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).
- 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):

Richardson Smith Gardner and Associates, Inc.

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

Name: Joan Smyth, PG Phone: 919-828-0577 x221

E-mail: joan@rsgengineers.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Martin County C&D Landfill	1445 Landfill Road, Williamston, NC	59-01	.0500	November 3, 2011

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

☒ Groundwater monitoring data from monitoring wells
☐ 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.

Madeline German, PG | Geologist | 919-828-0577 x222

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

Signature | 1/25/2012 Date | Affix NC Licensed/ Professional Geologist Seal

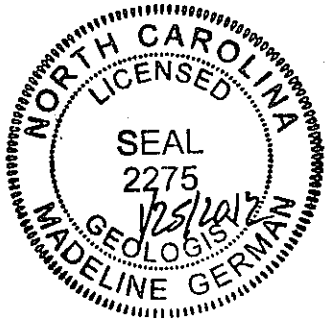
14 N. Boylan Ave, Raleigh, NC 27603

Facility Representative Address

CO828

NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009



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Martin County C&D Landfill

Ground Water Monitoring Report

Fall 2011 Semi-annual Monitoring Event

Martin County C&D Landfill
Williamston, North Carolina
NC Solid Waste Permit # 59-01

Prepared for:
Martin County Solid Waste Management
P.O. Box 668
Williamston, North Carolina 27892

January 2012

RICHARDSON SMITH GARDNER & ASSOCIATES
ENGINEERING & GEOLOGICAL SERVICES

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Martin County C&D Landfill
Semi-annual Ground Water Monitoring Report
Fall 2011 Sampling Event

FIGURES

TABLES

APPENDICES

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1.0 Introduction

The Martin County C&D Landfill, currently operating under Solid Waste Permit # 59-01 (C&D) and 15A NCAC 13B.0544, is required to perform semi-annual ground water monitoring. This report presents the Fall 2011 monitoring event results. This event was performed in compliance with NC Solid Waste Regulations.

The ground water monitoring network for the C&D landfill includes four (4) ground water monitoring wells. This report includes a field procedure summary and laboratory analyses for the C&D site. Summary tables of the results and laboratory analytical reports are also provided.

2.0 Site Geology

The Martin Co. landfill is located off McCaskey Road near Williamston in the Coastal Plain physiographic province. According to the Geologic Map of North Carolina (1985) this area is underlain by the Yorktown Formation. The Yorktown Formation is characterized by fossiliferous clay with varying amounts of fine-grained sand, bluish gray, shell material commonly concentrated in lenses.

3.0 Sampling Procedures

The sampling event, performed by Environment 1 personnel on November 3, 2011, consisted of collecting samples from four (4) ground water wells (CDMW-1, CDMW-2, CDMW-3, CDMW-4) shown in **Figure 1**.

Reported sampling methods followed the protocol outlined in the North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities (NCDENR, DWM). The depth to water in each well was gauged prior to purging and sampling. Field measurements of pH, specific conductivity and temperature were recorded at each monitoring location. Water table elevations and field parameter results are included in **Tables 1 and 2,** respectively.

Samples were reportedly collected by Environment 1 personnel in laboratory prepared containers for the specified analytical procedures. Ground water samples were properly preserved, placed on ice, and transported to the laboratory facility (Environment 1, Inc.), within the specified holding times for each analysis.

4.0 Field and Laboratory Results

4.1 Laboratory Analysis

Samples were transported to the laboratory facility under proper chain of custody analyzed at the specified DWM Solid Waste Quantitation Limits (SWSLs)[1] for Appendix I and

[1] New Guidelines for Electronic Submittal of Environmental Monitoring Data Memo, NCDENR – Solid Waste Section, October 27, 2006

additional required constituents for C&D landfills. The laboratory report is attached for your review as **Appendix A**.

4.2 Field Results

Depth to ground water and field measurements are included in **Tables 1 and 2**. These measurements are consistent with prior readings at the landfill.

4.3 Laboratory Results

No analyzed constituents were detected above their 15A NCAC 2L.0200 (2L) / Ground Water Protection (GWP) standards. Only one constituent (barium) was detected above the SWSL. **Table 3** summarizes the list of constituents detected. Constituents detected below the SWSL are denoted as "J" values and are also included in **Table 3**.

5.0 Ground Water Characterization

A potentiometric surface map was prepared from ground water elevation data collected during this sampling event. The data indicates that ground water is flowing generally to the northeast and east across most of the site. Hydraulic conductivity data is not available for these wells so ground water velocities could not be calculated. The potentiometric surface map (**Figure 1**) is attached for your review.

6.0 Conclusions

Monitoring event results indicate detectable concentrations of one (1) inorganic constituent with no exceedances of 2L or GWP standards. No organic constituents were detected during this sampling event. The next ground water monitoring event is scheduled for May 2012. A report will be submitted to NCDENR upon receipt of laboratory analyses.

Figures

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MW-3
TOC= 38.01
DTW= 1.04
GWE= 37.03

MW-2
TOC= 37.88
DTW= 0.50
GWE= 31.38

APPROXIMATE EXISTING
WASTE LIMITS

PROPERTY LINE
(SEE REFERENCE 2)

USED TIRE STORAGE
TRAILER

WHITE GOODS
HANDLING AREA

SW-2

MAINTENANCE BUILDING

LANDFILL OFFICE

SCALE HOUSE AND SCALE

ANIMAL SHELTER

CLOSED MSW
LANDFILL UNIT

EXISTING SEDIMENT BASIN NO. 1

USED PESTICIDE STORAGE
CONTAINER BUILDING

MW-4
TOC= 50.81
DTW= 13.03
GWE= 37.78

CDW-2R
CDW-1
TOC= 43.77
DTW= 8.61
GWE= 35.16

C&D LANDFILL
(ACTIVE)

LANDFILL ROAD

SITE ENTRANCE (GATED)

MW-1
TOC= 66.96
DTW= 7.56
GWE= 59.40

SW-1

APPROXIMATE EXISTING WASTE LIMITS
(SEE REFERENCE 3)

WOODWASTE
PROCESSING AREA

SOIL STOCKPILE

CDW-3
CDW-4
TOC= 55.63
DTW= 3.36
GWE= 52.27

LEGEND

890	EXISTING CONTOUR (SEE REFERENCE 1)
	PROPERTY LINE (SEE REFERENCE 2)
	APPROXIMATE EXISTING WASTE LIMITS
	LIMIT OF FUTURE WASTE PLACEMENT
55	GROUNDWATER SURFACE CONTOUR (5' INTERVAL)(DASHED WHERE INFERRED)
MW-2	EXISTING MONITORING WELL
TOC	TOP OF CASING ELEVATION
DTW	MEASURED DEPTH TO WATER
GWE	GROUNDWATER SURFACE ELEVATION
SW-1	SURFACE WATER SAMPLING LOCATION

REFERENCES

1. OVERALL BASE TOPOGRAPHY REFERENCES NCDOT GIS DEPARTMENT DATA RELEASE MARCH 2005.
2. PROPERTY LINE FROM GIS PARCEL DATA PROVIDED BY MARTIN COUNTY GIS DEPARTMENT.
3. TOPOGRAPHY WITHIN THE APPROXIMATE EXISTING WASTE LIMITS FROM FIELD SURVEY DATED JUNE 22, 2011 BY ROANOKE LAND SURVEYING, WILLIAMSTON, NC.
4. GROUNDWATER POTENTIOMETRIC SURFACE FROM DATA COLLECTED ON NOVEMBER 3, 2011

0 100' 200' 300'

REVISION

NO.	DATE

RICHARDSON SMITH GARDNER & ASSOCIATES
NC LIC NO. C-0424 (Engineering)
14 N. Boylan Ave. Raleigh, N.C. 27603
ph: 919-828-0577 fax: 919-828-3899
www.rsgengineers.com

SEAL

SEAL

PROJECT TITLE:
MARTIN COUNTY
MSW AND C&D LANDFILL
MONITORING REPORT

DRAWING TITLE:
POTENTIOMETRIC SURFACE MAP
FALL 2011 MONITORING EVENT

DESIGNED BY: J.A.S.	DRAWN BY: C.T.J.
CHECKED BY:	PROJECT NO.: MARTIN 11-2
SCALE: AS SHOWN	DATE: JAN. 2012
FILE NAME: MARTIN-D0009	
SHEET NO.	DRAWING NO.: FIG.1

G:\CAD\Martin County\Martin 11-2\sheets\MARTIN-D0009.dwg - 1/20/2012 11:40 AM

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Tables

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RICHARDSON SMITH GARDNER & ASSOCIATES
ENGINEERING & GEOLOGICAL SERVICES

By: MG
Date: 11/7/2011

Table 1
Martin County C&D Landfill
Ground Water Elevations
11/3/2011

Well	TOC Elevation (feet)	Depth to Water (feet)	GW Elev (feet)
CDMW-1	43.77	8.61	35.16
CDMW-2r	NA	9.99	NA
CDMW-3	55.98	13.84	42.14
CDMW-4	55.63	3.36	52.27

Well locations and elevations provided by Roanoke Land Surveying (RLS) Sur
Depth to Water data from Environment 1 laboratory report dated 11/22/11 Lab

RICHARDSON SMITH GARDNER & ASSOCIATES
ENGINEERING & GEOLOGICAL SERVICES

By: MG
Date: 11/7/2011

Table 2
Martin County C&D Landfill
Field Parameters
11/3/2011

Well Identification #	Static Water Level (ft) (DTW)	Temperature (°Celsius)	Specific Conductivity (uS/cm)	pH
CDMW-1	8.61	20	336	7.6
CDMW-2r	9.99	20	764	6.9
CDMW-3	13.84	21	268	7.8
CDMW-4	3.36	21	474	4.4

Note: 1. Data from Environment 1 laboratory report dated 11/22/11 ID # 6052

RICHARDSON SMITH GARDNER & ASSOCIATES
ENGINEERING & GEOLOGICAL SERVICES

By:
Date:

Table 3
Martin County C&D Landfill
Detected Inorganic and Organic Constituents
11/3/2011

Constituents	SWSL	2L	MW-1	MW-2	MW-3	MW-4
Inorganic Constituents						
Arsenic	10	10	0.39 J	6.9 J	0.42 J	5.3 J
Barium	100	700	4.9 J	58.6 J	27.8 J	**119**
Cadmium	1	2	0.10 J	0.23 J	0.28 J	0.47 J
Chromium, total	10	10	ND	2.0 J	ND	0.67 J
Mercury	0.2	1	ND	ND	ND	ND
Lead	10	15	ND	0.97 J	0.08 J	9.2 J
Selenium	10	20	ND	1.6 J	ND	2.0 J
Silver	10	20	ND	ND	ND	ND

SWSL - Solid Waste Quantitation Limit
ND - Not detected at or above SWSL
Shading - Concentrations above 2L standard.
Bold Letters - Constituent detected above SWSL
J - Detected constituents between method detection limit and SWSL
NE - SWSL not established

SWSLs, 2L Standards and Results are presented in ug/l.

Data from Environment 1 laboratory report dated 11/22/11 ID # 6052

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Appendix A

Laboratory Analytical Report

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6052

MARTIN CO. LANDFILL (C&D SITE)
MR. MAURICE ROBINSON
P.O. BOX 668
PO BOX 668
WILLIAMSTON ,NC 27892

DATE COLLECTED: 11/03/11
DATE REPORTED : 11/22/11

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-1	MW-2	MW-3	MW-4	Analysis Date	Analyst	Method Code
PH (field measurement), Units			7.6	6.9	7.8	4.4	11/03/11	RJH	SM4500HB
Arsenic, ug/l	0.10	10.0	0.39 J	6.9 J	0.42 J	5.3 J	11/11/11	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	4.9 J	58.6 J	27.8 J	119	11/11/11	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.10 J	0.23 J	0.28 J	0.47 J	11/11/11	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	--- U	2.0 J	--- U	0.67 J	11/11/11	LFJ	EPA200.8
Lead, ug/l	0.02	10.0	--- U	0.97 J	0.08 J	9.2 J	11/11/11	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20	--- U	--- U	--- U	--- U	11/11/11	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	--- U	1.6 J	--- U	2.0 J	11/11/11	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U	--- U	--- U	--- U	11/11/11	LFJ	EPA200.8
Conductivity (at 25c), uMhos/cm	1.0	1.0	336	764	268	474	11/03/11	RJH	SM2510B
Temperature, °C			20	20	21	21	11/03/11	RJH	SM2550B
Static Water Level, feet			8.61	9.99	13.84	3.36	11/03/11	RJH	
Well Depth, feet			53.18	23.12	53.02	19.22	11/03/11	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: MARTIN CO. LANDFILL (C&D SITE)
MR. MAURICE ROBINSON
P.O. BOX 668
PO BOX 668
WILLIAMSTON, NC 27892

CLIENT ID: 6052

ANALYST: MAO
DATE COLLECTED: 11/03/11
DATE ANALYZED: 11/11/11
DATE REPORTED: 11/22/11

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-1	MW-2	MW-3	MW-4
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U
48. Tetrahydrofuran	0.39	1.0	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6023

MARTIN COUNTY LANDFILL
MR. MAURICE ROBINSON
P.O. BOX 668
WILLIAMSTON ,NC 27892

DATE COLLECTED: 11/03/11
DATE REPORTED : 11/22/11

REVIEWED BY:

PARAMETERS	MDL	SWSL	Well #1	Well #2	Well #3	Well #4	SW-1	Analysis Date	Analyst	Method Code
PH (field measurement), Units			7.2	5.3	6.8	6.2	6.1	11/03/11	RJH	SM4500HB
Antimony, ug/l	0.14	6.0	0.28 J	--- U	--- U	0.16 J	--- U	11/11/11	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	2.3 J	1.0 J	0.19 J	42	1.1 J	11/11/11	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	58.5 J	225	137	83.8 J	44.6 J	11/11/11	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.22 J	3	--- U	--- U	--- U	11/11/11	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.14 J	--- U	0.08 J	--- U	--- U	11/11/11	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	0.28 J	1.1 J	0.08 J	0.55 J	1.1 J	11/11/11	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	0.43 J	0.65 J	0.18 J	0.53 J	0.56 J	11/11/11	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	--- U	--- U	--- U	0.93 J	0.92 J	11/11/11	LFJ	EPA200.8
Lead, ug/l	0.02	10.0	0.11 J	--- U	--- U	0.06 J	0.65 J	11/11/11	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	1.1 J	4.1 J	1.3 J	2.7 J	1.9 J	11/11/11	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	--- U	2.8 J	0.64 J	--- U	0.24 J	11/11/11	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U	--- U	--- U	--- U	--- U	11/11/11	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	--- U	--- U	--- U	--- U	--- U	11/11/11	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	1.2 J	1.5 J	0.63 J	1.5 J	2.0 J	11/11/11	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	3.9 J	2.3 J	1.2 J	2.7 J	5.6 J	11/11/11	LFJ	EPA200.8
Conductivity (at 25c), uMhos/cm	1.0	1.0	215	918	930	1032	142	11/03/11	RJH	SM2510B
Temperature, °C			20	19	19	20	13	11/03/11	RJH	SM2550B
Static Water Level, feet			7.56	0.50	1.04	13.03		11/03/11	RJH	
Well Depth, feet			20.28	20.01	19.04	20.64		11/03/11	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6023

MARTIN COUNTY LANDFILL
MR. MAURICE ROBINSON
P.O. BOX 668
WILLIAMSTON ,NC 27892

DATE COLLECTED: 11/03/11
DATE REPORTED : 11/22/11

REVIEWED BY:

PARAMETERS	MDL	SWSL	SW-2	SW-3	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.7	7.0	11/03/11	RJH	SM4500HB
Antimony, ug/l	0.14	6.0	--- U	--- U	11/11/11	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	0.96 J	0.99 J	11/11/11	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	48.4 J	53.2 J	11/11/11	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	--- U	--- U	11/11/11	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.06 J	--- U	11/11/11	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	1.2 J	0.69 J	11/11/11	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	0.56 J	0.66 J	11/11/11	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	1.3 J	0.79 J	11/11/11	LFJ	EPA200.8
Lead, ug/l	0.02	10.0	1.0 J	0.91 J	11/11/11	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	1.9 J	1.6 J	11/11/11	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	0.20 J	--- U	11/11/11	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U	--- U	11/11/11	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	--- U	--- U	11/11/11	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	2.6 J	1.5 J	11/11/11	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	6.0 J	6.1 J	11/11/11	LFJ	EPA200.8
Conductivity (at 25c), uMhos/cm	1.0	1.0	160	285	11/03/11	RJH	SM2510B
Temperature, °C			11	14	11/03/11	RJH	SM2550B

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
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CLIENT: MARTIN COUNTY LANDFILL
MR. MAURICE ROBINSON
P.O. BOX 668
WILLIAMSTON, NC 27892

CLIENT ID: 6023

ANALYST: MAO
DATE COLLECTED: 11/03/11
DATE REPORTED: 11/22/11

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed: MDL	SWSL	11/08/11 Well #1	11/08/11 Well #2	11/08/11 Well #3	11/11/11 Well #4	11/11/11 SW-1
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	1.40	6.30	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	0.90 J	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	1.10 J	0.80 J	1.30 J	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	1.30 J	26.50	0.40 J	--- U
15. 2-Butanone	2.21	100.0	3.10 J	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	1.90	0.80 J	4.20	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	0.90 J	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	1.20 J	0.60 J	11.80	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	5.70	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	4.70	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

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Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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CLIENT: MARTIN COUNTY LANDFILL
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WILLIAMSTON, NC 27892

CLIENT ID: 6023

ANALYST: MAO
DATE COLLECTED: 11/03/11
DATE REPORTED: 11/22/11

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed: MDL	SWSL	11/11/11 SW-2	11/11/11 SW-3
1. Chloromethane	0.77	1.0	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.