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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):

Smith Gardner, Inc.

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

Name: Madeline German

Phone: 919-828-0577 x 222

E-mail: madeline@smithgardnerinc.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Davidson County Closed Phase 1 Landfill	1242 Old Highway 29 Thomasville, NC 27360	29-06	0.1600	March 31 & April 1, 2014

Environmental Status: (Check all that apply)

- Initial/Background Monitoring Detection Monitoring Assessment Monitoring Corrective Action

Type of data submitted: (Check all that apply)

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

Notification attached?

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

Certification

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

Madeline German

Geologist

919-828-0577 x 222

Facility Representative Name (Print)

Title

(Area Code) Telephone Number

Signature

Date

Affix NC Licensed/ Professional Geologist Seal

14 N. Boylan Ave. Raleigh, NC 27603

Facility Representative Address

C-0828

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



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April 2014 Semi-Annual Groundwater Monitoring Report

Davidson County Phase 1 Lined Landfill NC Solid Waste Permit No. 29-06

Prepared for:

Davidson County Integrated Solid Waste
1242 Old Highway 29
Thomasville, North Carolina 27360-0024



May 2014

Prepared by:

SMITH+GARDNER

14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577



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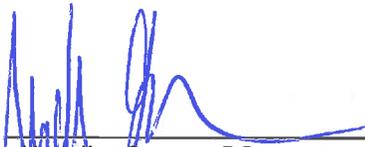
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April 2014 Semi-Annual Groundwater Monitoring Report

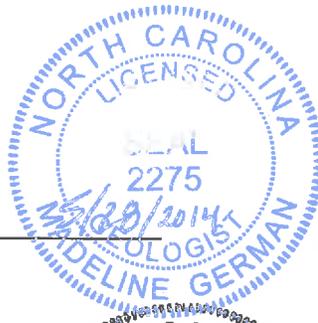
Davidson County Phase 1 Lined Landfill
NC Solid Waste Permit No. 29-06

Prepared For:
Davidson County Integrated Solid Waste
Thomasville, North Carolina 27360-0024

S+G Project No. DAVDCO -4



Madeline German, P.G.
Project Geologist





Joan Smyth, P.G.
Senior Hydrogeologist



May 2014

SMITH+GARDNER

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Davidson County Phase 1 Lined Landfill NC Solid Waste Permit No. 29-06

April 2014 Groundwater Monitoring Report

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FIGURE

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1.0 INTRODUCTION

Smith Gardner, Inc. (S+G) was contracted by Davidson County to perform their semi-annual ground water monitoring at the Davidson County Phase 1 Lined Landfill, permit number 29-06, as required by 15A NCAC 13B .1600. Sampling was conducted March 31 and April 1, 2014. This report summarizes the event sampling procedures, field and laboratory results and ground water characterization as required by NC Solid Waste Regulations. Summary tables, a potentiometric map and the laboratory analytical report are also included.

2.0 SITE GEOLOGY

The Davidson County Landfill facility is located in the Piedmont Physiographic Province of North Carolina approximately three and a half miles northeast of the City of Lexington, NC. The Geologic Map of North Carolina (*USGS, 1985*) indicates that the site lies at the western margin of the Carolina Slate Belt; an area of predominantly volcanic and sedimentary rocks of Late Proterozoic to Cambrian age that have been metamorphosed and intruded by numerous igneous plutons. The boundary zone between the Carolina Slate Belt and the adjacent Charlotte Belt is known as the Gold Hill/Silver Hill shear zone. The site vicinity is underlain by volcanic rocks from the Flat Swamp Member of the Cid Formation and metavolcanic rocks of the Battleground Formation.

3.0 SAMPLING LOCATIONS

The groundwater monitoring network for the Davidson County Phase 1 includes thirteen monitoring wells (MW-1S, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7S, MW-7D, MW-8, MW-9A, MW-10, MW-11 and MW-12), two surface water locations (SW-1 and SW-2) and one leachate location (Leachate). Monitoring well MW-2 was dry this event; therefore, it was not sampled. SW-1 is the upstream surface water location; SW-2 is located on Jimmy's Creek downstream of the landfill. A trip blank and equipment blank were submitted for quality control purposes. Sampling locations are shown in **Figure 1**. Available well logs are provided in **Appendix A**.

4.0 SAMPLING PROCEDURES

Sampling procedures followed the protocols set forth in the site's Water Quality Monitoring Plan¹ and the North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities (North Carolina Department of Environment and Natural Resources, Division of Waste Management). S+G personnel gauged each well to determine ground water depth and purged three to five well volumes or until dry. Ground water elevations are provided in **Table 1**.

Environment 1, Inc. (NC Laboratory Certification # 10) provided laboratory prepared sample containers for the specified analytical procedures. Ground water samples were properly preserved, placed on ice and transported to the laboratory facility within the specified hold times for each analysis.

¹ Davidson County Water Quality Monitoring Plan, G.N. Richardson and Associates, June 1999.

Sampling wells and locations were inspected and found to be in good condition and free of obstructions. Field logs are presented in **Appendix B**.

5.0 FIELD & LABORATORY RESULTS

5.1 Field Results

Temperature, pH, specific conductance and turbidity were measured in the field at the time of sampling via direct read instruments. The field parameter results are summarized in **Table 2** and have remained consistent with previously reported sampling events.

5.2 Laboratory Analysis

Samples were transported to Environment 1, Inc., in Greenville, NC, a North Carolina certified laboratory (NC Wastewater ID #10). Laboratory analysis for groundwater included metals via EPA Test Method 200.8 and Appendix I Volatile Organic Compounds (VOCs) via EPA Test Method 8260B. Leachate samples were also sampled for BOD, COD, nitrate nitrogen, total phosphorus and sulfate via SWS approved methods listed in the laboratory report. Analytical results were compared to the NC DWM Solid Waste Section Quantitation Limits (SWSLs) and 15A NCAC 2L.0200 (2LStandard). Surface water results were compared with the NCAC 2B Standard for Class C waters (2B Standards).

Most constituents were either below the method detection limit (MDL) or were “J-values” indicating a non-quantifiable value. The laboratory results are presented in **Appendix C**.

5.2.1 Inorganic Constituents

Zinc in MW-8 was the only inorganic constituent detected above the SWSL this event. No inorganic constituents were detected above their 2L Standards. Inorganic detections are provided in **Table 3**.

5.2.2 Organic Constituents

Acetone was the only organic parameter detected this event; however, it was “j-qualified” and not detected above the SWSL or the 2L Standard. Organic detections are provided in **Table 3**.

5.2.3 Surface Water Results

No inorganic or organic constituents were detected above their 2B Standards in surface water samples. Surface water detections are shown in **Table 3**.

5.2.4 Leachate Analysis

Leachate samples were collected from the leachate collection system. A summary of constituents detected in the leachate is included as **Table 4**.

6.0 STATISTICAL ANALYSIS

No statistical analyses were performed on the analytical data based on the latest version of 15A NCAC 13B.1632 and .1633 effective April 1, 2011. Time vs. concentration graphs are included as **Appendix D**.

7.0 GROUNDWATER CHARACTERIZATION

A potentiometric surface map was prepared from ground water data from this sampling event. Ground water flow velocities for this sampling event were calculated for monitoring wells using the equation:

$$V = KI/n$$

where: K = hydraulic conductivity

l = ground water gradient

n = porosity

Ground water velocities in the uppermost aquifer ranged from 0.015 feet/day (MW-6) to 2.099 feet/day (MW-9A) and averaging 0.4035 feet/day. Calculations are included in **Table 5**. Groundwater elevations indicate the flow direction is generally north and northwest across the site; which is consistent with historically reported ground water flow patterns. The potentiometric surface map is included as **Figure 1**.

8.0 CONCLUSIONS

The analytical results for the Phase 1 lined landfill are consistent with reported historic inorganic detections; likely due to variations in these naturally occurring constituents and are not indicative of ground water impact from the landfill. Acetone levels are non-quantifiable values, indicating April 2014 concentrations are not indicative of landfill contamination. The next ground water monitoring event is tentatively scheduled for October 2014.

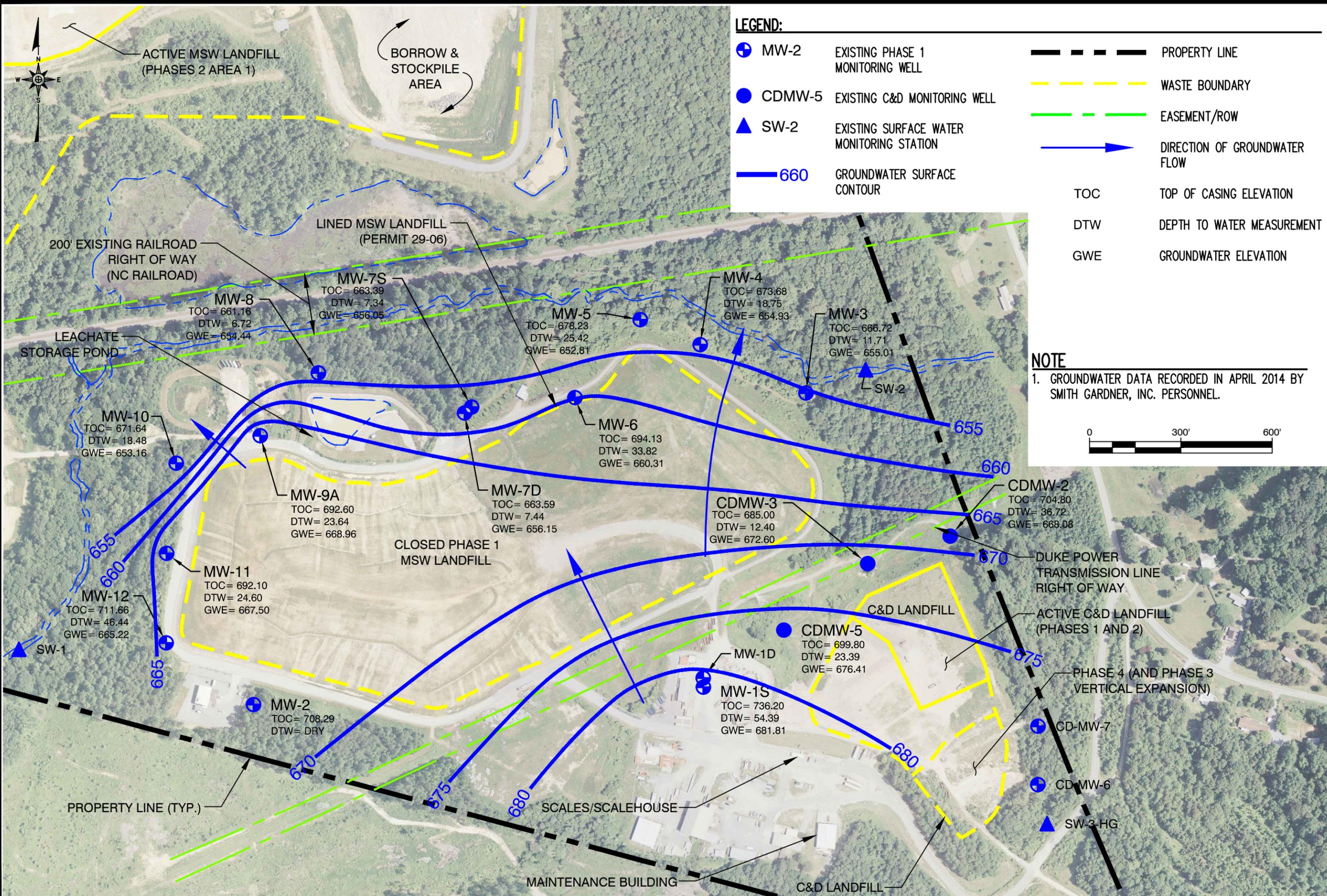
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FIGURES

**April 2014 Groundwater Monitoring Report
Davidson County Phased 1 Lined Landfill
NC Solid Waste Permit No. 29-06**

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LEGEND:

- MW-2 EXISTING PHASE 1 MONITORING WELL
- CDMW-5 EXISTING C&D MONITORING WELL
- ▲ SW-2 EXISTING SURFACE WATER MONITORING STATION
- 660 GROUNDWATER SURFACE CONTOUR
- PROPERTY LINE
- WASTE BOUNDARY
- EASEMENT/ROW
- DIRECTION OF GROUNDWATER FLOW
- TOC TOP OF CASING ELEVATION
- DTW DEPTH TO WATER MEASUREMENT
- GWE GROUNDWATER ELEVATION

NOTE

1. GROUNDWATER DATA RECORDED IN APRIL 2014 BY SMITH GARDNER, INC. PERSONNEL.



PREPARED BY: **SMITH+GARDNER**
NC LIC. NO. C-0828 (ENGINEERING)
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

DRAWN: J.A.L.	APPROVED: M.M.G.	SCALE: AS SHOWN	FIGURE NO: 1
DATE: May 2014	PROJECT NO: DAVDCO-4	FILENAME: DAVDCO-B0779	

POTENTIOMETRIC SURFACE MAP
APRIL 2014
CLOSED PHASE 1 AND C&D
DAVIDSON COUNTY, NC

PREPARED FOR:

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TABLES

**April 2014 Groundwater Monitoring Report
Davidson County Phase 1 Lined Landfill
Solid Waste Permit No. 29-06**

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Table 1
 Groundwater Elevations
 Davidson County Phase 1 Lined Landfill
 March 31 and April 1, 2014

Well	Northing	Easting	TOC Elevation (feet)	Water Level (feet)	GW Elev (feet)
MW-1S	763311.06	1650889.31	736.20	54.39	681.81
MW-2	763253.60	1649411.40	708.29	DRY	-
MW-3	764274.92	1651226.41	666.72	11.71	655.01
MW-4	764433.34	1650879.10	673.68	18.75	654.93
MW-5	764515.15	1650681.80	678.23	25.42	652.81
MW-6	764259.47	1650467.49	694.13	33.82	660.31
MW-7S	764228.53	1650127.95	663.39	7.34	656.05
MW-7D	764228.53	1650127.95	663.59	7.44	656.15
MW-8	764340.45	1649624.12	661.16	6.72	654.44
MW-9A	764134.52	1649433.54	692.60	23.64	668.96
MW-10	764044.52	1649157.57	671.64	18.48	653.16
MW-11	763749.09	1649125.82	692.10	24.60	667.50
MW-12	763456.03	1649124.23	711.66	46.44	665.22

Notes: Survey Data collected by Michael Green and Associates.

Table 2
 Field Parameters
 Davidson County Phase 1 Lined Landfill
 March 31 and April 1, 2014

Well	pH (Std. Units)	Conductivity (umhos)	Temperature (celsius)	Turbidity (NTU)	DO (%)	ORP (mV)
MW-1	6.30	722	17.61	5.3	18.7	257.6
MW-3	6.09	217	12.08	34.5	38.2	266.2
MW-4	5.83	131	12.97	59.9	41.4	269.2
MW-5	6.17	145	13.97	7.27	29	254.6
MW-6	6.90	211	15	1.76	77.3	222.6
MW-7S	5.96	115	11.18	77.5	46.3	248.3
MW-7d	6.30	100	11.97	1.25	60.5	237.9
MW-8	5.58	95	9.41	23.8	17.7	237.5
MW-9A	6.45	340	15.45	45.7	71.8	266.6
MW-10	6.34	311	12.32	12.4	29.1	219.9
MW-11	6.41	306	13.57	28.8	38.5	216.5
MW-12	6.80	672	14.52	1.34	40.3	214.5
SW-1	7.40	144	10.86	15.7	90.9	188.5
SW-2	7.15	145	11.33	20	81.9	145.5

NOTES:

Data Collected by S+G personel, Madeline German and John Ferrington.

Table 3
 Detected Parameters
 Davidson County Phase 1 Lined Landfill
 March 31 and April 1, 2014

Parameter	MDL	SWSL	2L or GWP	2B	MW-1S	MW-3	MW-4	MW-5	MW-6	MW-7D	MW-8	MW-7S	MW-9A	MW-10	MW-11	MW-12	SW-1	SW-2
Inorganic Constituents																		
antimony	0.02	6	1 [§]	640	0.05 J	0.03 J	0.02 J	<0.02	0.05 J	<0.02	0.8 J	0.06 J	0.22 J	0.05 J	0.86 J	0.02 J	0.17 J	0.13 J
arsenic	0.05	10	10	10	0.44 J	0.19 J	0.24 J	0.08 J	0.13 J	0.25 J	0.63 J	0.42 J	0.47 J	0.32 J	0.42 J	0.42 J	0.73 J	0.56 J
barium	0.06	100	700	2000000	43.8 J	65.1 J	52.3 J	55.4 J	12.5 J	4.9 J	65.2 J	28.2 J	31.6 J	6.4 J	13.8 J	1.1 J	25.9 J	27.8 J
beryllium	0.03	1	4 [§]	6.5	<0.03	0.04 J	0.04 J	<0.03	<0.03	<0.03	0.16 J	0.12 J	0.04 J	0.09 J	0.12 J	<0.03	<0.03	<0.03
cadmium	0.05	1	2	2	<0.05	<0.05	0.08 J	0.09 J	0.21 J	<0.05	<0.05	0.05 J	<0.05	0.06 J	0.08 J	0.05 J	<0.05	<0.05
cobalt	0.02	10	1 [§]	270	0.2 J	1.2 J	1.1 J	0.14 J	0.04 J	0.03 J	4.5 J	1.5 J	1.3 J	0.74 J	1.3 J	0.16 J	0.65 J	0.80 J
copper	0.06	10	1000	7	0.65 J	4.6 J	6 J	0.49 J	<0.06	0.16 J	8.8 J	9.5 J	9.3 J	1.6 J	6.1 J	0.23 J	1.5 J	1.5 J
chromium, total	0.04	10	10	50	<0.04	0.53 J	2.3 J	<0.04	<0.04	<0.04	6 J	3.3 J	1.7 J	2 J	5.4 J	0.19 J	0.63 J	0.66 J
iron	13.6	300	300	1	227 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
manganese	0.42	50	50	NE	15 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
lead	0.02	10	15	25	0.16 J	0.3 J	1.3 J	0.08 J	0.03 J	0.83 J	4.3 J	1 J	1.1 J	0.38 J	0.97 J	0.03 J	0.44 J	0.44 J
nickel	0.45	50	100	88	1.7 J	1.5 J	1.6 J	<0.45	0.49 J	<0.45	3.7 J	2.2 J	4.1 J	1.5 J	3.6 J	1.4 J	0.86 J	0.89 J
selenium	0.06	10	20	5	1.4 J	0.44 J	0.28 J	0.35 J	0.44 J	0.43 J	0.75 J	0.35 J	1.1 J	0.64 J	0.89 J	0.90 J	0.48 J	0.40 J
thallium	0.02	5.5	0.28 [§]	0.47	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03 J	<0.02	<0.02	0.05 J	0.03 J	<0.02	<0.02	<0.02
vanadium	0.07	25	0.3 [§]	NE	2.5 J	8.9 J	7 J	3.5 J	0.26 J	0.6 J	19.6 J	9.8 J	7.8 J	6.9 J	14.1 J	5.3 J	1.9 J	2.1 J
zinc	0.47	10	1000	50	0.67 J	7.7 J	10	<0.47	1.1 J	0.74 J	13	8.3 J	8.9 J	3.2 J	6.2 J	0.99 J	3.0 J	2.5 J

Organic Constituents

Parameter	MDL	SWSL	2L	MW-4	MW-5	MW-10
acetone	9.06	100	6000	43.5 J	11.5 J	27.60 J

- SWSL - Solid Waste Section Quantitation Limits
- 2L - Groundwater Standards (15A NCAC 2L 0200)
- 2B - NCAC 2B Standard for Class C waters
- GWP - Groundwater Protection Standards (noted by §)
- MDL - Method Detection Limit
- Shading - Detection above 2L Standard
- Bold Letters - Constituents detected above SWSL
- J - Laboratory defined detection between MDL and SWSL limit
- <MDL - Not detected at or above MDL
- NA - Not analyzed
- NE - Not Established

Table units are presented in ug/l.

Lab data analysis by Environment 1, Inc. report dated 04/30/2014, Client ID#6038.

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Table 4
 Leachate Analytical Data
 Davidson County Phase 1 Lined Landfill
 March 31 and April 1, 2014

Parameter	Unit	Leachate
Antimony	ug/l	1.1 J
Arsenic	ug/l	1.3 J
Barium	ug/l	60.6 J
BOD	mg/l	7.9
Cobalt	ug/l	1.9 J
COD	mg/l	97
Copper	ug/l	5 J
Lead	ug/l	0.3 J
Nitrate Nitrogen as N	mg/l	0.5 J
Nickel	ug/l	11.5 J
Selenium	ug/l	0.94 J
Sulfate	mg/l	37.1 J
Total Chromium	ug/l	1.9 J
Total Phosphorus as P	mg/l	0.09
Vanadium	ug/l	4.7 J
Zinc	ug/l	3.7 J

NOTES:

J-values indicate the parameter was detected between the laboratory MDL and the SWSL. These are estimated concentrations.

Lab data analysis by Environment 1, Inc. report dated 04/30/2014, Client ID#6038.

Table 5
 Aquifer Conductivity and Velocity Calculations
 Davidson County Phase 1 Lined Landfill
 March 31 and April 1, 2014

Well Number	Aquifer	Conductivity (ft/day)	Conductivity (ft/min)	Assumed Porosity (n)	Gradient (I)	Velocity (ft/day)
MW-1S	Bedrock	0.14	9.72E-05	0.1	0.052	0.0724
MW-2	Bedrock	0.17	1.18E-04	0.1	DRY	-
MW-3	Unconsolidated	0.62	4.31E-04	0.2	0.045	0.1406
MW-4	Unconsolidated	1.31	9.10E-04	0.2	0.033	0.2143
MW-5	Unconsolidated	NA	NA	NA	0.034	NA
MW-6	Bedrock	0.02	1.39E-05	0.1	0.076	0.0152
MW-7S	Unconsolidated	0.38	2.64E-04	0.15	0.023	0.0591
MW-7D	Unconsolidated	NA	NA	NA	NA	NA
MW-8	Unconsolidated	0.57	3.96E-04	0.15	0.079	0.3018
MW-9A	Unconsolidated	2.65	1.84E-03	0.1	0.079	2.0988
MW-10	Unconsolidated	0.88	6.11E-04	0.2	0.037	0.1619
MW-11	Unconsolidated	4.13	2.87E-03	0.2	0.045	0.9386
MW-12	Unconsolidated	0.58	4.03E-04	0.2	0.011	0.0319

Notes: Velocity Calculated from $V=K*I/n$ where:
 V = velocity
 K = Hydraulic Conductivity
 I = Gradient
 n = Porosity
 Hydraulic Conductivity data from slug tests performed in 1994
 Porosity values assumed from Groundwater & Wells (Driscoll)
 Survey Data collected by Michael Green and Associates.
 Gradient calculated from Fall 2013 potentiometric surface.

NM - Not Measured
 NA - Not Available

Appendix A

Monitoring Well Information

**April 2014 – Groundwater Monitoring Report
Davidson County Phase 1 Lined Landfill
Solid Waste Permit No. 29-06**

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FIELD BOREHOLE LOG

BOREHOLE NUMBER:

MW-10

PROJECT NUMBER: 94012
 PROJECT NAME: DAVIDSON COUNTY
 LOCATION: LEXINGTON, NORTH CAROLINA
 DRILLING COMPANY: BORE AND CORE
 RIG TYPE & NUMBER: MOBILE B-53
 DRILLING METHOD: HOLLOW STEM AUGER AND AIR ROTARY
 WEATHER: SUNNY
 FIELD PARTY: KENNY MOSLEY
 GEOLOGIST: GRAHAM SIMMERMAN
 DATE BEGUN: 5/03/94

TOP OF CASING ELEVATION: 736.18
 TOTAL DEPTH: 88.5
 GROUND SURFACE ELEVATION: 735.01
 SHEET: 1 OF: 4

STATIC WATER LEVEL (8LS)	
WD=While Drilling AB=After Boring	
Depth (ft)	51.88 AB
Time	9:37
Date	05/04/94

DATE COMPLETED: 5/03/94

DEPTH	BLON COUNTS	SAMPLING METHOD	SAMPLE NUMBER	MOISTURE	CONSISTANCY	SAMPLE RECOVERY	CGI	LITHOLOGY DESCRIPTION	LITHOLOGY	WELL INSTALLATION
2.0										
1.0										
0.0										
1.0								CLAY AND SILT: with sand; white quartz and weathered feldspar; grades into light green weathered chlorite schist.		
2.0										
3.0	15	Ss	S1							
4.0	50/5									
5.0										
6.0										
7.0										
8.0										
9.0	26	Ss	S2					CLAY AND SILT: chlorite schist; light bluish green; some black stained vertical fractures; very dense; dry.		
10.0	50/4									
11.0										
12.0										
13.0										
14.0	42	Ss	S3					CLAY AND SILT: bluish gray green; weathered chlorite schist; with white feldspar (talcl) veins; some black to orange stained subvertical fractures.		
15.0	50/4									
16.0										
17.0										
18.0										
19.0	35	Ss	S4					CLAY AND SILT: weathered chlorite/white feldspar schist; horizontal to subvertical fractures; dry; very dense; auger refusal.		
20.0	50/4									
21.0										

FIELD BOREHOLE LOG

BOREHOLE NUMBER:

MW-1D

PROJECT NUMBER: 94012
 PROJECT NAME: DAVIDSON COUNTY
 LOCATION: LEXINGTON, NORTH CAROLINA
 DRILLING COMPANY: BORE AND CORE
 RIG TYPE & NUMBER: MOBILE B-53
 DRILLING METHOD: AIR ROTARY
 WEATHER: SUNNY
 FIELD PARTY: KENNY MOBLEY
 GEOLOGIST: GRAHAM SIMMERMAN
 DATE BEGUN: 5/03/94

TOP OF CASING ELEVATION: 736.18
 TOTAL DEPTH: 88.5
 GROUND SURFACE ELEVATION: 735.01
 SHEET: 2 OF 4

STATIC WATER LEVEL (BLS)	
HQ-White Drilling AB-After Boring	
Depth (ft)	51.88 AB
Time	9:37
Date	05/04/94

DATE COMPLETED: 5/03/94

DEPTH	BLD/COUNTS	SAMPLING METHOD	SAMPLE NUMBER	MOISTURE	CONSISTENCY	ORGANIC VAPOR	GRT	LITHOLOGY DESCRIPTION	LITHOLOGY	WELL INSTALLATION
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 30.0 31.0 32.0 33.0 34.0 35.0 36.0 37.0 38.0 39.0 40.0 41.0 42.0 43.0 44.0 45.0								SCHIST: chlorite/white feldspar schist; few horizontal to subvertical fractures.		

FIELD BOREHOLE LOG

BOREHOLE NUMBER:

MW-10

PROJECT NUMBER: 94012
 PROJECT NAME: DAVIDSON COUNTY
 LOCATION: LEXINGTON, NORTH CAROLINA
 DRILLING COMPANY: BORE AND CORE
 RIG TYPE & NUMBER: MOBILE B-53
 DRILLING METHOD: AIR ROTARY
 WEATHER: SUNNY
 FIELD PARTY: KENNY MDSLEY
 GEOLOGIST: GRAHAM SIMMERMAN
 DATE BEGUN: 5/03/94

TOP OF CASING ELEVATION: 736.18
 TOTAL DEPTH: 88.5
 GROUND SURFACE ELEVATION: 735.01
 SHEET: 3 OF: 4

STATIC WATER LEVEL (BLS)	
WD=While Drilling AB=After Boring	
Depth (Ft)	51.88 AB
Time	9:37
Date	05/04/94

DEPTH	BLD COUNTS	SAMPLING METHOD	SAMPLE NUMBER	MOISTURE	CONSISTANCY	ORGANIC VAPOR	CGI	LITHOLOGY DESCRIPTION	LITHOLOGY	WELL INSTALLATION
45.0 46.0 47.0 48.0 49.0 50.0 51.0 52.0 53.0 54.0 55.0 56.0 57.0 58.0 59.0 60.0 61.0 62.0 63.0 64.0 65.0 66.0 67.0 68.0								SCHIST: chlorite/white feldspar schist; few horizontal to subvertical fractures.		

FIELD BOREHOLE LOG

BOREHOLE NUMBER:

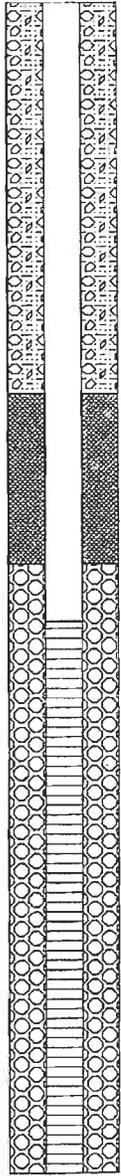
MW-10

PROJECT NUMBER: 94012
 PROJECT NAME: DAVIDSON COUNTY
 LOCATION: LEXINGTON, NORTH CAROLINA
 DRILLING COMPANY: BORE AND CORE
 RIG TYPE & NUMBER: MOBILE B-53
 DRILLING METHOD: AIR ROTARY
 WEATHER: SUNNY
 FIELD PARTY: KENNY MOSLEY
 GEOLOGIST: GRAHAM SIMPERMAN
 DATE BEGUN: 5/03/94

TOP OF CASING ELEVATION: 736.18
 TOTAL DEPTH: 88.5
 GROUND SURFACE ELEVATION: 735.01
 SHEET: 4 OF: 4

STATIC WATER LEVEL (BLS)	
WD=While Drilling AB=After Boring	
Depth (ft)	51.88 AB
Time	9:37
Date	05/04/94

DATE COMPLETED: 5/03/94

DEPTH	BLOW COUNTS	SAMPLING METHOD	SAMPLE NUMBER	MOISTURE	CONSISTANCY	ORGANIC VAPOR	GGI	LITHOLOGY DESCRIPTION	LITHOLOGY	WELL INSTALLATION
68.0								<p>SCHIST: chlorite/white feldspar schist; few horizontal to subvertical fractures.</p>		
69.0										
70.0										
71.0										
72.0										
73.0										
74.0										
75.0										
76.0										
77.0										
78.0										
79.0										
80.0										
81.0										
82.0										
83.0										
84.0										
85.0										
86.0										
87.0										
88.0										

FIELD BOREHOLE LOG

BOREHOLE NUMBER:

MW-2

PROJECT NUMBER: 94012
 PROJECT NAME: DAVIDSON COUNTY
 LOCATION: LEXINGTON, NORTH CAROLINA
 DRILLING COMPANY: BORE AND CORE
 RIG TYPE & NUMBER: MOBILE B-53
 DRILLING METHOD: HOLLOW STEM AUGER
 WEATHER: SUNNY
 FIELD PARTY: KENNY MOSLEY
 GEOLOGIST: GRAHAM BIMMERMAN
 DATE BEGUN: 5/5/94

TOP OF CASING ELEVATION: -
 TOTAL DEPTH: 39.0
 GROUND SURFACE ELEVATION: -
 SHEET: 1 OF: 2

STATIC WATER LEVEL (BLS)		
WD=While Drilling AB=After Boring		
Depth(ft)		
Time		
Date		

DATE COMPLETED: 5/5/94

DEPTH	BLOG COUNTS	SAMPLING METHOD	SAMPLE NUMBER	MOISTURE	CONSISTENCY	SAMPLE RECOVERY	CGI	LITHOLOGY DESCRIPTION	LITHOLOGY	WELL INSTALLATION
2.0 + 1.0 + 0.0 + 1.0 + 2.0 + 3.0 + 4.0 + 5.0 + 6.0 + 7.0 + 8.0 + 9.0 + 10.0 + 11.0 + 12.0 + 13.0 + 14.0 + 15.0 + 16.0 + 17.0 + 18.0 + 19.0 + 20.0 +								SAND AND SILT: brown; fine grained. CLAY AND SILT AND SAND: brown to green; fine grained. SAND AND SILT: brown green; fine grained.		
	6 6 7	Ss	S1							
	4 6 7	Ss	S2							
	11 16 16	Ss	S3							
	14 21 22	Ss	S4							

FIELD BOREHOLE LOG

BOREHOLE NUMBER

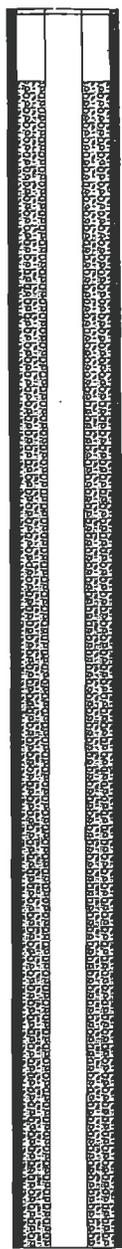
MW-6D

PROJECT NUMBER 94012
 PROJECT NAME DAVIDSON COUNTY
 LOCATION LEXINGTON, NORTH CAROLINA
 DRILLING COMPANY: BORE AND CORE
 RIG TYPE & NUMBER MOBILE 8-53
 DRILLING METHOD: HOLLOW STEM AUGER
 WEATHER: SUNNY
 FIELD PARTY: KENNY MOSLEY
 GEOLOGIST: GRAHAM SIMMERMAN
 DATE BEGUN: 5/04/94

TOP OF CASING ELEVATION 694.13
 TOTAL DEPTH: 68.5
 GROUND SURFACE ELEVATION 692.79
 SHEET: 1 DF: 3

STATIC WATER LEVEL (BLS)		
WD=While Drilling AB=After Boring		
Depth (ft)		
Time		
Date		

DATE COMPLETED: 5/04/94

DEPTH	BLOW COUNTS	SAMPLING METHOD	SAMPLE NUMBER	MOISTURE	CONSISTANCY	SAMPLE RECOVERY	DRILL METHOD	LITHOLOGY DESCRIPTION	DEPTH	LITHOLOGY	WELL INSTALLATION
1.0									1.0		
0.0								CLAY AND SILT AND SAND. Fill.	0.0		
1.0								CLAY AND SAND coarse sand, light tan brown, soft, moist; fill; some roots	1.0		
2.0									2.0		
3.0									3.0		
4.0	5	Ss	S1						4.0		
5.0	7								5.0		
6.0	7								6.0		
7.0									7.0		
8.0									8.0		
9.0	5	Ss	S2					CLAY AND SILT: tan brown to orange red; interbedded with light tan coarse sandy clay, with quartz and feldspar; soft, moist; medium dense.	9.0		
10.0	6								10.0		
11.0	9								11.0		
12.0									12.0		
13.0									13.0		
14.0	6	Ss	S3					CLAY AND SILT light tan, interbedded with orange coarse sandy clay, some greenstone and wood fragments; stiff.	14.0		
15.0	10								15.0		
16.0	12								16.0		
17.0									17.0		
18.0									18.0		
19.0	9	Ss	S4					CLAY AND SILT. light tan, interbedded with orange coarse sandy clay, some greenstone fragments, stiff.	19.0		
20.0	10								20.0		
21.0	9								21.0		

FIELD BOREHOLE LOG

BOREHOLE NUMBER:

MW-6D

PROJECT NUMBER: 94012
 PROJECT NAME: DAVIDSON COUNTY
 LOCATION: LEXINGTON, NORTH CAROLINA
 DRILLING COMPANY: BORE AND CORE
 RIG TYPE & NUMBER: MOBILE 8-53
 DRILLING METHOD: HOLLOW STEM AUGER
 WEATHER: SUNNY
 FIELD PARTY: KENNY MOSLEY
 GEOLOGIST: GRAHAM SIMMERMAN
 DATE BEGUN: 5/04/94

TOP OF CASING ELEVATION: 694.13
 TOTAL DEPTH: 68.5
 GROUND SURFACE ELEVATION: 692.79
 SHEET: 3 OF 3

STATIC WATER LEVEL (BLS)		
WO=While Drilling AB=After Boring		
Depth (ft)		
Time		
Date		

DEPTH	BLOW COUNTS	SAMPLING METHOD	SAMPLE NUMBER	MOISTURE	CONSISTANCY	SAMPLE RECOVERY	DRILL METHOD	LITHOLOGY DESCRIPTION	DEPTH	LITHOLOGY	WELL INSTALLATION
45.0								GRANITE GNEISS bedrock.	45.0		
46.0									46.0		
47.0									47.0		
48.0									48.0		
49.0									49.0		
50.0									50.0		
51.0									51.0		
52.0									52.0		
53.0									53.0		
54.0									54.0		
55.0									55.0		
56.0									56.0		
57.0									57.0		
58.0									58.0		
59.0									59.0		
60.0									60.0		
61.0									61.0		
62.0									62.0		
63.0									63.0		
64.0								64.0			
65.0								65.0			
66.0								66.0			
67.0								67.0			
68.0								68.0			
69.0								69.0			

FIELD BOREHOLE LOG

BOREHOLE NUMBER:

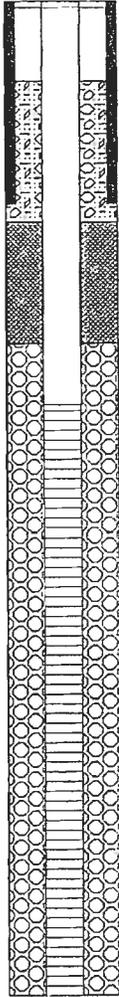
MW-8

PROJECT NUMBER: 94012
 PROJECT NAME: DAVIDSON COUNTY
 LOCATION: LEXINGTON, NORTH CAROLINA
 DRILLING COMPANY: BORE AND CORE
 RIG TYPE & NUMBER: MOBILE B-53
 DRILLING METHOD: HOLLOW STEM AUGER
 WEATHER: SUNNY
 FIELD PARTY: KENNY MOSLEY
 GEOLOGIST: GRAHAM SIMMERMAN
 DATE BEGUN: 4/27/94

TOP OF CASING ELEVATION: 661.16
 TOTAL DEPTH: 15.0
 GROUND SURFACE ELEVATION: 659.83
 SHEET: 1 OF: 1

STATIC WATER LEVEL (BLS)	
WD=While Drilling AB=After Boring	
Depth (ft)	6.34 AB
Time	9:37
Date	04/28/94

DATE COMPLETED: 4/27/94

DEPTH	BLOW COUNTS	SAMPLING METHOD	SAMPLE NUMBER	MOISTURE	CONSISTENCY	ORGANIC VAPOR	CGI	LITHOLOGY DESCRIPTION	LITHOLOGY	WELL INSTALLATION
2.0 1.0 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0								CLAY AND SILT: with medium to coarse sand; engineered fill (nine inches thick); numerous root fragments; mottled iron staining; wetland soil; dark grayish brown.		
	7 4 5	Ss	S1					CLAY AND SAND AND SILT: sand is med. to coarse blue quartz; angular; some reddish orange sandy clay; moist; med. dense.		
	6 4 4	Ss	S2		W			CLAY AND SILT: light bluish green with tan silty clay; some iron staining; slight relict chlorite/feldspar schist fabric.		
	10 10 9	Ss	S3					CLAY AND SAND: relict granite texture; quartz; feldspar; equigranular; moist.		

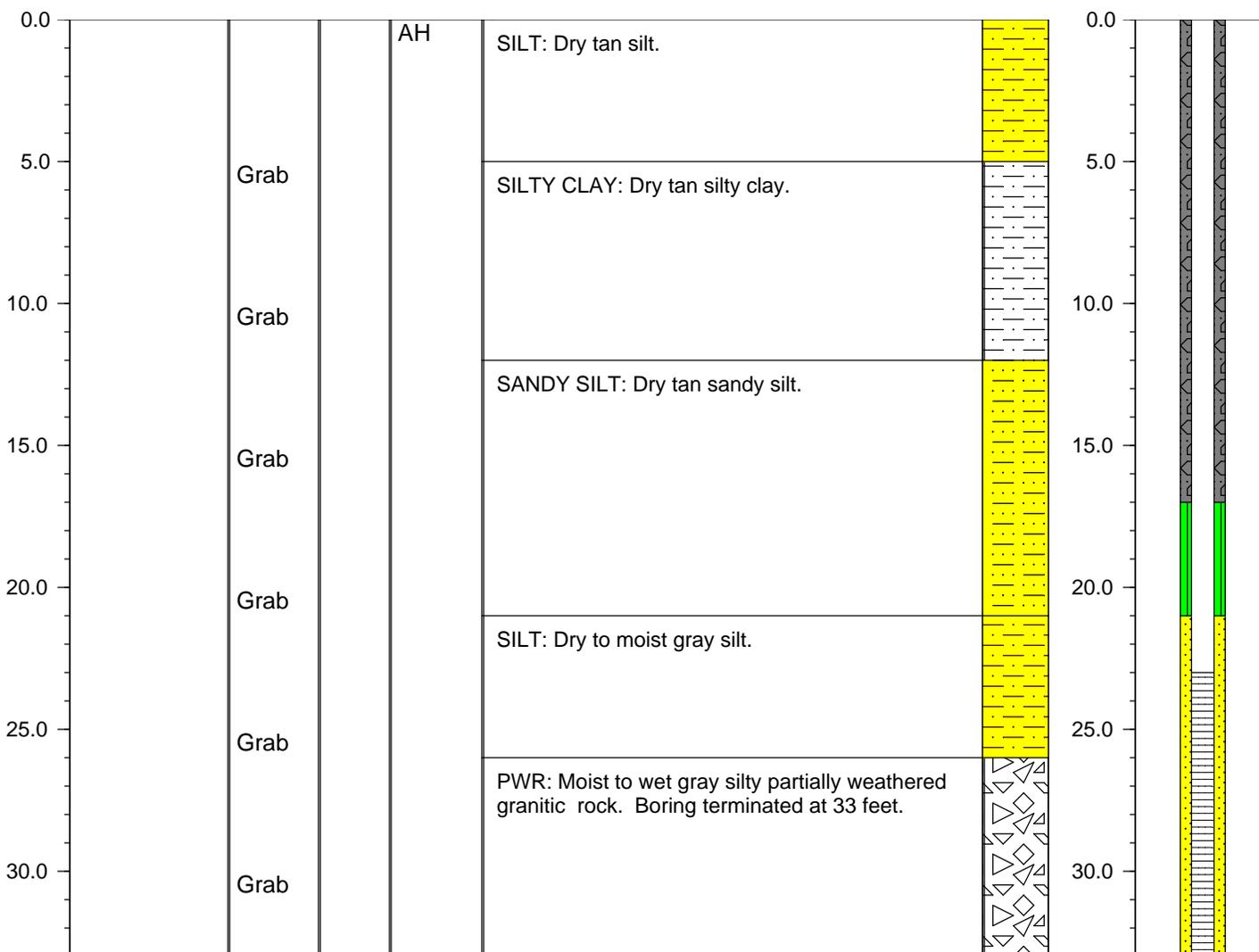


PROJECT NAME: **Davidson Co Phase 1 Landfill**
LOCATION: **Davidson County**
DRILLING CO: **Geologic Explorations**
DRILLING METHOD: **AH**
FIELD PARTY: **Johnny Burr**
GEOLOGIST: **Lindsay Quant**
DATE BEGUN: **11/11/10** COMPLETED: **11/11/10**

TOTAL DEPTH: **33**
TOP OF CASING ELEV.: **GROUND ELEV.: 686.32**
NORTHING: **764126.597** EASTING: **1649351.338**

STATIC WATER LEVEL (BLS)		
Depth (ft)		
Time		
Date		

DEPTH Feet	BLOW COUNT Per 6"	SAMPLING METHOD	RECOVERY Inches	DRILL METHOD	DESCRIPTION	LITHOLOGY	DEPTH Feet	WELL INSTALLATION
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Appendix B

Field Data Sheets

**April 2014 – Groundwater Monitoring Report
Davidson County Phase 1 Lined Landfill
NC Solid Waste Permit No. 29-06**

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This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVDO PHASE I

Date: 3/31/14

Well ID: MW-15

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	-	
B.	Vicinity is free of potential contaminants.	-	
C.	Dead trees, etc. not in danger of falling and damaging wells.	-	
D.	Well is in the same location as on field maps.	-	
E.			
Comments/ items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	-	
B.	Steel case is present and upright.	-	
C.	Steel case is not movable and cemented in.	-	
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	-	
E.	Well tag is present with pertinent information.	-	
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	-	
G.	No evidence of tampering is present.	-	
H.	Lock operates properly.		-
I.			
Comments/ items addressed or to be addressed:			
NO LOCK			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	-	
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	-	
C.	Riser is not loose/ easily moved.	-	
D.	Riser does not appear cracked, broken, or brittle.	-	
E.	No visual sign of external contamination entering well through riser.	-	
F.			
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVIDCO PHASE 1

Date: 3/31/14

Well ID: MW-2

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	/	
B.	Vicinity is free of potential contaminants.	/	
C.	Dead trees, etc. not in danger of falling and damaging wells.	/	
D.	Well is in the same location as on field maps.	/	
E.			
Comments/ items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	/	
B.	Steel case is present and upright.	/	
C.	Steel case is not movable and cemented in.	/	
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	/	
E.	Well tag is present with pertinent information.	/	
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	/	
G.	No evidence of tampering is present.	/	
H.	Lock operates properly.		/
I.			
Comments/ Items addressed or to be addressed:			
NO LOCK			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	/	
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	/	
C.	Riser is not loose/ easily moved.	/	
D.	Riser does not appear cracked, broken, or brittle.	/	
E.	No visual sign of external contamination entering well through riser.	/	
F.			
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVCO PHASE 1

Date: 3/31/14

Well ID: MW-3

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Vicinity is free of potential contaminants.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Dead trees, etc. not in danger of falling and damaging wells.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Well is in the same location as on field maps.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.		<input type="checkbox"/>	<input type="checkbox"/>
Comments/ items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Steel case is present and upright.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Steel case is not movable and cemented in.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	Well tag is present with pertinent information.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G.	No evidence of tampering is present.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
H.	Lock operates properly.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I.		<input type="checkbox"/>	<input type="checkbox"/>
Comments/ items addressed or to be addressed:			
<u>NO LOCK</u>			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Riser is not loose/ easily moved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Riser does not appear cracked, broken, or brittle.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	No visual sign of external contamination entering well through riser.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F.		<input type="checkbox"/>	<input type="checkbox"/>
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVIDS PHASE 1

Date: 3/31/14

Well ID: MW-4

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	-	
B.	Vicinity is free of potential contaminants.	-	
C.	Dead trees, etc. not in danger of falling and damaging wells.	-	
D.	Well is in the same location as on field maps.	-	
E.			
Comments/ items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	-	
B.	Steel case is present and upright.	-	
C.	Steel case is not movable and cemented in.	-	
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	-	
E.	Well tag is present with pertinent information.	-	
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	-	
G.	No evidence of tampering is present.	-	
H.	Lock operates properly.		-
I.			
Comments/ items addressed or to be addressed:			
NO LOCK			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	-	
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	-	
C.	Riser is not loose/ easily moved.	-	
D.	Riser does not appear cracked, broken, or brittle.	-	
E.	No visual sign of external contamination entering well through riser.	-	
F.			
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVCO PHASE 1

Date: 3/31/14

Well ID: MW 5

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Vicinity is free of potential contaminants.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Dead trees, etc. not in danger of falling and damaging wells.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Well is in the same location as on field maps.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.		<input type="checkbox"/>	<input type="checkbox"/>
Comments/ items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Steel case is present and upright.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Steel case is not movable and cemented in.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	Well tag is present with pertinent information.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G.	No evidence of tampering is present.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
H.	Lock operates properly.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I.		<input type="checkbox"/>	<input type="checkbox"/>
Comments/ items addressed or to be addressed:			
<u>NO LOCK</u>			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Riser is not loose/ easily moved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Riser does not appear cracked, broken, or brittle.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	No visual sign of external contamination entering well through riser.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F.		<input type="checkbox"/>	<input type="checkbox"/>
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVDO PHASE 1

Date: 3/31/14

Well ID: MW-6

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	—	
B.	Vicinity is free of potential contaminants.	—	
C.	Dead trees, etc. not in danger of falling and damaging wells.	—	
D.	Well is in the same location as on field maps.	—	
E.			
Comments/ items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	—	
B.	Steel case is present and upright.	—	
C.	Steel case is not movable and cemented in.	—	
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	—	
E.	Well tag is present with pertinent information.	—	
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	—	
G.	No evidence of tampering is present.	—	
H.	Lock operates properly.		—
I.			
Comments/ items addressed or to be addressed:			
NO LOCK			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	—	
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	—	
C.	Riser is not loose/ easily moved.	—	
D.	Riser does not appear cracked, broken, or brittle.	—	
E.	No visual sign of external contamination entering well through riser.	—	
F.			
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVIDLO PHASE I

Date: 3/31/14

Well ID: MW-7S

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

	YES	NO
1. Well Vicinity		
A. Well is assessable and surrounding area is safe for employees.	-	
B. Vicinity is free of potential contaminants.	-	
C. Dead trees, etc. not in danger of falling and damaging wells.	-	
D. Well is in the same location as on field maps.	-	
E.		
Comments/ items addressed or to be addressed:		

	YES	NO
2. Concrete Apron and Steel Case		
A. Concrete apron is present and in good condition.	-	
B. Steel case is present and upright.	-	
C. Steel case is not movable and cemented in.	-	
D. Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.		-
E. Well tag is present with pertinent information.	-	
F. Well numbers are prominently displayed (Reflective address numbers, etc.).	-	
G. No evidence of tampering is present.	-	
H. Lock operates properly.		-
I.		
Comments/ items addressed or to be addressed: <p style="text-align: center;">WELL LOOKS TO BE RUN OVER</p> <p style="text-align: center;">NO LOCK</p>		

	YES	NO
3. PVC Riser		
A. Monitoring cap is present and provides a tight seal.	-	
B. Riser is of appropriate height (has not been cut off too low within the steel case).	-	
C. Riser is not loose/ easily moved.	-	
D. Riser does not appear cracked, broken, or brittle.	-	
E. No visual sign of external contamination entering well through riser.	-	
F.		
Comments/ items addressed or to be addressed:		

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVCO PHASE 1

Date: 3/31/14

Well ID: MW-7D

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	-	
B.	Vicinity is free of potential contaminants.	-	
C.	Dead trees, etc. not in danger of falling and damaging wells.	-	
D.	Well is in the same location as on field maps.	-	
E.			
Comments/ items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	-	
B.	Steel case is present and upright.	-	
C.	Steel case is not movable and cemented in.	-	
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	-	
E.	Well tag is present with pertinent information.	-	
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	-	
G.	No evidence of tampering is present.	-	
H.	Lock operates properly.		-
I.			
Comments/ items addressed or to be addressed:			
NO LOCK			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	-	
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	-	
C.	Riser is not loose/ easily moved.	-	
D.	Riser does not appear cracked, broken, or brittle.	-	
E.	No visual sign of external contamination entering well through riser.	-	
F.			
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVCO PHASE 1

Date: 3/31/14

Well ID: MW - 8

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Vicinity is free of potential contaminants.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Dead trees, etc. not in danger of falling and damaging wells.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Well is in the same location as on field maps.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.		<input type="checkbox"/>	<input type="checkbox"/>
Comments/ Items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Steel case is present and upright.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Steel case is not movable and cemented in.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	<input type="checkbox"/>	<input type="checkbox"/>
E.	Well tag is present with pertinent information.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G.	No evidence of tampering is present.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
H.	Lock operates properly.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I.		<input type="checkbox"/>	<input type="checkbox"/>
Comments/ items addressed or to be addressed:			
NO LOCK			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C.	Riser is not loose/ easily moved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D.	Riser does not appear cracked, broken, or brittle.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E.	No visual sign of external contamination entering well through riser.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F.		<input type="checkbox"/>	<input type="checkbox"/>
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVCO PHASE 1

Date: 3/31/14

Well ID: MW-9A

Initials: JPF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

	YES	NO
1. Well Vicinity		
A. Well is assessable and surrounding area is safe for employees.	-	
B. Vicinity is free of potential contaminants.	-	
C. Dead trees, etc. not in danger of falling and damaging wells.	-	
D. Well is in the same location as on field maps.	-	
E.		
Comments/ items addressed or to be addressed:		

	YES	NO
2. Concrete Apron and Steel Case		
A. Concrete apron is present and in good condition.	-	
B. Steel case is present and upright.	-	
C. Steel case is not movable and cemented in.	-	
D. Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	-	
E. Well tag is present with pertinent information.	-	
F. Well numbers are prominently displayed (Reflective address numbers, etc.).	-	
G. No evidence of tampering is present.	-	
H. Lock operates properly.		-
I.		
Comments/ items addressed or to be addressed:		
NO LOCK		

	YES	NO
3. PVC Riser		
A. Monitoring cap is present and provides a tight seal.	-	
B. Riser is of appropriate height (has not been cut off too low within the steel case).	-	
C. Riser is not loose/ easily moved.	-	
D. Riser does not appear cracked, broken, or brittle.	-	
E. No visual sign of external contamination entering well through riser.	-	
F.		
Comments/ items addressed or to be addressed:		

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVCO PHASE 1

Date: 3/31/14

Well ID: MW-10

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	-	
B.	Vicinity is free of potential contaminants.	-	
C.	Dead trees, etc. not in danger of falling and damaging wells.	-	
D.	Well is in the same location as on field maps.	-	
E.			
Comments/ items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	-	
B.	Steel case is present and upright.	-	
C.	Steel case is not movable and cemented in.	-	
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	-	
E.	Well tag is present with pertinent information.	-	
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	-	
G.	No evidence of tampering is present.	-	
H.	Lock operates properly.		-
I.			
Comments/ items addressed or to be addressed:			
NO LOCK			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	-	
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	-	
C.	Riser is not loose/ easily moved.	-	
D.	Riser does not appear cracked, broken, or brittle.	-	
E.	No visual sign of external contamination entering well through riser.	-	
F.			
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAJDCO PHASE 1

Date: 3/31/14

Well ID: MW-11

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

		YES	NO
1. Well Vicinity			
A.	Well is assessable and surrounding area is safe for employees.	-	
B.	Vicinity is free of potential contaminants.	-	
C.	Dead trees, etc. not in danger of falling and damaging wells.	-	
D.	Well is in the same location as on field maps.	-	
E.			
Comments/ items addressed or to be addressed:			

		YES	NO
2. Concrete Apron and Steel Case			
A.	Concrete apron is present and in good condition.	-	
B.	Steel case is present and upright.	-	
C.	Steel case is not movable and cemented in.	-	
D.	Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	-	
E.	Well tag is present with pertinent information.	-	
F.	Well numbers are prominently displayed (Reflective address numbers, etc.).	-	
G.	No evidence of tampering is present.	-	
H.	Lock operates properly.		-
I.			
Comments/ Items addressed or to be addressed:			
NO LOCK			

		YES	NO
3. PVC Riser			
A.	Monitoring cap is present and provides a tight seal.	-	
B.	Riser is of appropriate height (has not been cut off too low within the steel case).	-	
C.	Riser is not loose/ easily moved.	-	
D.	Riser does not appear cracked, broken, or brittle.	-	
E.	No visual sign of external contamination entering well through riser.	-	
F.			
Comments/ items addressed or to be addressed:			

This checklist is provided to inform our clients about the health and maintenance of their groundwater monitoring wells. This checklist provides no information pertaining to groundwater quality, but focuses on the physical characteristics of the well and its vicinity.

Site: DAVDO PHASE 1

Date: 3/31/14

Well ID: MW-12

Initials: JRF

Please mark the appropriate box for the following areas of concern. If you answer NO, please explain in the comment box.

	YES	NO
1. Well Vicinity		
A. Well is assessable and surrounding area is safe for employees.	-	
B. Vicinity is free of potential contaminants.	-	
C. Dead trees, etc. not in danger of falling and damaging wells.	-	
D. Well is in the same location as on field maps.	-	
E.		
Comments/ items addressed or to be addressed:		

	YES	NO
2. Concrete Apron and Steel Case		
A. Concrete apron is present and in good condition.	-	
B. Steel case is present and upright.	-	
C. Steel case is not movable and cemented in.	-	
D. Steel case lid opens and closes correctly with no gaps. Lock can be easily applied.	-	
E. Well tag is present with pertinent information.	-	
F. Well numbers are prominently displayed (Reflective address numbers, etc.).	-	
G. No evidence of tampering is present.	-	
H. Lock operates properly.		-
I.		
Comments/ items addressed or to be addressed:		
NO LOCK		

	YES	NO
3. PVC Riser		
A. Monitoring cap is present and provides a tight seal.	-	
B. Riser is of appropriate height (has not been cut off too low within the steel case).	-	
C. Riser is not loose/ easily moved.	-	
D. Riser does not appear cracked, broken, or brittle.	-	
E. No visual sign of external contamination entering well through riser.	-	
F.		
Comments/ items addressed or to be addressed:		

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Appendix C

Laboratory Analytical Report

**April 2014 Groundwater Monitoring Report
Davidson County Phase 1 Lined Landfill
NC Solid Waste Permit No. 29-06**

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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#: 6038

DAVIDSON COUNTY (LINED)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH ,NC 27603

DATE COLLECTED: 04/01/14
DATE REPORTED : 04/30/14

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-1S	MW-3	MW-4	MW-5	MW-6	Analysis			
								Date	Analyst Code		
Total Alkalinity (to pH 4.5), mg/l	1.0	1.0	256					04/03/14TRB	2320B-97		
Chloride, mg/l	5.0	5.0	65					04/07/14CMC	4500CLB-97		
Total Dissolved Residue, mg/l	1.0	1.0	470					04/07/14LW	2540C-97		
Sulfate, mg/l	5.0	250.0	31.2 J					04/04/14TRB	4500SO42E97		
Antimony, ug/l	0.02	6.0	0.05 J	0.03 J	0.02 J	---	U	0.05 J	04/20/14LFW	EPA200.8	
Arsenic, ug/l	0.05	10.0	0.44 J	0.19 J	0.24 J	0.08 J	0.13 J	04/20/14LFW	EPA200.8		
Barium, ug/l	0.06	100.0	43.8 J	65.1 J	52.3 J	55.4 J	12.5 J	04/20/14LFW	EPA200.8		
Beryllium, ug/l	0.03	1.0	---	U	0.04 J	0.04 J	---	U	04/20/14LFW	EPA200.8	
Cadmium, ug/l	0.05	1.0	---	U	---	U	0.08 J	0.09 J	0.21 J	04/20/14LFW	EPA200.8
Cobalt, ug/l	0.02	10.0	0.20 J	1.2 J	1.1 J	0.14 J	0.04 J	04/20/14LFW	EPA200.8		
Copper, ug/l	0.06	10.0	0.65 J	4.6 J	6.0 J	0.49 J	---	U	04/20/14LFW	EPA200.8	
Total Chromium, ug/l	0.04	10.0	---	U	0.53 J	2.3 J	---	U	04/20/14LFW	EPA200.8	
Iron, ug/l	13.6	300.0	227 J					04/24/14MTM	3111B-99		
Manganese, ug/l	0.42	50.0	15 J					04/25/14LFW	EPA200.7		
Lead, ug/l	0.02	10.0	0.16 J	0.30 J	1.3 J	0.08 J	0.03 J	04/20/14LFW	EPA200.8		
Mercury, ug/l	0.01	0.20	---	U				04/15/14MTM	245.1 R3-94		
Nickel, ug/l	0.45	50.0	1.7 J	1.5 J	1.6 J	---	U	0.49 J	04/20/14LFW	EPA200.8	
Selenium, ug/l	0.06	10.0	1.4 J	0.44 J	0.28 J	0.35 J	0.44 J	04/20/14LFW	EPA200.8		
Silver, ug/l	0.03	10.0	---	U	---	U	---	U	04/20/14LFW	EPA200.8	
Thallium, ug/l	0.02	5.5	---	U	---	U	---	U	04/20/14LFW	EPA200.8	
Vanadium, ug/l	0.07	25.0	2.5 J	8.9 J	7.0 J	3.5 J	0.26 J	04/20/14LFW	EPA200.8		
Zinc, ug/l	0.47	10.0	0.67 J	7.7 J	10	---	U	1.1 J	04/20/14LFW	EPA200.8	

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

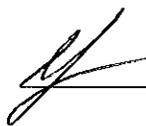
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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

ID#: 6038

DAVIDSON COUNTY (LINED)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH ,NC 27603

DATE COLLECTED: 04/01/14
DATE REPORTED : 04/30/14

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-7D	MW-8	MW-7S	MW-9A	Analysis		Method
							Date	Analyst	Code
Antimony, ug/l	0.02	6.0	--- U	0.80 J	0.06 J	0.22 J	04/20/14L	FJ	EPA200.8
Arsenic, ug/l	0.05	10.0	0.25 J	0.63 J	0.42 J	0.47 J	04/20/14L	FJ	EPA200.8
Barium, ug/l	0.06	100.0	4.9 J	65.2 J	28.2 J	31.6 J	04/20/14L	FJ	EPA200.8
Beryllium, ug/l	0.03	1.0	--- U	0.16 J	0.12 J	0.04 J	04/20/14L	FJ	EPA200.8
Cadmium, ug/l	0.05	1.0	--- U	--- U	0.05 J	--- U	04/20/14L	FJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.03 J	4.5 J	1.5 J	1.3 J	04/20/14L	FJ	EPA200.8
Copper, ug/l	0.06	10.0	0.16 J	8.8 J	9.5 J	9.3 J	04/20/14L	FJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	--- U	6.0 J	3.3 J	1.7 J	04/20/14L	FJ	EPA200.8
Lead, ug/l	0.02	10.0	0.83 J	4.3 J	1.0 J	1.1 J	04/20/14L	FJ	EPA200.8
Nickel, ug/l	0.45	50.0	--- U	3.7 J	2.2 J	4.1 J	04/20/14L	FJ	EPA200.8
Selenium, ug/l	0.06	10.0	0.43 J	0.75 J	0.35 J	1.1 J	04/20/14L	FJ	EPA200.8
Silver, ug/l	0.03	10.0	--- U	--- U	--- U	--- U	04/20/14L	FJ	EPA200.8
Thallium, ug/l	0.02	5.5	--- U	0.03 J	--- U	--- U	04/20/14L	FJ	EPA200.8
Vanadium, ug/l	0.07	25.0	0.60 J	19.6 J	9.8 J	7.8 J	04/20/14L	FJ	EPA200.8
Zinc, ug/l	0.47	10.0	0.74 J	13	8.3 J	8.9 J	04/20/14L	FJ	EPA200.8

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

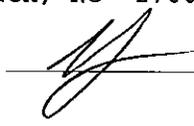
PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: DAVIDSON COUNTY (LINED)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH, NC 27603

CLIENT ID: 6038

ANALYST: MO
DATE COLLECTED: 04/01/14
DATE ANALYZED: 04/09/14
DATE REPORTED: 04/30/14

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B R1 (96)

PARAMETERS, ug/l	MDL	SWSL	MW-18	MW-3	MW-4	MW-5	MW-6
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- 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	43.50 J	11.50 J	--- 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	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- 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	--- U	--- U	--- U	--- 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-Dichloropropane	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	--- U	--- 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	--- U	--- U	--- U	--- 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	--- U	--- 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	--- U	--- 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

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

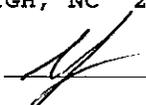
PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: DAVIDSON COUNTY (LINED)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH, NC 27603

CLIENT ID: 6038

ANALYST: MO
DATE COLLECTED: 04/01/14
DATE ANALYZED: 04/09/14
DATE REPORTED: 04/30/14

Page: 2

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	MW-7D	MW-8	MW-7S	MW-9A
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

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

Environment 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6038 Week: 12

DAVIDSON COUNTY (LINED)
 MS. JOAN SMYTH
 SMITH GARDNER, INC.
 14 NORTH BOYLAN AVE.
 RALEIGH NC 27603

(919) 828-0577

CHAIN OF CUSTODY RECORD

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Alkalinity	Chloride	TDS	Sulfate	Metals	EPA 8260B	8260 Dup. 1	8260 Dup. 2	CHLORINE NEUTRALIZED AT COLLECTION
	DATE	TIME				CHLORINE	UV	NONE									
MW-1S	4/1	10:30A			8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
MW-2		7:55A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
MW-3		9:45A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
MW-4		9:35A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
MW-5		9:30A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
MW-6		9:00A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
MW-7D		9:12A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
MW-8		8:50A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
MW-7S		9:16A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
MW-9A		8:40A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
RELINQUISHED BY (SIG.) (SAMPLER)		DATE/TIME	RECEIVED BY (SIG.)		DATE/TIME	COMMENTS:											
<i>[Signature]</i>		04/02/14	<i>[Signature]</i>		4/2/14	No metals or residuals at this site. Per Madeline Cannon - site is dry. DD 4-3-14											
RELINQUISHED BY (SIG.)		DATE/TIME	RECEIVED BY (SIG.)		DATE/TIME	SAMPLER MUST PLACE A "C" FOR COMPOSITE SAMPLE OR A "G" FOR GRAB SAMPLE IN THE BLOCKS ABOVE FOR EACH PARAMETER REQUESTED.											
						CLASSIFICATION: <input type="checkbox"/> WASTEWATER (NPDES) <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> DWQ/GW <input checked="" type="checkbox"/> SOLID WASTE SECTION CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY SAMPLES COLLECTED BY: <u>Y</u> (Please Print) SAMPLES RECEIVED IN LAB AT <u>6-2</u> °C											

PLEASE READ Instructions for completing this form on the reverse side.

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#: 6038 A

DAVIDSON COUNTY (LINED)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH, NC 27603

DATE COLLECTED: 04/02/14

DATE REPORTED : 04/30/14

REVIEWED BY: 

PARAMETERS	MDL	Leachate		Analysis		Method
		SWSL		Date	Analyst	Code
BOD, mg/l	2.0	2.0	7.9	04/03/14TRB	5210B-01	
COD, mg/l	20.0	20.0	97	04/07/14TRB	H8000-79	
Nitrate Nitrogen as N, mg/l	0.03	10.0	0.50 J	04/04/14ANO	353.2 R2-93	
Total Phosphorus as P, mg/l	0.04	0.04	0.09	04/07/14ALB	365.4-74	
Sulfate, mg/l	5.0	250.0	37.1 J	04/04/14TRB	4500S042E97	
Antimony, ug/l	0.02	6.0	1.1 J	04/20/14LFFJ	EPA200.8	
Arsenic, ug/l	0.05	10.0	1.3 J	04/20/14LFFJ	EPA200.8	
Barium, ug/l	0.06	100.0	60.6 J	04/20/14LFFJ	EPA200.8	
Beryllium, ug/l	0.03	1.0	--- U	04/20/14LFFJ	EPA200.8	
Cadmium, ug/l	0.05	1.0	--- U	04/20/14LFFJ	EPA200.8	
Cobalt, ug/l	0.02	10.0	1.9 J	04/20/14LFFJ	EPA200.8	
Copper, ug/l	0.06	10.0	5.0 J	04/20/14LFFJ	EPA200.8	
Total Chromium, ug/l	0.04	10.0	1.9 J	04/20/14LFFJ	EPA200.8	
Lead, ug/l	0.02	10.0	0.30 J	04/20/14LFFJ	EPA200.8	
Nickel, ug/l	0.45	50.0	11.5 J	04/20/14LFFJ	EPA200.8	
Selenium, ug/l	0.06	10.0	0.94 J	04/28/14LFFJ	EPA200.8	
Silver, ug/l	0.03	10.0	--- U	04/20/14LFFJ	EPA200.8	
Thallium, ug/l	0.02	5.5	--- U	04/20/14LFFJ	EPA200.8	
Vanadium, ug/l	0.07	25.0	4.7 J	04/20/14LFFJ	EPA200.8	
Zinc, ug/l	0.47	10.0	3.7 J	04/20/14LFFJ	EPA200.8	

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

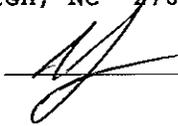
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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

CLIENT: DAVIDSON COUNTY (LINED)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH, NC 27603

CLIENT ID: 6038 A
ANALYST: MAO
DATE COLLECTED: 04/02/14
DATE ANALYZED: 04/14/14
DATE REPORTED: 04/30/14

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)

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

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#: 6038 B

DAVIDSON COUNTY (LINED)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH ,NC 27603

DATE COLLECTED: 04/01/14
DATE REPORTED : 04/30/14

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-10	MW-11	MW-12	SW-1	SW-2	Analysis Date	Method
									Analyst
Antimony, ug/l	0.02	6.0	0.05 J	0.86 J	0.2 J	0.17 J	0.13 J	04/20/14LFPJ	EPA200.8
Arsenic, ug/l	0.05	10.0	0.32 J	0.42 J	0.42 J	0.73 J	0.56 J	04/20/14LFPJ	EPA200.8
Barium, ug/l	0.06	100.0	6.4 J	13.8 J	1.1 J	25.9 J	27.8 J	04/20/14LFPJ	EPA200.8
Beryllium, ug/l	0.03	1.0	0.09 J	0.12 J	---	---	---	04/20/14LFPJ	EPA200.8
Cadmium, ug/l	0.05	1.0	0.06 J	0.08 J	0.05 J	---	---	04/20/14LFPJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.74 J	1.3 J	0.16 J	0.65 J	0.80 J	04/20/14LFPJ	EPA200.8
Copper, ug/l	0.06	10.0	1.6 J	6.1 J	0.23 J	1.5 J	1.5 J	04/20/14LFPJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	2.0 J	5.4 J	0.19 J	0.63 J	0.66 J	04/20/14LFPJ	EPA200.8
Lead, ug/l	0.02	10.0	0.38 J	0.97 J	0.03 J	0.44 J	0.44 J	04/20/14LFPJ	EPA200.8
Nickel, ug/l	0.45	50.0	1.5 J	3.6 J	1.4 J	0.86 J	0.89 J	04/20/14LFPJ	EPA200.8
Selenium, ug/l	0.06	10.0	0.64 J	0.89 J	0.90 J	0.48 J	0.40 J	04/20/14LFPJ	EPA200.8
Silver, ug/l	0.03	10.0	---	---	---	---	---	04/20/14LFPJ	EPA200.8
Thallium, ug/l	0.02	5.5	0.05 J	0.03 J	---	---	---	04/20/14LFPJ	EPA200.8
Vanadium, ug/l	0.07	25.0	6.9 J	14.1 J	5.3 J	1.9 J	2.1 J	04/20/14LFPJ	EPA200.8
Zinc, ug/l	0.47	10.0	3.2 J	6.2 J	0.99 J	3.0 J	2.5 J	04/20/14LFPJ	EPA200.8

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

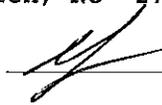
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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CLIENT: DAVIDSON COUNTY (LINED)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH, NC 27603

CLIENT ID: 6038 B
ANALYST: MAO
DATE COLLECTED: 04/01/14
DATE REPORTED: 04/30/14

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	Date Analyzed:		04/10/14	04/11/14	04/11/14	04/11/14	04/11/14
	MDL	SWSL	MW-10	MW-11	MW-12	SW-1	SW-2
1. Chloromethane	0.77	1.0	--- U				
2. Vinyl Chloride	0.63	1.0	--- U				
3. Bromomethane	0.67	10.0	--- U				
4. Chloroethane	0.48	10.0	--- U				
5. Trichlorofluoromethane	0.24	1.0	--- U				
6. 1,1-Dichloroethene	0.17	5.0	--- U				
7. Acetone	9.06	100.0	27.60 J	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U				
9. Carbon Disulfide	0.23	100.0	--- U				
10. Methylene Chloride	0.64	1.0	--- U				
11. trans-1,2-Dichloroethene	0.23	5.0	--- U				
12. 1,1-Dichloroethane	0.20	5.0	--- U				
13. Vinyl Acetate	0.20	50.0	--- U				
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U				
15. 2-Butanone	2.21	100.0	--- U				
16. Bromochloromethane	0.27	3.0	--- U				
17. Chloroform	0.25	5.0	--- U				
18. 1,1,1-Trichloroethane	0.19	1.0	--- U				
19. Carbon Tetrachloride	0.22	1.0	--- U				
20. Benzene	0.24	1.0	--- U				
21. 1,2-Dichloroethane	0.27	1.0	--- U				
22. Trichloroethene	0.23	1.0	--- U				
23. 1,2-Dichloropropane	0.21	1.0	--- U				
24. Bromodichloromethane	0.21	1.0	--- U				
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U				
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U				
27. Toluene	0.23	1.0	--- U				
28. trans-1,3-Dichloropropene	0.28	1.0	--- U				
29. 1,1,2-Trichloroethane	0.25	1.0	--- U				
30. Tetrachloroethene	0.17	1.0	--- U				
31. 2-Hexanone	1.57	50.0	--- U				
32. Dibromochloromethane	0.24	3.0	--- U				
33. 1,2-Dibromoethane	0.26	1.0	--- U				
34. Chlorobenzene	0.30	3.0	--- U				
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U				
36. Ethylbenzene	0.21	1.0	--- U				
37. Xylenes	0.68	5.0	--- U				
38. Dibromomethane	0.28	10.0	--- U				
39. Styrene	0.19	1.0	--- U				
40. Bromoform	0.20	3.0	--- U				
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U				
42. 1,2,3-Trichloropropane	0.43	1.0	--- U				
43. 1,4-Dichlorobenzene	0.39	1.0	--- U				
44. 1,2-Dichlorobenzene	0.32	5.0	--- U				
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U				
46. Acrylonitrile	2.72	200.0	--- U				
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U				

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

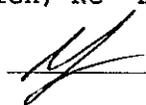
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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CLIENT: DAVIDSON COUNTY (LINED)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH, NC 27603

CLIENT ID: 6038 B
ANALYST: MAO
DATE COLLECTED: 04/01/14
DATE REPORTED: 04/30/14

Page: 2

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B R1 (96)

PARAMETERS, ug/l	Date Analyzed:		04/11/14	04/11/14
	MDL	SWSL	Equipment Blank	Trip Blank
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 Quantitation Limits.

DAVIDSON COUNTY (LINED)
 MS. JOAN SMYTH
 SMITH GARDNER, INC.
 14 NORTH BOYLAN AVE.
 RALEIGH NC 27603

(919) 828-0577

CHAIN OF CUSTODY RECORD

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION				Metals	EPA 8260B	8260 Dup. 1	8260 Dup. 2	CHLORINE NEUTRALIZED AT COLLECTION
	DATE	TIME				CHLORINE	UV	NONE	NONE					
MW-10	4/1	8:30A			4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
MW-11		8:20A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
MW-12		8:10A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
SW-1		10:12A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
SW-2		9:50A			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Equipment Blank					2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Trip Blank					2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	COMMENTS:	PARAMETERS	CLASSIFICATION:	SAMPLES COLLECTED BY:	SAMPLES RECEIVED IN LAB AT
<i>[Signature]</i>	4/2	8:00A	<i>[Signature]</i>	4/2	<i>[Signature]</i>	4/2	4/2	4/2	4/2		A - NONE D - NAOH B - HNO ₃ E - HCL C - H ₂ SO ₄ F - ZINC ACETATE/NAOH G - NATHIOSULFATE	<input type="checkbox"/> WASTEWATER (NPDES) <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> DWQ/GW <input checked="" type="checkbox"/> SOLID WASTE SECTION	Y N	<i>[Signature]</i>

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested. NO 273525

Appendix D

Time vs. Concentration Graphs

**April 2014 Groundwater Monitoring Report
Davidson County Phase 1 Lined Landfill
NC Solid Waste Permit No. 29-06**

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