75-25-2	
Bromomethane	ND	ug/L	5.0	1		12/20/09 03:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/20/09 03:37	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		12/20/09 03:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/20/09 03:37	56-23-5	
Chlorobenzene	**16.0**	ug/L	1.0	1		12/20/09 03:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/20/09 03:37	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/20/09 03:37	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/20/09 03:37	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		12/20/09 03:37	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/20/09 03:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/20/09 03:37	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/20/09 03:37	74-95-3	
1,2-Dichlorobenzene	**2.2**	ug/L	1.0	1		12/20/09 03:37	95-50-1	
1,4-Dichlorobenzene	**14.4**	ug/L	1.0	1		12/20/09 03:37	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		12/20/09 03:37	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/20/09 03:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/20/09 03:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/20/09 03:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 03:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 03:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		12/20/09 03:37	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		12/20/09 03:37	591-78-6	
Iodomethane	ND	ug/L	5.0	1		12/20/09 03:37	74-88-4	
Methylene Chloride	ND	ug/L	2.0	1		12/20/09 03:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/20/09 03:37	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-4 **Lab ID: 9259430004** Collected: 12/10/09 10:20 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	1		12/20/09 03:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 03:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 03:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/20/09 03:37	127-18-4	
Toluene	ND	ug/L	1.0	1		12/20/09 03:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/20/09 03:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/20/09 03:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/20/09 03:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/20/09 03:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/20/09 03:37	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/20/09 03:37	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/20/09 03:37	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		12/20/09 03:37	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/20/09 03:37	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		12/20/09 03:37	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109	1		12/20/09 03:37	460-00-4	
Dibromofluoromethane (S)	98	%	85-115	1		12/20/09 03:37	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	79-120	1		12/20/09 03:37	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		12/20/09 03:37	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-5 **Lab ID: 9259430005** Collected: 12/10/09 12:15 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:32	7440-38-2	
Barium	**49.5**	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:32	7440-39-3	
Cadmium	ND	ug/L	1.0	1	12/17/09 14:30	12/22/09 17:32	7440-43-9	
Chromium	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:32	7440-47-3	
Lead	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:32	7439-92-1	
Selenium	ND	ug/L	10.0	1	12/17/09 14:30	12/22/09 17:32	7782-49-2	
Silver	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:32	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	12/14/09 11:40	12/16/09 12:03	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/20/09 03:55	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		12/20/09 03:55	107-13-1	
Benzene	**1.3**	ug/L	1.0	1		12/20/09 03:55	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/20/09 03:55	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/20/09 03:55	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/20/09 03:55	75-25-2	
Bromomethane	ND	ug/L	5.0	1		12/20/09 03:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/20/09 03:55	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		12/20/09 03:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/20/09 03:55	56-23-5	
Chlorobenzene	**5.8**	ug/L	1.0	1		12/20/09 03:55	108-90-7	
Chloroethane	**2.7**	ug/L	1.0	1		12/20/09 03:55	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/20/09 03:55	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/20/09 03:55	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		12/20/09 03:55	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/20/09 03:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/20/09 03:55	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/20/09 03:55	74-95-3	
1,2-Dichlorobenzene	**1.9**	ug/L	1.0	1		12/20/09 03:55	95-50-1	
1,4-Dichlorobenzene	**12.8**	ug/L	1.0	1		12/20/09 03:55	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		12/20/09 03:55	110-57-6	
1,1-Dichloroethane	**1.1**	ug/L	1.0	1		12/20/09 03:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/20/09 03:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 03:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/20/09 03:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 03:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 03:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		12/20/09 03:55	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		12/20/09 03:55	591-78-6	
Iodomethane	ND	ug/L	5.0	1		12/20/09 03:55	74-88-4	
Methylene Chloride	ND	ug/L	2.0	1		12/20/09 03:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/20/09 03:55	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-5 **Lab ID: 9259430005** Collected: 12/10/09 12:15 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	1		12/20/09 03:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 03:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 03:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/20/09 03:55	127-18-4	
Toluene	ND	ug/L	1.0	1		12/20/09 03:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/20/09 03:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/20/09 03:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/20/09 03:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/20/09 03:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/20/09 03:55	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/20/09 03:55	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/20/09 03:55	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		12/20/09 03:55	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/20/09 03:55	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		12/20/09 03:55	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109	1		12/20/09 03:55	460-00-4	
Dibromofluoromethane (S)	100	%	85-115	1		12/20/09 03:55	1868-53-7	
1,2-Dichloroethane-d4 (S)	101	%	79-120	1		12/20/09 03:55	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		12/20/09 03:55	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-6 **Lab ID: 9259430006** Collected: 12/10/09 13:15 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:39	7440-38-2	
Barium	**22.0**	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:39	7440-39-3	
Cadmium	ND	ug/L	1.0	1	12/17/09 14:30	12/22/09 17:39	7440-43-9	
Chromium	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:39	7440-47-3	
Lead	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:39	7439-92-1	
Selenium	ND	ug/L	10.0	1	12/17/09 14:30	12/22/09 17:39	7782-49-2	
Silver	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:39	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	12/14/09 11:40	12/16/09 12:06	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/20/09 04:14	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		12/20/09 04:14	107-13-1	
Benzene	ND	ug/L	1.0	1		12/20/09 04:14	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/20/09 04:14	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/20/09 04:14	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/20/09 04:14	75-25-2	
Bromomethane	ND	ug/L	5.0	1		12/20/09 04:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/20/09 04:14	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		12/20/09 04:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/20/09 04:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/20/09 04:14	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/20/09 04:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/20/09 04:14	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/20/09 04:14	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		12/20/09 04:14	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/20/09 04:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/20/09 04:14	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/20/09 04:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 04:14	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 04:14	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		12/20/09 04:14	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/20/09 04:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/20/09 04:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/20/09 04:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 04:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 04:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/20/09 04:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 04:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 04:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		12/20/09 04:14	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		12/20/09 04:14	591-78-6	
Iodomethane	ND	ug/L	5.0	1		12/20/09 04:14	74-88-4	
Methylene Chloride	ND	ug/L	2.0	1		12/20/09 04:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/20/09 04:14	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: MW-6 **Lab ID: 9259430006** Collected: 12/10/09 13:15 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	1		12/20/09 04:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 04:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 04:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/20/09 04:14	127-18-4	
Toluene	ND	ug/L	1.0	1		12/20/09 04:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/20/09 04:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/20/09 04:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/20/09 04:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/20/09 04:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/20/09 04:14	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/20/09 04:14	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/20/09 04:14	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		12/20/09 04:14	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/20/09 04:14	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		12/20/09 04:14	95-47-6	
4-Bromofluorobenzene (S)	102	%	87-109	1		12/20/09 04:14	460-00-4	
Dibromofluoromethane (S)	101	%	85-115	1		12/20/09 04:14	1868-53-7	
1,2-Dichloroethane-d4 (S)	102	%	79-120	1		12/20/09 04:14	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		12/20/09 04:14	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: SW-1 **Lab ID: 9259430007** Collected: 12/10/09 13:45 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:42	7440-38-2	
Barium	**25.9**	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:42	7440-39-3	
Cadmium	ND	ug/L	1.0	1	12/17/09 14:30	12/22/09 17:42	7440-43-9	
Chromium	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:42	7440-47-3	
Lead	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:42	7439-92-1	
Selenium	ND	ug/L	10.0	1	12/17/09 14:30	12/22/09 17:42	7782-49-2	
Silver	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:42	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	12/14/09 11:40	12/16/09 12:08	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/20/09 04:32	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		12/20/09 04:32	107-13-1	
Benzene	ND	ug/L	1.0	1		12/20/09 04:32	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/20/09 04:32	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/20/09 04:32	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/20/09 04:32	75-25-2	
Bromomethane	ND	ug/L	5.0	1		12/20/09 04:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/20/09 04:32	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		12/20/09 04:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/20/09 04:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/20/09 04:32	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/20/09 04:32	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/20/09 04:32	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/20/09 04:32	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		12/20/09 04:32	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/20/09 04:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/20/09 04:32	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/20/09 04:32	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 04:32	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 04:32	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		12/20/09 04:32	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/20/09 04:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/20/09 04:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/20/09 04:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 04:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 04:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/20/09 04:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 04:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 04:32	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		12/20/09 04:32	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		12/20/09 04:32	591-78-6	
Iodomethane	ND	ug/L	5.0	1		12/20/09 04:32	74-88-4	
Methylene Chloride	ND	ug/L	2.0	1		12/20/09 04:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/20/09 04:32	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: SW-1 **Lab ID: 9259430007** Collected: 12/10/09 13:45 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	1		12/20/09 04:32	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 04:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 04:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/20/09 04:32	127-18-4	
Toluene	ND	ug/L	1.0	1		12/20/09 04:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/20/09 04:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/20/09 04:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/20/09 04:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/20/09 04:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/20/09 04:32	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/20/09 04:32	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/20/09 04:32	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		12/20/09 04:32	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/20/09 04:32	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		12/20/09 04:32	95-47-6	
4-Bromofluorobenzene (S)	102	%	87-109	1		12/20/09 04:32	460-00-4	
Dibromofluoromethane (S)	102	%	85-115	1		12/20/09 04:32	1868-53-7	
1,2-Dichloroethane-d4 (S)	99	%	79-120	1		12/20/09 04:32	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		12/20/09 04:32	2037-26-5	

REPORT OF LABORATORY ANALYSIS
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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: SW-2 **Lab ID: 9259430008** Collected: 12/10/09 13:30 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:46	7440-38-2	
Barium	**27.1**	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:46	7440-39-3	
Cadmium	ND	ug/L	1.0	1	12/17/09 14:30	12/22/09 17:46	7440-43-9	
Chromium	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:46	7440-47-3	
Lead	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:46	7439-92-1	
Selenium	ND	ug/L	10.0	1	12/17/09 14:30	12/22/09 17:46	7782-49-2	
Silver	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:46	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	12/14/09 11:40	12/16/09 12:16	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/20/09 04:50	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		12/20/09 04:50	107-13-1	
Benzene	ND	ug/L	1.0	1		12/20/09 04:50	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/20/09 04:50	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/20/09 04:50	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/20/09 04:50	75-25-2	
Bromomethane	ND	ug/L	5.0	1		12/20/09 04:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/20/09 04:50	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		12/20/09 04:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/20/09 04:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/20/09 04:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/20/09 04:50	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/20/09 04:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/20/09 04:50	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		12/20/09 04:50	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/20/09 04:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/20/09 04:50	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/20/09 04:50	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 04:50	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 04:50	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		12/20/09 04:50	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/20/09 04:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/20/09 04:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/20/09 04:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 04:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 04:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/20/09 04:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 04:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 04:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		12/20/09 04:50	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		12/20/09 04:50	591-78-6	
Iodomethane	ND	ug/L	5.0	1		12/20/09 04:50	74-88-4	
Methylene Chloride	ND	ug/L	2.0	1		12/20/09 04:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/20/09 04:50	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: SW-2 **Lab ID: 9259430008** Collected: 12/10/09 13:30 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	1		12/20/09 04:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 04:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 04:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/20/09 04:50	127-18-4	
Toluene	ND	ug/L	1.0	1		12/20/09 04:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/20/09 04:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/20/09 04:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/20/09 04:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/20/09 04:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/20/09 04:50	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/20/09 04:50	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/20/09 04:50	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		12/20/09 04:50	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/20/09 04:50	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		12/20/09 04:50	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109	1		12/20/09 04:50	460-00-4	
Dibromofluoromethane (S)	99	%	85-115	1		12/20/09 04:50	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	79-120	1		12/20/09 04:50	17060-07-0	
Toluene-d8 (S)	101	%	70-120	1		12/20/09 04:50	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: DUPLICATE **Lab ID: 9259430009** Collected: 12/10/09 08:00 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:49	7440-38-2	
Barium	**75.1**	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:49	7440-39-3	
Cadmium	ND	ug/L	1.0	1	12/17/09 14:30	12/22/09 17:49	7440-43-9	
Chromium	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:49	7440-47-3	
Lead	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:49	7439-92-1	
Selenium	ND	ug/L	10.0	1	12/17/09 14:30	12/22/09 17:49	7782-49-2	
Silver	ND	ug/L	5.0	1	12/17/09 14:30	12/22/09 17:49	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	12/14/09 11:40	12/16/09 12:18	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/20/09 05:09	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1		12/20/09 05:09	107-13-1	
Benzene	ND	ug/L	1.0	1		12/20/09 05:09	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/20/09 05:09	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/20/09 05:09	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/20/09 05:09	75-25-2	
Bromomethane	ND	ug/L	5.0	1		12/20/09 05:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/20/09 05:09	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		12/20/09 05:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/20/09 05:09	56-23-5	
Chlorobenzene	**4.9**	ug/L	1.0	1		12/20/09 05:09	108-90-7	
Chloroethane	**2.2**	ug/L	1.0	1		12/20/09 05:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/20/09 05:09	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/20/09 05:09	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	1		12/20/09 05:09	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/20/09 05:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/20/09 05:09	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/20/09 05:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/20/09 05:09	95-50-1	
1,4-Dichlorobenzene	**3.6**	ug/L	1.0	1		12/20/09 05:09	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		12/20/09 05:09	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/20/09 05:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/20/09 05:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/20/09 05:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 05:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/20/09 05:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/20/09 05:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 05:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/20/09 05:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		12/20/09 05:09	100-41-4	
2-Hexanone	ND	ug/L	5.0	1		12/20/09 05:09	591-78-6	
Iodomethane	ND	ug/L	5.0	1		12/20/09 05:09	74-88-4	
Methylene Chloride	ND	ug/L	2.0	1		12/20/09 05:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/20/09 05:09	108-10-1	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

Sample: DUPLICATE **Lab ID: 9259430009** Collected: 12/10/09 08:00 Received: 12/11/09 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Styrene	ND	ug/L	1.0	1		12/20/09 05:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 05:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/20/09 05:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/20/09 05:09	127-18-4	
Toluene	ND	ug/L	1.0	1		12/20/09 05:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/20/09 05:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/20/09 05:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/20/09 05:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/20/09 05:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/20/09 05:09	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/20/09 05:09	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/20/09 05:09	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		12/20/09 05:09	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/20/09 05:09	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		12/20/09 05:09	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109	1		12/20/09 05:09	460-00-4	
Dibromofluoromethane (S)	101	%	85-115	1		12/20/09 05:09	1868-53-7	
1,2-Dichloroethane-d4 (S)	99	%	79-120	1		12/20/09 05:09	17060-07-0	
Toluene-d8 (S)	100	%	70-120	1		12/20/09 05:09	2037-26-5	

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

QC Batch: MPRP/5551 — Analysis Method: EPA 6010
QC Batch Method: EPA 3010 — Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 9259430001, 9259430002, 9259430003, 9259430004, 9259430005, 9259430006, 9259430007, 9259430008, 9259430009

METHOD BLANK: 380465 — Matrix: Water
Associated Lab Samples: 9259430001, 9259430002, 9259430003, 9259430004, 9259430005, 9259430006, 9259430007, 9259430008, 9259430009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	5.0	12/22/09 16:44	
Barium	ug/L	ND	5.0	12/22/09 16:44	
Cadmium	ug/L	ND	1.0	12/22/09 16:44	
Chromium	ug/L	ND	5.0	12/22/09 16:44	
Lead	ug/L	ND	5.0	12/22/09 16:44	
Selenium	ug/L	ND	10.0	12/22/09 16:44	
Silver	ug/L	ND	5.0	12/22/09 16:44	

LABORATORY CONTROL SAMPLE: 380466

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	500	500	100	80-120	
Barium	ug/L	500	494	99	80-120	
Cadmium	ug/L	500	502	100	80-120	
Chromium	ug/L	500	504	101	80-120	
Lead	ug/L	500	505	101	80-120	
Selenium	ug/L	500	512	102	80-120	
Silver	ug/L	250	258	103	80-120	

MATRIX SPIKE SAMPLE: 380467

Parameter	Units	9259430001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	ND	500	569	113	75-125	
Barium	ug/L	20.8	500	514	99	75-125	
Cadmium	ug/L	ND	500	505	101	75-125	
Chromium	ug/L	ND	500	509	102	75-125	
Lead	ug/L	ND	500	494	99	75-125	
Selenium	ug/L	ND	500	574	114	75-125	
Silver	ug/L	ND	250	277	111	75-125	

SAMPLE DUPLICATE: 380468

Parameter	Units	9259430002 Result	Dup Result	RPD	Qualifiers
Arsenic	ug/L	7.3	7.2	1	
Barium	ug/L	158	157	1	
Cadmium	ug/L	ND	ND		
Chromium	ug/L	ND	.62J		

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

SAMPLE DUPLICATE: 380468

Parameter	Units	9259430002 Result	Dup Result	RPD	Qualifiers
Lead	ug/L	ND	ND		
Selenium	ug/L	ND	ND		
Silver	ug/L	ND	1.3J		

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

QC Batch: MERP/2558 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 9259430001, 9259430002, 9259430003, 9259430004, 9259430005, 9259430006, 9259430007, 9259430008, 9259430009

METHOD BLANK: 378620 Matrix: Water
Associated Lab Samples: 9259430001, 9259430002, 9259430003, 9259430004, 9259430005, 9259430006, 9259430007, 9259430008, 9259430009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	12/16/09 11:09	

LABORATORY CONTROL SAMPLE: 378621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.5	101	80-120	

MATRIX SPIKE SAMPLE: 378622

Parameter	Units	9259185001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	1.7	66	75-125	M0

SAMPLE DUPLICATE: 378623

Parameter	Units	9259404001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	1.7	1.8	3	

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

QC Batch: MSV/9392 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9259430001, 9259430002, 9259430003, 9259430004, 9259430005, 9259430006, 9259430007, 9259430008, 9259430009

METHOD BLANK: 381908 Matrix: Water
Associated Lab Samples: 9259430001, 9259430002, 9259430003, 9259430004, 9259430005, 9259430006, 9259430007, 9259430008, 9259430009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/20/09 01:11	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/20/09 01:11	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/20/09 01:11	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/20/09 01:11	
1,1-Dichloroethane	ug/L	ND	1.0	12/20/09 01:11	
1,1-Dichloroethene	ug/L	ND	1.0	12/20/09 01:11	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/20/09 01:11	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	12/20/09 01:11	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/20/09 01:11	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/20/09 01:11	
1,2-Dichloroethane	ug/L	ND	1.0	12/20/09 01:11	
1,2-Dichloropropane	ug/L	ND	1.0	12/20/09 01:11	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/20/09 01:11	
2-Butanone (MEK)	ug/L	ND	5.0	12/20/09 01:11	
2-Hexanone	ug/L	ND	5.0	12/20/09 01:11	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/20/09 01:11	
Acetone	ug/L	ND	25.0	12/20/09 01:11	
Acrylonitrile	ug/L	ND	10.0	12/20/09 01:11	
Benzene	ug/L	ND	1.0	12/20/09 01:11	
Bromochloromethane	ug/L	ND	1.0	12/20/09 01:11	
Bromodichloromethane	ug/L	ND	1.0	12/20/09 01:11	
Bromoform	ug/L	ND	1.0	12/20/09 01:11	
Bromomethane	ug/L	ND	5.0	12/20/09 01:11	
Carbon disulfide	ug/L	ND	2.0	12/20/09 01:11	
Carbon tetrachloride	ug/L	ND	1.0	12/20/09 01:11	
Chlorobenzene	ug/L	ND	1.0	12/20/09 01:11	
Chloroethane	ug/L	ND	1.0	12/20/09 01:11	
Chloroform	ug/L	ND	1.0	12/20/09 01:11	
Chloromethane	ug/L	ND	1.0	12/20/09 01:11	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/20/09 01:11	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/20/09 01:11	
Dibromochloromethane	ug/L	ND	1.0	12/20/09 01:11	
Dibromomethane	ug/L	ND	1.0	12/20/09 01:11	
Ethylbenzene	ug/L	ND	1.0	12/20/09 01:11	
Iodomethane	ug/L	ND	5.0	12/20/09 01:11	
m&p-Xylene	ug/L	ND	2.0	12/20/09 01:11	
Methylene Chloride	ug/L	ND	2.0	12/20/09 01:11	
o-Xylene	ug/L	ND	1.0	12/20/09 01:11	
Styrene	ug/L	ND	1.0	12/20/09 01:11	
Tetrachloroethene	ug/L	ND	1.0	12/20/09 01:11	
Toluene	ug/L	ND	1.0	12/20/09 01:11	

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

METHOD BLANK: 381908 Matrix: Water

Associated Lab Samples: 9259430001, 9259430002, 9259430003, 9259430004, 9259430005, 9259430006, 9259430007, 9259430008, 9259430009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/20/09 01:11	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/20/09 01:11	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	12/20/09 01:11	
Trichloroethene	ug/L	ND	1.0	12/20/09 01:11	
Trichlorofluoromethane	ug/L	ND	1.0	12/20/09 01:11	
Vinyl acetate	ug/L	ND	2.0	12/20/09 01:11	
Vinyl chloride	ug/L	ND	1.0	12/20/09 01:11	
Xylene (Total)	ug/L	ND	2.0	12/20/09 01:11	
1,2-Dichloroethane-d4 (S)	%	101	79-120	12/20/09 01:11	
4-Bromofluorobenzene (S)	%	100	87-109	12/20/09 01:11	
Dibromofluoromethane (S)	%	101	85-115	12/20/09 01:11	
Toluene-d8 (S)	%	100	70-120	12/20/09 01:11	

LABORATORY CONTROL SAMPLE: 381909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	45.2	90	83-125	
1,1,1-Trichloroethane	ug/L	50	48.6	97	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	46.6	93	73-127	
1,1,2-Trichloroethane	ug/L	50	49.3	99	77-123	
1,1-Dichloroethane	ug/L	50	53.2	106	76-129	
1,1-Dichloroethene	ug/L	50	53.3	107	78-146	
1,2,3-Trichloropropane	ug/L	50	47.6	95	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	43.9	88	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	50.1	100	81-125	
1,2-Dichlorobenzene	ug/L	50	46.5	93	82-126	
1,2-Dichloroethane	ug/L	50	48.9	98	72-126	
1,2-Dichloropropane	ug/L	50	50.7	101	80-127	
1,4-Dichlorobenzene	ug/L	50	45.2	90	79-125	
2-Butanone (MEK)	ug/L	100	93.4	93	50-134	
2-Hexanone	ug/L	100	97.6	98	58-138	
4-Methyl-2-pentanone (MIBK)	ug/L	100	101	101	70-131	
Acetone	ug/L	100	105	105	50-146	
Acrylonitrile	ug/L	250	299	119	66-124	
Benzene	ug/L	50	48.9	98	78-128	
Bromochloromethane	ug/L	50	53.3	107	73-124	
Bromodichloromethane	ug/L	50	46.5	93	81-125	
Bromoform	ug/L	50	39.0	78	71-125	
Bromomethane	ug/L	50	36.9	74	50-150	
Carbon disulfide	ug/L	50	54.0	108	54-150	
Carbon tetrachloride	ug/L	50	44.7	89	81-137	
Chlorobenzene	ug/L	50	47.7	95	82-126	
Chloroethane	ug/L	50	50.8	102	69-140	
Chloroform	ug/L	50	48.0	96	77-129	

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

LABORATORY CONTROL SAMPLE: 381909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	50	45.8	92	54-139	
cis-1,2-Dichloroethene	ug/L	50	52.0	104	76-133	
cis-1,3-Dichloropropene	ug/L	50	48.8	98	76-127	
Dibromochloromethane	ug/L	50	44.8	90	77-125	
Dibromomethane	ug/L	50	51.5	103	77-125	
Ethylbenzene	ug/L	50	47.2	94	80-127	
Iodomethane	ug/L	100	97.6	98	65-172	
m&p-Xylene	ug/L	100	97.0	97	82-127	
Methylene Chloride	ug/L	50	53.9	108	67-133	
o-Xylene	ug/L	50	48.7	97	83-124	
Styrene	ug/L	50	49.9	100	80-130	
Tetrachloroethene	ug/L	50	47.5	95	78-128	
Toluene	ug/L	50	47.7	95	76-126	
trans-1,2-Dichloroethene	ug/L	50	51.5	103	78-134	
trans-1,3-Dichloropropene	ug/L	50	43.1	86	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	35.6	71	51-140	
Trichloroethene	ug/L	50	50.5	101	79-127	
Trichlorofluoromethane	ug/L	50	50.1	100	76-148	
Vinyl acetate	ug/L	100	117	117	50-150	
Vinyl chloride	ug/L	50	47.1	94	67-143	
Xylene (Total)	ug/L	150	146	97	83-125	
1,2-Dichloroethane-d4 (S)	%			100	79-120	
4-Bromofluorobenzene (S)	%			101	87-109	
Dibromofluoromethane (S)	%			100	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 381910 381911

Parameter	Units	9259430006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	50.9	71.4	102	143	60-150	34	M0,R1
Benzene	ug/L	ND	50	50	51.1	70.0	102	140	74-136	31	M0,R1
Chlorobenzene	ug/L	ND	50	50	48.5	68.3	97	137	79-135	34	M0,R1
Toluene	ug/L	ND	50	50	49.6	68.4	99	137	73-131	32	M0,R1
Trichloroethene	ug/L	ND	50	50	51.5	71.3	103	143	73-131	32	M0,R1
1,2-Dichloroethane-d4 (S)	%						98	98	79-120		
4-Bromofluorobenzene (S)	%						100	100	87-109		
Dibromofluoromethane (S)	%						98	98	85-115		
Toluene-d8 (S)	%						99	99	70-120		

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QUALIFIERS

Project: CASWELL COUNTY LANDFILL
Pace Project No.: 9259430

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
S - Surrogate
1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
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U - Indicates the compound was analyzed for, but not detected.

ANALYTE QUALIFIERS

M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
R1	RPD value was outside control limits.

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