[redacted] ☐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.

RECEIVED FEB - 5 2009 SOLID WASTE SECTION

Solid Waste Monitoring Data Submittal Information

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

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

Name: T. Patrick Shillington, PE Phone: (919) 781-7798

E-mail: e2s@bellsouth.net

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Chatham County Landfill	720 County Landfill Road Pittsboro, NC	19-01		November 24, 2008

Environmental Status: (Check all that apply)

☐ Initial/Background Monitoring ☒ Detection Monitoring ☐ Assessment Monitoring ☐ Corrective Action

Type of data submitted: (Check all that apply)

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

Notification attached?

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

Certification

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

T. Patrick Shillington — President/Consultant — (919) 781-7798

Facility Representative Name (Print) — Title — (Area Code) Telephone Number

Signature — Date: 2/3/09

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

NORTH CAROLINA PROFESSIONAL SEAL 15472 2/3/09

Revised 01/2007

E²S

ENGINEERING & ENVIRONMENTAL SCIENCE COMPANY

3008 ANDERSON DRIVE, SUITE 102

RALEIGH, NC 27609

(919) 781-7798

January 29, 2009

Mr. Robert J. Holden
Solid Waste Manager
P.O. Box 87
Pittsboro, NC 27312

RE: Monitoring Well Test Results
November 24, 2008 Sampling Event
Chatham County MSW Landfill
Permit No. 19-01

Dear Mr. Holden:

Submitted are the test results for the water sampled from the four (4) monitoring wells of the Chatham County MSW Landfill and the two (2) surface water samples collected upstream and downstream of the Chatham County MSW Landfill. The test results for each well and surface water sample are summarized in Table 1 in Attachment A. Attachment B contains the test results as submitted by Summit Environmental Technologies, Inc.

Prior to sampling each monitoring well, the water level depth was determined in reference to the top of the well casing. Teflon disposable bailers attached to nylon rope were used to purge the wells of at least three times the volume of static well water. Surface water sampling was performed by dipping the containers into the stream.

The collected samples were placed on ice for transportation to the laboratory. Temperature, pH, conductivity, and Total Suspended Solids were determined in the field with the Hanna water test instrument prior to sample collection.

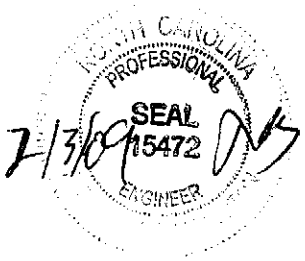
Analytical test results indicated Barium and Chromium above detection limits, where Barium and Chromium are above the 2L Standards, results are provided in Table 1 of this document.

We appreciate serving Chatham County on the well and surface water sampling and testing. Please contact us if you have any questions concerning the test results.

Sincerely,

T. Patrick Shillington, P.E.
President

Attachment A: Tables 1 through 4
Attachment B: Analytical Test Results



ATTACHMENT A:
Table 1

19-01	MW-1N	7440-39-3	15	Barium	**420**	ug/L			11/24/2008		11/26/2008
19-01	MW-1N	7440-47-3	51	Chromium	**46**	ug/L			11/24/2008		
19-01	MW-1N			Well Elevation	481.73	ft.			11/24/2008		
19-01	MW-1N			Groundwater Depth	9.87	ft.			11/24/2008		
19-01	MW-1N			Water Level Elevation	471.86	ft.			11/24/2008		
19-01	MW-1N			Temperature	15.8	C			11/24/2008		
19-01	MW-1N			pH	5.4				11/24/2008		
19-01	MW-1N			Conductivity	31	mV			11/24/2008		
19-01	MW-1N			Total Suspended Solids	141	ppm			11/24/2008		
19-01	MW-2N	7440-39-3	15	Barium	**320**	ug/L			11/24/2008		11/26/2008
19-01	MW-2N			Well Elevation	465.36	ft.			11/24/2008		
19-01	MW-2N			Groundwater Depth	14.51	ft.			11/24/2008		
19-01	MW-2N			Water Level Elevation	450.85	ft.			11/24/2008		
19-01	MW-2N			Temperature	15.1	C			11/24/2008		
19-01	MW-2N			pH	5.4				11/24/2008		
19-01	MW-2N			Conductivity	99	mV			11/24/2008		
19-01	MW-2N			Total Suspended Solids	302	ppm			11/24/2008		
19-01	MW-3N			Well Elevation	465.85	ft.			11/24/2008		
19-01	MW-3N			Groundwater Depth	12.28	ft.			11/24/2008		
19-01	MW-3N			Water Level Elevation	453.57	ft.			11/24/2008		
19-01	MW-3N			Temperature	15.9	C			11/24/2008		
19-01	MW-3N			pH	5.6				11/24/2008		
19-01	MW-3N			Conductivity	121	mV			11/24/2008		
19-01	MW-3N			Total Suspended Solids	137	ppm			11/24/2008		
19-01	MW-4N			Well Elevation	522.84	ft.			11/24/2008		
19-01	MW-4N			Groundwater Depth	50.44	ft.			11/24/2008		
19-01	MW-4N			Water Level Elevation	472.4	ft.			11/24/2008		
19-01	MW-4N			Temperature	16.2	C			11/24/2008		
19-01	MW-4N			pH	5.3				11/24/2008		
19-01	MW-4N			Conductivity	143	mV			11/24/2008		
19-01	MW-4N			Total Suspended Solids	156	ppm			11/24/2008		
19-01	DS			Temperature	2.3	C			11/24/2008		
19-01	DS			pH	5.8				11/24/2008		
19-01	DS			Conductivity	173	mV			11/24/2008		
19-01	DS			Total Suspended Solids	207	ppm			11/24/2008		

19-01	US			Temperature	2.2	C			11/24/2008		
19-01	US			pH	5.9				11/24/2008		
19-01	US			Conductivity	14	mV			11/24/2008		
19-01	US			Total Suspended Solids	111	ppm			11/24/2008		

Bold values exceed SWSL Standards
Red values exceed 2L Standards

ATTACHMENT B:
Analytical Test Results

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
3310 Win Street
Cuyahoga Falls, Ohio 44223
800-278-0140

Analysis Request / Chain of Custody

For Summit Environmental Technologies, Inc. use only

 SET No.

Client Name	Project Identification
Eng & Env Science Co (e2s)	Chatham Co Landfill
Client Address	Project Address
3008 Anderson Drive st 102	Chatham Co, NC
Client Phone	Report To
919-781-7798	e2s
Client Fax No. √ to Receive Results by Fax ☐	PO Number
919-781-7796	
Contact Person	Quote Number
Pat Shillington	
Sampled By	☐ √ if Ohio VAP Samples
C. Mason	

#	Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: S=Solid, L=Liquid, O=Oil SL=Sludge, A=Air	Preservative	Number of Containers	Analytical Parameters and Methods: 8260 w 47 VOCs	RCRA Metals
	MW-1N	11/24/08	13:20	x				3	x	x
	MW-2N	11/24/08	11:00	x				3	x	x
	MW-3N	11/24/08	11:40	x				3	x	x
	MW-4N	11/24/08	14:00	x				3	x	x
	US	11/24/08	12;10	x				3	x	x
	DS	11/24/08	12:50	x				3	x	x

0813559-01-06

Relinquished by:	Date	Time	Received by:	Date	Time
	11-24-08	16:30			
Received in Lab by:	**Date**	**Time**	**Rush Requested:** _____ Day(s)		
	11-25-08	10:00	Must be approved by Lab Manager		

Notes / Comments:

Summit Environmental Technologies, Inc.
Cooler Receipt Form

Client: E2S Order Number: 0813559

Date Received: 11-25-08 Time Received: 1010

Number of Coolers/Boxes: 1 N/A

Shipper: (FED EX) UPS DHL Airborne US Postal Walk-in Pickup Other:

Packaging: Peanuts (Bubble Wrap) Paper (Foam) None Other:

Tape on cooler/box:	(Y)	N	N/A
Custody Seals intact	Y	N	(N/A)
C-O-C in plastic	(Y)	N	N/A
Ice (✓) Blue ice ____	(present) / absent / melted		N/A
Sample Temperature	1.9 °C		N/A
C-O-C filled out properly	(Y)	N	N/A
Samples in separate bags	(Y)	N	N/A
Sample containers intact*	(Y)	N	N/A

*If no, list broken sample(s):

Sample label(s) complete (ID, date, etc.)	(Y)	N	N/A
Label(s) agree with C-O-C	(Y)	N	N/A
Correct containers used	(Y)	N	N/A
Sufficient sample received	(Y)	N	N/A
Bubbles absent from 40 mL vials**	(Y)	N	N/A

** Samples with bubbles less than the size of a pea are acceptable.

Was client contacted about samples	Y	N
Will client send new samples	Y	N

Client contact:

Date/Time:

Logged in by:

Comments:

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

LABORATORY REPORT

Client
Engineering, Environmental & Science (E2S)
3008 Anderson Dr.
Raleigh, NC 27609

Order Number
0813559

Project Number
Chatham Co Landfill

Issued
Monday, December 01, 2008

Total Number of Pages
27 (excluding C.O.C. and cooler receipt form)

Approved By :

Bassam Youssef
Laboratory Manager

NELAC Accreditation #E87688 A2LA ISO/IEC 17025 Accreditation #0724.01

Sample Summary

Client: Engineering, Environmental & Science (E2S)
Order Number: 0813559

Laboratory ID	Client ID	Matrix	Sampling Date
0813559-01	MW-1N	Liquid	11/24/2008
0813559-02	MW-2N	Liquid	11/24/2008
0813559-03	MW-3N	Liquid	11/24/2008
0813559-04	MW-4N	Liquid	11/24/2008
0813559-05	US	Liquid	11/24/2008
0813559-06	DS	Liquid	11/24/2008

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

Report Narrative

Client: Engineering, Environmental & Science (E2S)

Order Number: 0813559

No problems were encountered during analysis of this order number, except as noted.

Data Qualifiers:
B = Analyte found in the method blank
J = Estimated concentration of an analyte between the MDL (LOD) and the Reporting Limit (LOQ)
C = Analyte has been confirmed by another instrument or method
E = Analyte exceeds the upper limit of the calibration curve.
D = Sample or extract was analyzed at a higher dilution
X = User defined data qualifier.
S = Surrogate out of control limits
a = Not Accredited by AALA or NELAC

Limit Of Quantitation (LOQ) = Laboratory Reporting Limit
Limit Of Detection (LOD) = Laboratory Detection Limit

Estimated uncertainty values are available upon request.

The test results meet the requirements of the NELAC and A2LA standards, except where noted.
The information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the client. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the client for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Summit Environmental Technologies, Inc. is not responsible for use or interpretation of the data included herein.

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-1N
Laboratory ID #: 0813559-01
Matrix: Liquid
Analyst: VVK

Parameter	Date of Analysis	Results	Units	Reporting Limit	Method
Arsenic	11/26/2008	BRL	mg/l	0.02	6010
Barium	11/26/2008	0.42	mg/l	0.04	6010
Cadmium	11/26/2008	BRL	mg/l	0.005	6010
Chromium	11/26/2008	0.046	mg/l	0.02	6010
Lead	11/26/2008	BRL	mg/l	0.04	6010
Mercury	11/26/2008	BRL	mg/l	0.0002	7470
Selenium	11/26/2008	BRL	mg/l	0.02	6010
Silver	11/26/2008	BRL	mg/l	0.02	6010

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-1N
Laboratory ID #: 0813559-01
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/L)	Results (ug/L)
Acetone	50.0	BRL
Acrylonitrile	100.0	BRL
Benzene	2.0	BRL
Bromochloromethane	2.0	BRL
Bromoform	2.0	BRL
Bromomethane	2.0	BRL
MEK (2-Butanone)	50.0	BRL
Carbon Disulfide	50.0	BRL
Carbon Tetrachloride	2.0	BRL
Chlorobenzene	2.0	BRL
Chloroethane	2.0	BRL
Chloroform	2.0	BRL
Chloromethane	2.0	BRL
1,2-Dibromo-3-chloropropane	10.0	BRL
Dibromochloromethane	2.0	BRL
1,2-Dibromoethane	2.0	BRL
Dibromomethane	2.0	BRL
1,4-Dichloro-2-butane	25.0	BRL
1,2- Dichlorobenzene	2.0	BRL
1,4- Dichlorobenzene	2.0	BRL
1,1-Dichloroethane	2.0	BRL
1,2-Dichloroethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-1N
Laboratory ID #: 0813559-01
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
1,1-Dichloroethene	2.0	BRL
Cis-1,2-dichloroethene	2.0	BRL
Trans-1,2-dichloroethene	2.0	BRL
1,2-Dichloropropane	2.0	BRL
Cis-1,3-dichloropropene	2.0	BRL
trans-1, 3-Dichloropropene	2.0	BRL
Ethylbenzene	2.0	BRL
2-Hexanone	25.0	BRL
Iodomethane	5.0	BRL
4-Methyl-2-pentanone	50.0	BRL
Methylene Chloride	2.0	BRL
Styrene	2.0	BRL
1,1,1,2-Tetrachloroethane	2.0	BRL
1,1,2,2-Tetrachloroethane	2.0	BRL
Tetrachloroethene	2.0	BRL
Toluene	2.0	BRL
1,1,1-Trichloroethane	2.0	BRL
1,1,2-Trichloroethane	2.0	BRL
Trichlorethylene	2.0	BRL
1,2,3-Trichloropropane	2.0	BRL
Vinyl Acetate	20.0	BRL
Vinyl Chloride	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-1N
Laboratory ID #: 0813559-01
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
Xylene	4.0	BRL
Bromodichloromethane	2.0	BRL
Trichlorofluoromethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-2N
Laboratory ID #: 0813559-02
Matrix: Liquid
Analyst: VVK

Parameter	Date of Analysis	Results	Units	Reporting Limit	Method
Arsenic	11/26/2008	BRL	mg/l	0.02	6010
Barium	11/26/2008	0.32	mg/l	0.04	6010
Cadmium	11/26/2008	BRL	mg/l	0.005	6010
Chromium	11/26/2008	BRL	mg/l	0.02	6010
Lead	11/26/2008	BRL	mg/l	0.04	6010
Mercury	11/26/2008	BRL	mg/l	0.0002	7470
Selenium	11/26/2008	BRL	mg/l	0.02	6010
Silver	11/26/2008	BRL	mg/l	0.02	6010

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-2N
Laboratory ID #: 0813559-02
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/L)	Results (ug/L)
Acetone	50.0	BRL
Acrylonitrile	100.0	BRL
Benzene	2.0	BRL
Bromochloromethane	2.0	BRL
Bromoform	2.0	BRL
Bromomethane	2.0	BRL
MEK (2-Butanone)	50.0	BRL
Carbon Disulfide	50.0	BRL
Carbon Tetrachloride	2.0	BRL
Chlorobenzene	2.0	BRL
Chloroethane	2.0	BRL
Chloroform	2.0	BRL
Chloromethane	2.0	BRL
1,2-Dibromo-3-chloropropane	10.0	BRL
Dibromochloromethane	2.0	BRL
1,2-Dibromoethane	2.0	BRL
Dibromomethane	2.0	BRL
1,4-Dichloro-2-butane	25.0	BRL
1,2- Dichlorobenzene	2.0	BRL
1,4- Dichlorobenzene	2.0	BRL
1,1-Dichloroethane	2.0	BRL
1,2-Dichloroethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-2N
Laboratory ID #: 0813559-02
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
1,1-Dichloroethene	2.0	BRL
Cis-1,2-dichloroethene	2.0	BRL
Trans-1,2-dichloroethene	2.0	BRL
1,2-Dichloropropane	2.0	BRL
Cis-1,3-dichloropropene	2.0	BRL
trans-1, 3-Dichloropropene	2.0	BRL
Ethylbenzene	2.0	BRL
2-Hexanone	25.0	BRL
Iodomethane	5.0	BRL
4-Methyl-2-pentanone	50.0	BRL
Methylene Chloride	2.0	BRL
Styrene	2.0	BRL
1,1,1,2-Tetrachloroethane	2.0	BRL
1,1,2,2-Tetrachloroethane	2.0	BRL
Tetrachloroethene	2.0	BRL
Toluene	2.0	BRL
1,1,1-Trichloroethane	2.0	BRL
1,1,2-Trichloroethane	2.0	BRL
Trichlorethylene	2.0	BRL
1,2,3-Trichloropropane	2.0	BRL
Vinyl Acetate	20.0	BRL
Vinyl Chloride	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-2N
Laboratory ID #: 0813559-02
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
Xylene	4.0	BRL
Bromodichloromethane	2.0	BRL
Trichlorofluoromethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-3N
Laboratory ID #: 0813559-03
Matrix: Liquid
Analyst: VVK

Parameter	Date of Analysis	Results	Units	Reporting Limit	Method
Arsenic	11/26/2008	BRL	mg/l	0.02	6010
Barium	11/26/2008	BRL	mg/l	0.04	6010
Cadmium	11/26/2008	BRL	mg/l	0.005	6010
Chromium	11/26/2008	BRL	mg/l	0.02	6010
Lead	11/26/2008	BRL	mg/l	0.04	6010
Mercury	11/26/2008	BRL	mg/l	0.0002	7470
Selenium	11/26/2008	BRL	mg/l	0.02	6010
Silver	11/26/2008	BRL	mg/l	0.02	6010

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-3N
Laboratory ID #: 0813559-03
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/L)	Results (ug/L)
Acetone	50.0	BRL
Acrylonitrile	100.0	BRL
Benzene	2.0	BRL
Bromochloromethane	2.0	BRL
Bromoform	2.0	BRL
Bromomethane	2.0	BRL
MEK (2-Butanone)	50.0	BRL
Carbon Disulfide	50.0	BRL
Carbon Tetrachloride	2.0	BRL
Chlorobenzene	2.0	BRL
Chloroethane	2.0	BRL
Chloroform	2.0	BRL
Chloromethane	2.0	BRL
1,2-Dibromo-3-chloropropane	10.0	BRL
Dibromochloromethane	2.0	BRL
1,2-Dibromoethane	2.0	BRL
Dibromomethane	2.0	BRL
1,4-Dichloro-2-butane	25.0	BRL
1,2- Dichlorobenzene	2.0	BRL
1,4- Dichlorobenzene	2.0	BRL
1,1-Dichloroethane	2.0	BRL
1,2-Dichloroethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-3N
Laboratory ID #: 0813559-03
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
1,1-Dichloroethene	2.0	BRL
Cis-1,2-dichloroethene	2.0	BRL
Trans-1,2-dichloroethene	2.0	BRL
1,2-Dichloropropane	2.0	BRL
Cis-1,3-dichloropropene	2.0	BRL
trans-1, 3-Dichloropropene	2.0	BRL
Ethylbenzene	2.0	BRL
2-Hexanone	25.0	BRL
Iodomethane	5.0	BRL
4-Methyl-2-pentanone	50.0	BRL
Methylene Chloride	2.0	BRL
Styrene	2.0	BRL
1,1,1,2-Tetrachloroethane	2.0	BRL
1,1,2,2-Tetrachloroethane	2.0	BRL
Tetrachloroethene	2.0	BRL
Toluene	2.0	BRL
1,1,1-Trichloroethane	2.0	BRL
1,1,2-Trichloroethane	2.0	BRL
Trichlorethylene	2.0	BRL
1,2,3-Trichloropropane	2.0	BRL
Vinyl Acetate	20.0	BRL
Vinyl Chloride	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-3N
Laboratory ID #: 0813559-03
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
Xylene	4.0	BRL
Bromodichloromethane	2.0	BRL
Trichlorofluoromethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-4N
Laboratory ID #: 0813559-04
Matrix: Liquid
Analyst: VVK

Parameter	Date of Analysis	Results	Units	Reporting Limit	Method
Arsenic	11/26/2008	BRL	mg/l	0.02	6010
Barium	11/26/2008	BRL	mg/l	0.04	6010
Cadmium	11/26/2008	BRL	mg/l	0.005	6010
Chromium	11/26/2008	BRL	mg/l	0.02	6010
Lead	11/26/2008	BRL	mg/l	0.04	6010
Mercury	11/26/2008	BRL	mg/l	0.0002	7470
Selenium	11/26/2008	BRL	mg/l	0.02	6010
Silver	11/26/2008	BRL	mg/l	0.02	6010

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-4N
Laboratory ID #: 0813559-04
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/L)	Results (ug/L)
Acetone	50.0	BRL
Acrylonitrile	100.0	BRL
Benzene	2.0	BRL
Bromochloromethane	2.0	BRL
Bromoform	2.0	BRL
Bromomethane	2.0	BRL
MEK (2-Butanone)	50.0	BRL
Carbon Disulfide	50.0	BRL
Carbon Tetrachloride	2.0	BRL
Chlorobenzene	2.0	BRL
Chloroethane	2.0	BRL
Chloroform	2.0	BRL
Chloromethane	2.0	BRL
1,2-Dibromo-3-chloropropane	10.0	BRL
Dibromochloromethane	2.0	BRL
1,2-Dibromoethane	2.0	BRL
Dibromomethane	2.0	BRL
1,4-Dichloro-2-butane	25.0	BRL
1,2- Dichlorobenzene	2.0	BRL
1,4- Dichlorobenzene	2.0	BRL
1,1-Dichloroethane	2.0	BRL
1,2-Dichloroethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01. 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-4N
Laboratory ID #: 0813559-04
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
1,1-Dichloroethene	2.0	BRL
Cis-1,2-dichloroethene	2.0	BRL
Trans-1,2-dichloroethene	2.0	BRL
1,2-Dichloropropane	2.0	BRL
Cis-1,3-dichloropropene	2.0	BRL
trans-1, 3-Dichloropropene	2.0	BRL
Ethylbenzene	2.0	BRL
2-Hexanone	25.0	BRL
Iodomethane	5.0	BRL
4-Methyl-2-pentanone	50.0	BRL
Methylene Chloride	2.0	BRL
Styrene	2.0	BRL
1,1,1,2-Tetrachloroethane	2.0	BRL
1,1,2,2-Tetrachloroethane	2.0	BRL
Tetrachloroethene	2.0	BRL
Toluene	2.0	BRL
1,1,1-Trichloroethane	2.0	BRL
1,1,2-Trichloroethane	2.0	BRL
Trichlorethylene	2.0	BRL
1,2,3-Trichloropropane	2.0	BRL
Vinyl Acetate	20.0	BRL
Vinyl Chloride	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: MW-4N
Laboratory ID #: 0813559-04
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
Xylene	4.0	BRL
Bromodichloromethane	2.0	BRL
Trichlorofluoromethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: US
Laboratory ID #: 0813559-05
Matrix: Liquid
Analyst: VVK

Parameter	Date of Analysis	Results	Units	Reporting Limit	Method
Arsenic	11/26/2008	BRL	mg/l	0.02	6010
Barium	11/26/2008	BRL	mg/l	0.04	6010
Cadmium	11/26/2008	BRL	mg/l	0.005	6010
Chromium	11/26/2008	BRL	mg/l	0.02	6010
Lead	11/26/2008	BRL	mg/l	0.04	6010
Mercury	11/26/2008	BRL	mg/l	0.0002	7470
Selenium	11/26/2008	BRL	mg/l	0.02	6010
Silver	11/26/2008	BRL	mg/l	0.02	6010

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: US
Laboratory ID #: 0813559-05
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/L)	Results (ug/L)
Acetone	50.0	BRL
Acrylonitrile	100.0	BRL
Benzene	2.0	BRL
Bromochloromethane	2.0	BRL
Bromoform	2.0	BRL
Bromomethane	2.0	BRL
MEK (2-Butanone)	50.0	BRL
Carbon Disulfide	50.0	BRL
Carbon Tetrachloride	2.0	BRL
Chlorobenzene	2.0	BRL
Chloroethane	2.0	BRL
Chloroform	2.0	BRL
Chloromethane	2.0	BRL
1,2-Dibromo-3-chloropropane	10.0	BRL
Dibromochloromethane	2.0	BRL
1,2-Dibromoethane	2.0	BRL
Dibromomethane	2.0	BRL
1,4-Dichloro-2-butane	25.0	BRL
1,2- Dichlorobenzene	2.0	BRL
1,4- Dichlorobenzene	2.0	BRL
1,1-Dichloroethane	2.0	BRL
1,2-Dichloroethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: US
Laboratory ID #: 0813559-05
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
Xylene	4.0	BRL
Bromodichloromethane	2.0	BRL
Trichlorofluoromethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: DS
Laboratory ID #: 0813559-06
Matrix: Liquid
Analyst: VVK

Parameter	Date of Analysis	Results	Units	Reporting Limit	Method
Arsenic	11/26/2008	BRL	mg/l	0.02	6010
Barium	11/26/2008	BRL	mg/l	0.04	6010
Cadmium	11/26/2008	BRL	mg/l	0.005	6010
Chromium	11/26/2008	BRL	mg/l	0.02	6010
Lead	11/26/2008	BRL	mg/l	0.04	6010
Mercury	11/26/2008	BRL	mg/l	0.0002	7470
Selenium	11/26/2008	BRL	mg/l	0.02	6010
Silver	11/26/2008	BRL	mg/l	0.02	6010

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: DS
Laboratory ID #: 0813559-06
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/L)	Results (ug/L)
Acetone	50.0	BRL
Acrylonitrile	100.0	BRL
Benzene	2.0	BRL
Bromochloromethane	2.0	BRL
Bromoform	2.0	BRL
Bromomethane	2.0	BRL
MEK (2-Butanone)	50.0	BRL
Carbon Disulfide	50.0	BRL
Carbon Tetrachloride	2.0	BRL
Chlorobenzene	2.0	BRL
Chloroethane	2.0	BRL
Chloroform	2.0	BRL
Chloromethane	2.0	BRL
1,2-Dibromo-3-chloropropane	10.0	BRL
Dibromochloromethane	2.0	BRL
1,2-Dibromoethane	2.0	BRL
Dibromomethane	2.0	BRL
1,4-Dichloro-2-butane	25.0	BRL
1,2- Dichlorobenzene	2.0	BRL
1,4- Dichlorobenzene	2.0	BRL
1,1-Dichloroethane	2.0	BRL
1,2-Dichloroethane	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental& Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: DS
Laboratory ID #: 0813559-06
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
1,1-Dichloroethene	2.0	BRL
Cis-1,2-dichloroethene	2.0	BRL
Trans-1,2-dichloroethene	2.0	BRL
1,2-Dichloropropane	2.0	BRL
Cis-1,3-dichloropropene	2.0	BRL
trans-1, 3-Dichloropropene	2.0	BRL
Ethylbenzene	2.0	BRL
2-Hexanone	25.0	BRL
Iodomethane	5.0	BRL
4-Methyl-2-pentanone	50.0	BRL
Methylene Chloride	2.0	BRL
Styrene	2.0	BRL
1,1,1,2-Tetrachloroethane	2.0	BRL
1,1,2,2-Tetrachloroethane	2.0	BRL
Tetrachloroethene	2.0	BRL
Toluene	2.0	BRL
1,1,1-Trichloroethane	2.0	BRL
1,1,2-Trichloroethane	2.0	BRL
Trichlorethylene	2.0	BRL
1,2,3-Trichloropropane	2.0	BRL
Vinyl Acetate	20.0	BRL
Vinyl Chloride	2.0	BRL

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

December 01, 2008

Client: Engineering, Environmental & Science (E2S)
Address: 3008 Anderson Dr.
Raleigh, NC 27609

Date Collected: 11/24/2008
Date Received: 11/25/2008
Project #: Chatham Co Landfill
Client ID #: DS
Laboratory ID #: 0813559-06
Analysis: VOC(E2S)8260
Method: 8260
Matrix: Liquid
Date of Analysis: 11/26/2008
Analyst: MS

VOC(E2S)8260

Parameter	Reporting Limit (ug/l)	Results (ug/l)
Xylene	4.0	BRL
Bromodichloromethane	2.0	BRL
Trichlorofluoromethane	2.0	BRL