

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):

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 Phase 2 MSW Landfill	1242 Old Highway 29 Thomasville, NC 27360	29-06	.1600	April 16, 2015

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

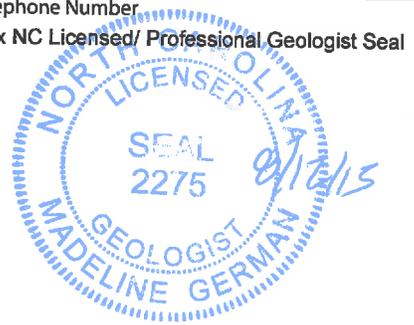
Signature [Signature] Date 8/12/15

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 2015 Semi-Annual Groundwater Monitoring Report

Davidson County Phase 2 MSW Landfill NC Solid Waste Permit No. 29-06

Prepared for:

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



August 2015

Prepared by:

NC LIC. NO. C-0828 (ENGINEERING)

SMITH+GARDNER

14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577



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April 2015 Groundwater Monitoring Report

**Davidson County Phase 2 MSW Landfill
NC Solid Waste Permit No. 29-06**

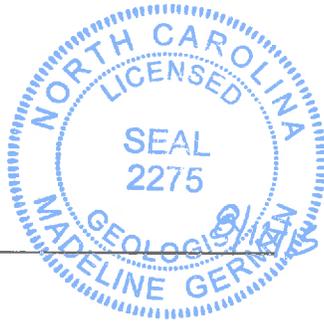
Prepared For:

**Davidson County Integrated Solid Waste
Thomasville, North Carolina 27360-0024**

S+G Project No. DAVDCO 14-7



Madeline German, P.G.
Project Geologist



Joan Smyth, P.G.
Senior Hydrogeologist

August 2015

NC LIC. NO. C-0828 (ENGINEERING)

SMITH+GARDNER

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**Davidson County Phase 2 MSW Landfill
NC Solid Waste Permit No. 29-06**

April 2015 Groundwater Monitoring Report

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1.0 INTRODUCTION

Smith Gardner, Inc. (S+G) was contracted by Davidson County to perform semi-annual groundwater monitoring at the Davidson County Phase 2 Lined MSW Landfill, permit number 29-06, as required by 15A NCAC 13B .1600. Sampling was conducted April 16, 2015. This report summarizes the event sampling procedures, field and laboratory results and groundwater 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 network for Phase 2 at Davidson County includes eleven monitoring wells (MW-1, MW-2, MW-3S, MW-4S, MW-5, MW-6S, MW-8, MW-9 and MW-10S), two surface water locations (SW-1 and SW-2) and one leachate sampling point (Leachate). Monitoring wells MW-3D, MW-4D and 10D are designated as water level only locations. MW-1 serves as the background well for this site. A trip blank was submitted for quality control purposes. Available well logs are presented in **Appendix A**.

Sampling locations are shown on **Figure 1**.

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 groundwater depth and purged three to five well volumes or until dry. Groundwater elevations are provided in **Table 1**.

¹ Water Quality Monitoring Plan, Davidson County, Phase 2, Areas 1 and 2, Smith Gardner, Inc. January 2013, presented in the Permit to Construct application.

Environment 1, Inc. (NC Laboratory Certification # 10) provided laboratory prepared sample containers for the specified analytical procedures. Sample collection was performed using factory sealed teflon bailers. Groundwater samples were properly preserved, placed on ice and transported to the laboratory facility within the specified hold times for each analysis.

Sampling wells and locations were inspected and found to be in good condition and free of obstructions.

5.0 FIELD & LABORATORY RESULTS

5.1 Field Results

Temperature, pH, turbidity and specific conductance were measured in the field at the time of sampling via direct read instruments. The field parameter results are summarized in **Table 2** and remain 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 analyzed for BOD, COD, total suspended residue, ammonia nitrogen, nitrate nitrogen, total phosphorus and sulfate via the SWS approved method noted in the laboratory analytical report. Analytical results were compared to the NC Division of Waste Management Solid Waste Section Quantitation Limits (SWSLs) and 15A NCAC 2L.0200 (2LStandard) or SWS determined groundwater protection standard (GWP). Surface water results were compared with the NCAC 2B Standard for Class C waters (2B Standards).

Most inorganic constituents were either below the method detection limit (MDL) or were "J-values" indicating a non-quantifiable value, reported by the laboratory as between the MDL and the SWSL. The laboratory results are presented in **Appendix B**.

5.2.1 Inorganic Constituents

Chromium (MW-1, MW-2, MW-4S and MW-10S) was the only inorganic constituent with concentrations reported above its 2L Standard.

Two inorganic constituents cobalt (MW-1, MW-4S and MW-6S), and vanadium (MW-1, MW-2, MW-4S, MW-6S, MW-9 and MW-10S) had concentrations in samples above their respective GWP standards.

These inorganic constituents are naturally occurring in North Carolina and may also have been influenced by high sample turbidity. A summary of inorganic laboratory results is presented in **Table 3**.

5.2.2 Organic Constituents

No organic constituents were detected in samples above their MDL values for the April monitoring event.

5.2.3 Surface Water Results

No inorganic or organic constituents were detected above 2B Standards in surface water samples. Surface water results 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 in **Appendix C**.

7.0 GROUNDWATER CHARACTERIZATION

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

$$V = Ki/n$$

where: K = hydraulic conductivity

i = groundwater gradient

n = porosity

Groundwater velocities in the uppermost aquifer at the Phase 2 MSW Landfill ranged from 0.0038 feet/day (MW-6S) to 0.252 feet/day (MW-9) and averaging 0.0938 feet/day. Calculations are included in **Table 5**. Groundwater elevations indicate the flow direction is generally 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

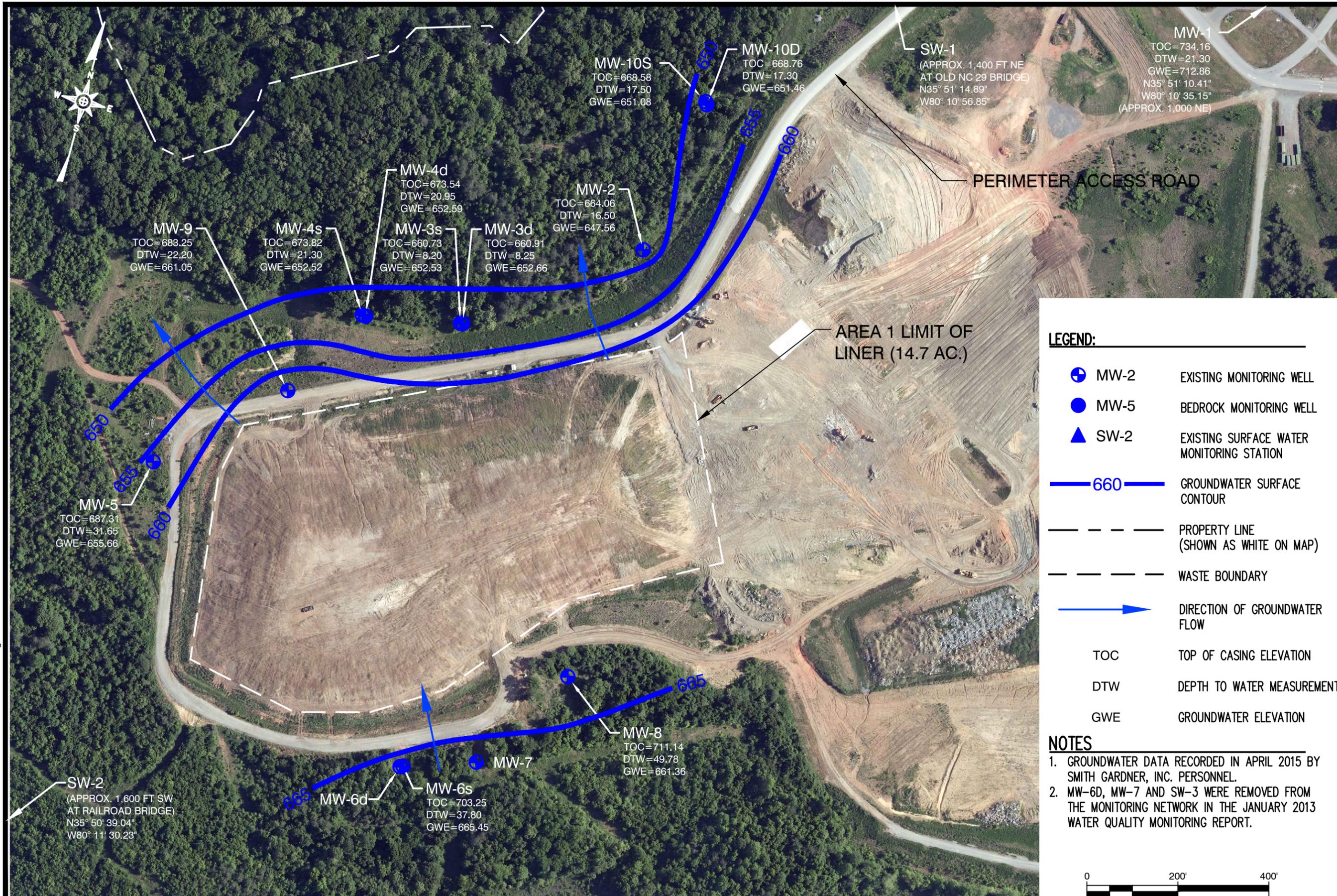
Laboratory results indicate the water quality at the Davidson County Phase 2 Landfill is generally consistent with reported historical detections. Inorganic constituent detections are likely due to natural occurrence and their presence in the soil and rock formations, not impact from the landfill. In general, detected groundwater concentrations at the site have remained stable. The next groundwater monitoring event will be performed in October 2015; results will be reported to NCDENR in accordance with 15A NCAC 13B.1600 et seq.

FIGURES

**April 2015 Groundwater Monitoring Report
Davidson County Phase 2 MSW Landfill
NC Solid Waste Permit No. 29-06**

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PREPARED BY: **SMITH+GARDNER**
 NC LIC. NO. C-9828 (ENGINEERING)
 14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

LEGEND:

- MW-2 EXISTING MONITORING WELL
- MW-5 BEDROCK MONITORING WELL
- SW-2 EXISTING SURFACE WATER MONITORING STATION
- 660 GROUNDWATER SURFACE CONTOUR
- PROPERTY LINE (SHOWN AS WHITE ON MAP)
- WASTE BOUNDARY
- DIRECTION OF GROUNDWATER FLOW
- TOC TOP OF CASING ELEVATION
- DTW DEPTH TO WATER MEASUREMENT
- GWE GROUNDWATER ELEVATION

NOTES

1. GROUNDWATER DATA RECORDED IN APRIL 2015 BY SMITH GARDNER, INC. PERSONNEL.
2. MW-6D, MW-7 AND SW-3 WERE REMOVED FROM THE MONITORING NETWORK IN THE JANUARY 2013 WATER QUALITY MONITORING REPORT.



PREPARED FOR:	POTENTIOMETRIC SURFACE MAP		
DATE:	Jun 2015	PROJECT NO.:	DAVDCO 14-7
DRAWN:	T.R.S.	APPROVED:	M.M.G.
SCALE:	AS SHOWN	FIGURE NO.:	1
FILENAME:	DAVDCO-B0798	NC LIC. NO.:	C-9828 (ENGINEERING)

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TABLES

**April 2015 Groundwater Monitoring Report
Davidson County Phase 2 MSW Landfill
Solid Waste Permit No. 29-06**

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Table 1
Groundwater Elevations
Davidson County Phase 2 Landfill
April 16, 2015

Well	Well Installation Date	Latitude	Longitude	Well Diameter (inches)	Total Well Depth (feet bgs)	Ground Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Water* (feet)	Groundwater Elevation (feet)	Screen Interval (feet bgs)	Screen Geology
MW-1	3/25/2008	35.85289	80.17643	2.0	20.0	730.65	734.16	21.30	712.86	10-20	sandy silt
MW-2	8/12/2008	35.84994	80.18351	2.0	14.5	661.05	664.06	16.50	647.56	9.5-14.5	sandy silt/granite
MW-3S	3/24/2008	35.84948	80.18486	2.0	18.0	657.87	660.73	8.20	652.53	8-18	clay and sand
MW-3D	3/26/2008	35.84948	80.18484	2.0	40.5	658.08	660.91	8.25	652.66	35.5-40.5	granite
MW-4S	3/24/2008	35.84953	80.18559	2.0	21.0	670.74	673.82	21.30	652.52	11-21	sandy silt with clay
MW-4D	3/26/2008	35.84952	80.18557	2.0	37.0	670.60	673.54	20.95	652.59	32-37	diorite
MW-5	3/24/2008	35.84863	80.18713	2.0	38.0	684.59	687.31	31.65	655.66	28-38	clayey silt
MW-6S	3/25/2008	35.84681	80.18525	2.0	40.0	700.00	703.25	37.80	665.45	30-40	sandy silt with gravel
MW-8	3/24/2008	35.84736	80.18404	2.0	58.6	708.21	711.14	49.78	661.36	48.6-58.6	diorite
MW-9	8/12/2008	35.84906	80.18614	2.0	30.5	683.68	683.25	22.20	661.05	20.5-30.5	diorite
MW-10S	9/21/2004	35.85083	80.18306	2.0	27.0	665.17	668.58	17.50	651.08	12-27	silty sand, clay & gravel
MW-10D	9/21/2004	35.85082	80.18305	2.0	44.0	666.02	668.76	17.30	651.46	36-44	diabase

Note: Survey data from Michael Green and Associates, P.A.
amsl = above mean sea level
bgs = below ground surface
NA = water level data not available
Well construction information from well logs (provided in Appendix A)
* Depth to water measured from Top of PVC Casing

Table 2
Field Parameters
Davidson County Phase 2 Landfill
April 16, 2015

Well	pH (Std. Units)	Conductivity (umhos)	Temperature (Celsius)	Turbidity (NTU)
MW-1	5.78	340	14.4	>1000
MW-2	6.03	170	12.4	35
MW-3S	6.53	230	10.9	66.1
MW-4S	6.28	190	14	100
MW-5	6	140	14.3	65.6
MW-6S	6.45	360	14.6	77.4
MW-8	6.73	300	14.2	7.97
MW-9	6.32	230	14.8	135
MW-10S	6.47	250	12.7	>1000
SW-1	7.66	180	13.9	58.7
SW-2	7.29	180	13	50.2

Note:

Data Collected by Smith Gardner, Inc. personnel
>1000 = exceeded equipment calibration

Table 3
 Detected Constituents
 Davidson County Landfill - Phase 2
 April 16, 2015

Parameter	MDL	SWSL	2L or GWP*	MCL	2B	MW-1	MW-2	MW-3S	MW-4S	MW-5	MW-6S	MW-8	MW-9	MW-10S	SW-1	SW-2
Inorganic Constituents																
Antimony	0.12	6	1*	6	640	<0.12	<0.12	0.30 J	0.12 J	<0.12	<0.12	0.13 J	<0.12	<0.12	0.236 J	0.27 J
Arsenic	0.10	10	10	10	10	0.73 J	0.52 J	0.17 J	0.82 J	0.12 J	1.1 J	0.33 J	0.59 J	0.43 J	0.35 J	0.50 J
Barium	0.12	100	700	2000	200000	366	44.1 J	23.5 J	293	13.5 J	599	4.8 J	77.1 J	57.6 J	34.1 J	40.5 J
Beryllium	0.04	1	4*	4	6.5	0.37 J	0.10 J	<0.04	0.21 J	<0.04	0.31 J	0.05 J	0.18 J	0.16 J	<0.04	0.09 J
Cadmium	0.04	1	2	5	2	0.09 J	0.06 J	<0.04	0.10 J	<0.04	0.11 J	<0.04	0.54 J	0.04 J	<0.04	0.04 J
Cobalt	0.12	10	1*	NE	4	49	5.8 J	0.76 J	24	2.3 J	18	1.2 J	5.5 J	6.7 J	0.84 J	1.6 J
Copper	0.10	10	1000	1300	7	630	26	1.5 J	294	8.3 J	258	4.3 J	38	45	4.4 J	5.8 J
Chromium, total	0.14	10	10	100	50	32	26	2.7 J	48	2.5 J	8.1 J	4.4 J	8.5 J	29	0.69 J	2.7 J
Lead	0.13	10	15	15	25	7.5 J	3.0 J	0.19 J	4.8 J	0.60 J	4.6 J	0.76 J	25.5 J	1.7 J	2.0 J	3.2 J
Nickel	0.12	50	100	NE	88	19.6 J	6.2 J	0.97 J	22.1 J	2.8 J	8.2 J	2.2 J	4.7 J	15.0 J	1.5 J	2.6 J
Selenium	0.16	10	20	50	5	0.38 J	0.31 J	0.49 J	<0.16	<0.16	0.97 J	0.54 J	0.22 J	0.22 J	0.21 J	0.37 J
Silver	0.04	10	20	100	0.06	0.34 J	0.13 J	<0.04	0.21 J	<0.04	0.08 J	<0.04	0.08 J	0.04 J	<0.04	0.04 J
Thallium	0.13	5.5	0.28*	2	0.47	0.17 J	<0.13	<0.13	<0.13	<0.13	0.18 J	<0.13	<0.13	<0.13	<0.13	<0.13
Vanadium	0.06	25	0.3*	NE	NE	178	34	10.8 J	183	11.3 J	109	8.7 J	43	40	3.3 J	6.3 J
Zinc	0.53	10	1000	5000	50	146	13	4.3 J	120	9.7 J	183	4.0 J	42	45	8.8 J	29

Note:

- MDL - Method Detection Limit
- SWSL - Solid Waste Section Quantitation Limits
- GWP - Groundwater Protection Standard (Indicated with a *)
- 2L - Groundwater Standards (15A NCAC 2L 0200)
- 2B - NCAC 2B Standard for Class C waters
- Bold** - Constituents detected above 2L or GWP
- J - Laboratory defined between MDL and SWSL
- < MDL - Not detected at or above MDL
- NE - Standard Not Established

Table units are presented in ug/l.

Lab data analysis by Environment 1, Inc. report dated 06/10/2015, ID#6059 A.

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Table 4
Leachate Analytical Data
Davidson County Phase 2 Landfill
April 16, 2015

Parameter	Unit	Leachate
BOD	mg/l	734
COD	mg/l	1000
Total Suspended Residue	mg/l	81
Ammonia Nitrogen as N	mg/l	42.5
Total Phosphorus	mg/l	2.2
Sulfate	mg/l	19.8 J
Antimony	ug/l	3.3 J
Arsenic	ug/l	8 J
Barium	ug/l	158
Beryllium	ug/l	0.09 J
Cadmium	ug/l	1
Cobalt	ug/l	12
Total Chromium	ug/l	25
Copper	ug/l	52
Lead	ug/l	2.2 J
Nickel	ug/l	96
Selenium	ug/l	7 J
Silver	ug/l	0.16 J
Vanadium	ug/l	29
Zinc	ug/l	2222
1,1-Dichloroethane	ug/l	2.50 J
1,2-Dichloroethane	ug/l	4.5
1,2-Dichloropropane	ug/l	12.7
1,4-Dichlorobenzene	ug/l	4.5
2-Butanone	ug/l	948
2-Hexanone	ug/l	42.10 J
Acetone	ug/l	862
Benzene	ug/l	13.2
Bromodichloromethane	ug/l	24.3
Chlorobenzene	ug/l	0.60 J
Chloroethane	ug/l	2.70 J
Cis-1,2-Dichloroethene	ug/l	1.50 J
Ethylbenzene	ug/l	13.9
Methylene Chloride	ug/l	2.3
Styrene	ug/l	0.90 J
trans-1,2-Dichloroethene	ug/l	1.80 J
Trichloroethene	ug/l	0.80 J
Vinyl Chloride	ug/l	1.9
Xylenes	ug/l	32.6

Note: J-values are laboratory defined between the SWSL and MDL.

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Table 5
 Aquifer Conductivity and Velocity Calculations
 Davidson County Phase 2 Landfill
 April 16, 2015

Well Number	Aquifer	Conductivity (ft/day)	Conductivity (ft/min)	Assumed Porosity (n)	Gradient (l)	Velocity (ft/day)
MW-2	Sandy Silt	6.75E-02	4.69E-05	0.18	0.0976	0.0366
MW-3s	Sand	8.60E-02	5.97E-05	0.20	0.0361	0.0155
MW-4s	Sandy Silt	6.22E-02	4.32E-05	0.18	0.0354	0.0122
MW-5	Clayey Silt	4.31E-01	2.99E-04	0.18	0.0579	0.1386
MW-6s	Sand and Gravel	4.64E-01	3.22E-04	0.22	0.0018	0.0038
MW-8	Diorite	4.90E-01	3.40E-04	0.10	0.0404	0.1980
MW-9	Diorite	7.20E-01	5.00E-04	0.10	0.0350	0.2520

Notes: NA = Well had insufficient water to perform Slug Test, or insufficient data to complete calculation.
 Porosity assumed based upon soil type from monitoring well boring log.
 Velocity Calculated by equation $V = KI/n$
 Gradient for bedrock wells assumed to be the same as for unconsolidated aquifer in
 Gradient calculated from April 2015 potentiometric surface.

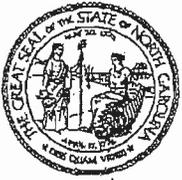
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Appendix A

Monitoring Well Information

**April 2015 – Groundwater Monitoring Report
Davidson County Phase 2 MSW Landfill
Solid Waste Permit No. 29-06**

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NON RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #

2089

1. WELL CONTRACTOR:

DAVID BARRON

Well Contractor (Individual) Name

Eng. Tectonics

Well Contractor Company Name

STREET ADDRESS 1780 VARGRAVE ST.

W-Salem N.C. 27107

City or Town State Zip Code

336-724-6994

Area code - Phone number

2. WELL INFORMATION:

SITE WELL ID #(if applicable) MW1

STATE WELL PERMIT #(if applicable)

DWQ or OTHER PERMIT #(if applicable)

WELL USE (Check Applicable Box) Monitoring Municipal/Public

Industrial/Commercial Agricultural Recovery Injection

Irrigation Other (list use)

DATE DRILLED 4-3-08

TIME COMPLETED 4-7-08 AM PM

3. WELL LOCATION:

CITY: Thomasville COUNTY: Davidsor

1242 Old Hwy 29 27360-0024

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope Valley Flat Ridge Other

(check appropriate box)

LATITUDE 35 51 11.4107

LONGITUDE 80 10 34.78794

May be in degrees, minutes, seconds or in a decimal format

Latitude/longitude source: GPS Topographic map

(location of well must be shown on a USGS topo map and attached to this form if not using GPS)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #(if applicable)

NAME OF FACILITY Davidsor Co. Landfill

STREET ADDRESS 1242 Old Hwy 29

Thomasville N.C. 27360-0024

City or Town State Zip Code

CONTACT PERSON CHARLIE BRUSHWOOD

MAILING ADDRESS 1242 Old Hwy 29

Thomasville N.C. 27360-0024

City or Town State Zip Code

336-242-2284

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 20.0

b. DOES WELL REPLACE EXISTING WELL? YES NO

c. WATER LEVEL Below Top of Casing: 14.1 FT.

(Use "*" if Above-Top of Casing)

d. TOP OF CASING IS 3' FT. Above Land Surface*

*Top of casing terminated at/or below land surface may require a variance in accordance with 15A NCAC 2C .0118.

e. YIELD (gpm): _____ METHOD OF TEST _____

f. DISINFECTION: Type _____ Amount _____

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

From 13.0 To 10.0 Ft. 2" Sch 40 PVC

From _____ To _____ Ft. _____

From _____ To _____ Ft. _____

7. GROUT:

From 6.0 To 8.0 Ft. Bentonite Tremie

From 0.0 To 6.0 Ft. PORTLAND Pump

From _____ To _____ Ft. _____

8. SCREEN:

From 10.0 To 20.0 Ft. 2" in. 1010 in. PVC

From _____ To _____ Ft. _____ in. _____ in.

From _____ To _____ Ft. _____ in. _____ in.

9. SAND/GRAVEL PACK:

From 8.0 To 20.0 Ft. #3 SAND

From _____ To _____ Ft. _____

From _____ To _____ Ft. _____

10. DRILLING LOG

From _____ To _____ Formation Description

11. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

David Barron 4-11-08
SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE

David Barron
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

Submit the original to the Division of Water Quality within 30 days: Attn: Information Mgt., 1517 Mail Service Center - Raleigh, NC 27699-1617 Phone No. (919) 733-7015 ext 568.

Form GW-1b Rev. 7/05

919 828 2899

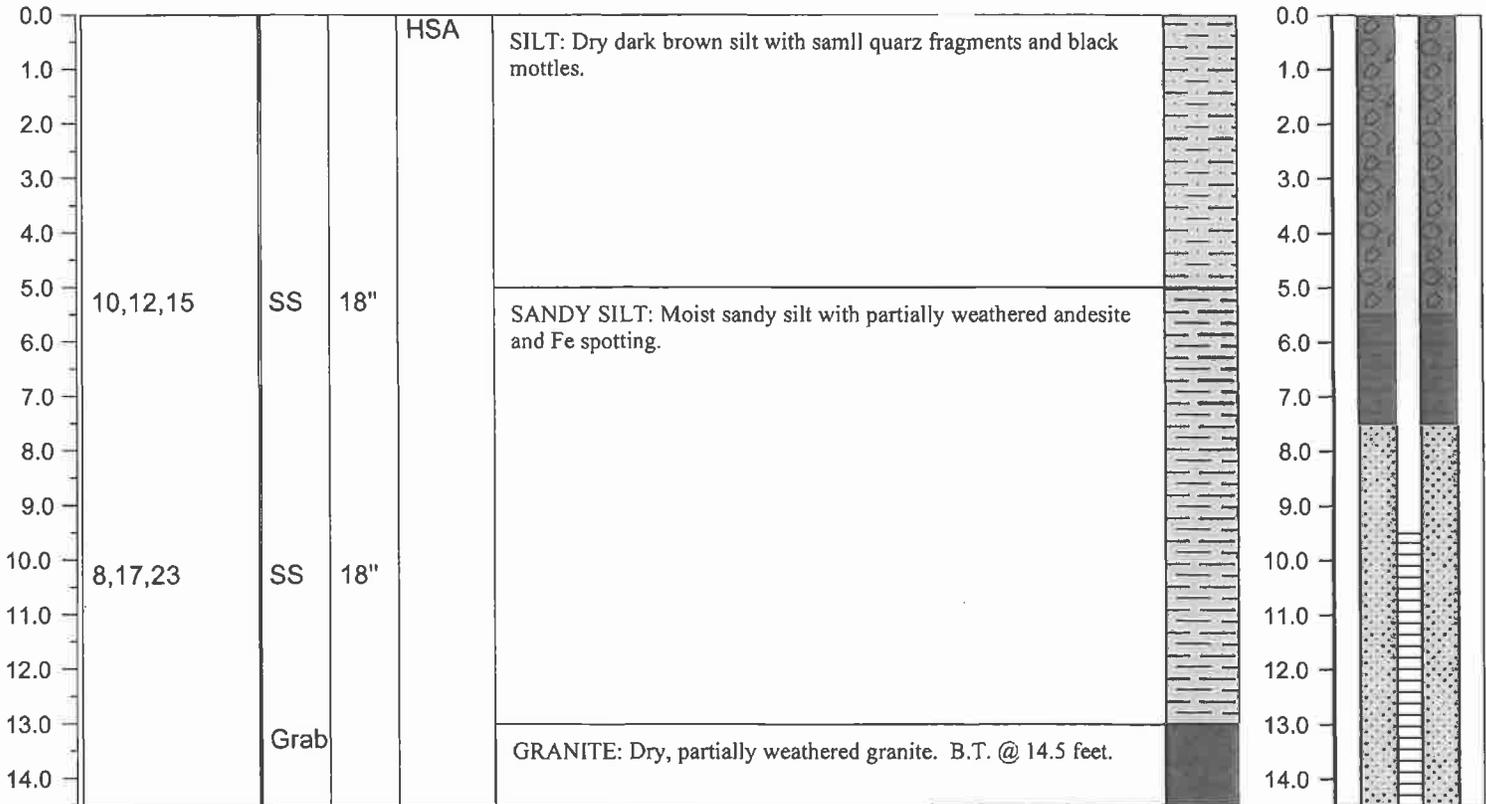


PROJECT NAME: **Davidson County - Phase 2**
 LOCATION: **Lexington, NC**
 DRILLING CO: **Engineering Tectonics, P.A.**
 DRILLING METHOD: **HSA**
 FIELD PARTY: **David Barron**
 GEOLOGIST: **Clark Wipfield**
 DATE BEGUN: **8/12/08** DATE COMPLETED: **8/12/08**

TOTAL DEPTH: **14.5**
 GROUND SURFACE ELEVATION:
 TOP OF CASING ELEVATION:

STATIC WATER LEVEL (TOC)		
Depth (ft)	13.06	
Time	11:00 am	
Date	8/12/08	

DEPTH	BLOW COUNT	SAMPLING METHOD	RECOVERY	DRILL METHOD	DESCRIPTION	LITHOLOGY	DEPTH	WELL INSTALLATION
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REC'D AUG 28 2008



NON RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources- Division of Water Quality

WELL CONTRACTOR CERTIFICATION # 2089

1. WELL CONTRACTOR:
DAVID BARRON
 Well Contractor (Individual) Name
Eng. Tectonics
 Well Contractor Company Name
 STREET ADDRESS 1720 UARGRAVE ST.
W-Salem N.C. 27107
 City or Town State Zip Code
336 - 724-6994
 Area code- Phone number

2. WELL INFORMATION:
 SITE WELL ID #(if applicable) mw#2
 WELL CONSTRUCTION PERMIT #(if applicable)
 OTHER ASSOCIATED PERMIT #(if applicable)

3. WELL USE (Check Applicable Box) Monitoring Municipal/Public
 Industrial/Commercial Agricultural Recovery Injection
 Irrigation Other (list use)
 DATE DRILLED 8-11-08
 TIME COMPLETED 8-15-08 AM PM

4. WELL LOCATION:
 CITY: Thomasville COUNTY: Davidson
1160 old Hwy 29 27360-0024
 (Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)
 TOPOGRAPHIC / LAND SETTING:
 Slope Valley Flat Ridge Other
 (check appropriate box)
 LATITUDE _____
 LONGITUDE _____
 Latitude/longitude source: GPS Topographic map
 (location of well must be shown on a USGS topo map and attached to this form if not using GPS)

5. FACILITY- is the name of the business where the well is located.
 FACILITY ID #(if applicable)
 NAME OF FACILITY DAVIDSON CO. LANDFILL
 STREET ADDRESS 1160 old Hwy 29
Thomasville NC 27360-0024
 City or Town State Zip Code
 CONTACT PERSON Charlie Brushwood
 MAILING ADDRESS 1242 old Hwy 29
Thomasville N.C. 27360-0024
 City or Town State Zip Code
336 - 242-2284
 Area code - Phone number

6. WELL DETAILS:
 a. TOTAL DEPTH: 14.0
 b. DOES WELL REPLACE EXISTING WELL? YES NO
 c. WATER LEVEL Below Top of Casing: 13.0 FT.
 (Use "+" if Above Top of Casing)

d. TOP OF CASING IS 3' FT. Above Land Surface*
 *Top of casing terminated at/or below land surface may require a variance in accordance with 15A NCAC 2C .0118.

e. YIELD (gpm): _____ METHOD OF TEST _____

f. DISINFECTION: Type _____ Amount _____

g. WATER ZONES (depth):
 From _____ To _____ From _____ To _____
 From _____ To _____ From _____ To _____
 From _____ To _____ From _____ To _____

7. CASING:

From	To	Depth	Diameter	Thickness/Weight	Material
From <u>3'</u>	To <u>4'</u>	Ft. <u>2"</u>	<u>sch 40</u>	<u>PVC</u>	
From _____	To _____	Ft. _____	_____	_____	_____
From _____	To _____	Ft. _____	_____	_____	_____

8. GROUT: Depth Material Method
 From 0 To 2.0 Ft. Portland Tremie
 From 2.0 To 3.0 Ft. Benstopite Tremie
 From _____ To _____ Ft. _____ _____

9. SCREEN: Depth Diameter Slot Size Material
 From 4.0 To 14.0 Ft. 2" in. .010 in. PVC
 From _____ To _____ Ft. _____ in. _____ in. _____
 From _____ To _____ Ft. _____ in. _____ in. _____

10. SAND/GRAVEL PACK:

From	To	Depth	Size	Material
From <u>3.0</u>	To <u>14.0</u>	Ft. <u>#3</u>	<u>SAND</u>	
From _____	To _____	Ft. _____	_____	_____
From _____	To _____	Ft. _____	_____	_____

11. DRILLING LOG
 From _____ To _____ Formation Description

12. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.
David Barron 8-20-08
 SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE
DAVID BARRON
 PRINTED NAME OF PERSON CONSTRUCTING THE WELL



PROJECT NAME: **Davidson County Landfill**

LOCATION: **Davidson County**

DRILLING CO: **Engineering Tectonics, P.A.**

DRILLING METHOD: **HSA**

FIELD PARTY: **Daivd Barron**

GEOLOGIST: **Clark Wipfield**

DATE BEGUN: **3/26/08** DATE COMPLETED: **3/26/08**

TOTAL DEPTH: **40.5 ft.**

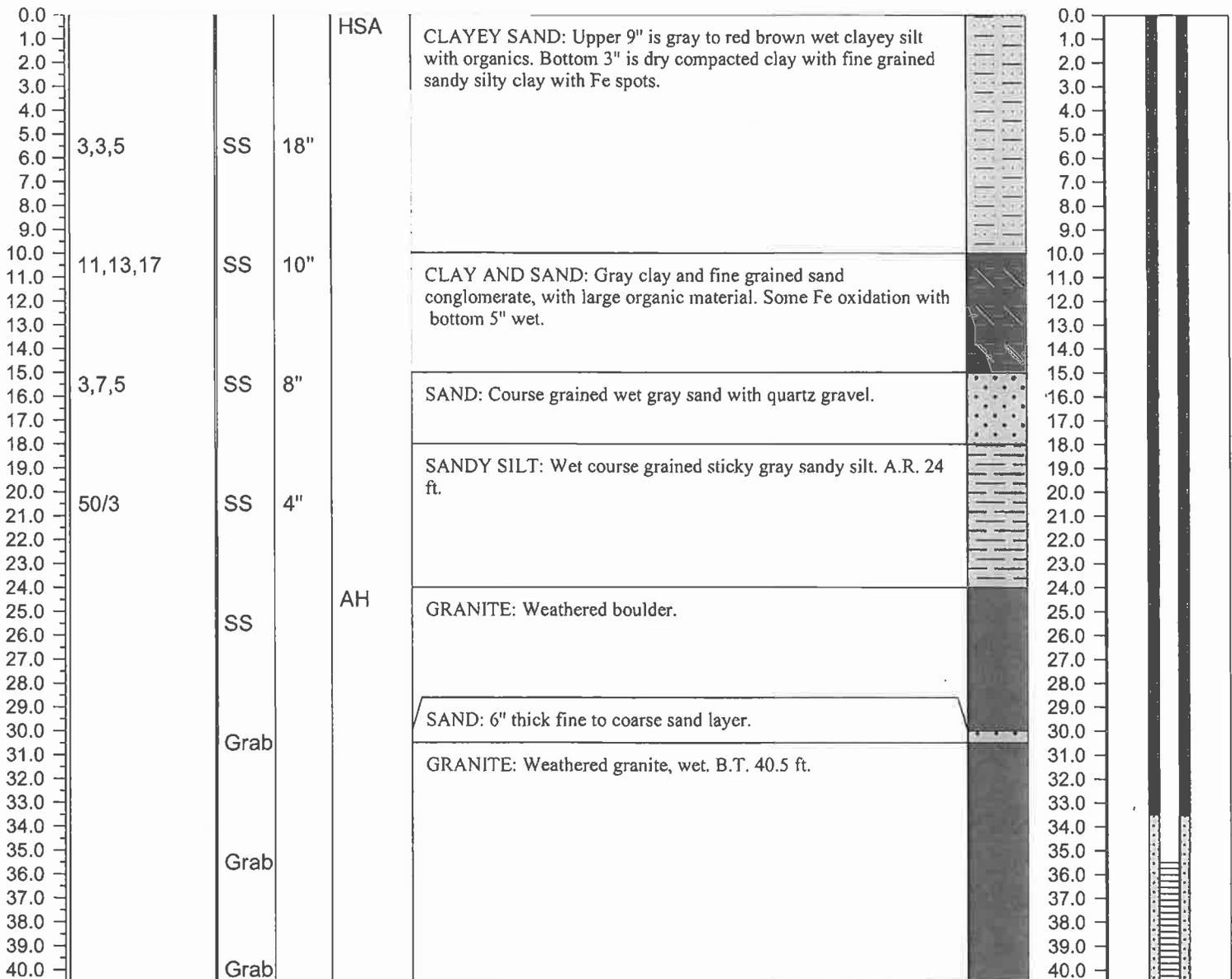
GROUND SURFACE ELEVATION:

TOP OF CASING ELEVATION:

STATIC WATER LEVEL (TOC)

Depth (ft)		
Time		
Date		

DEPTH	BLOW COUNT	SAMPLING METHOD	RECOVERY	DRILL METHOD	DESCRIPTION	LITHOLOGY	DEPTH	WELL INSTALLATION
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NON RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #

2089

1. WELL CONTRACTOR:

DAVID BARRON

Well Contractor (Individual) Name

Eng. Tectonics

Well Contractor Company Name

STREET ADDRESS 1780 VARGRAVE ST.

W-Salem N.C. 27107

City or Town State Zip Code

336-724-6994

Area code - Phone number

2. WELL INFORMATION:

SITE WELL ID #(if applicable) MW # 35

STATE WELL PERMIT #(if applicable)

DWQ or OTHER PERMIT #(if applicable)

WELL USE (Check Applicable Box) Monitoring Municipal/Public

Industrial/Commercial Agricultural Recovery Injection

Irrigation Other (list use)

DATE DRILLED 3-31

TIME COMPLETED 4-1 AM PM

3. WELL LOCATION:

CITY: Thomasville COUNTY: Davidsop

1242 Old Hwy 29 27360-0024

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope Valley Flat Ridge Other

(check appropriate box)

LATITUDE 35 50 58.13561

LONGITUDE 80 11 05.49742

May be in degrees, minutes, seconds or in a decimal format

Latitude/longitude source: GPS Topographic map

(location of well must be shown on a USGS topa map and attached to this form if not using GPS)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #(if applicable)

NAME OF FACILITY Davidsop Co. Landfill

STREET ADDRESS 1242 Old Hwy 29

Thomasville N.C. 27360-0024

City or Town State Zip Code

CONTACT PERSON Charlie Brushwood

MAILING ADDRESS 1242 Old Hwy 29

Thomasville N.C. 27360-0024

City or Town State Zip Code

336-242-2284

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 18.0

b. DOES WELL REPLACE EXISTING WELL? YES NO

c. WATER LEVEL Below Top of Casing: 7.93 FT.
(Use "+" if Above-Top of Casing)

d. TOP OF CASING IS 3' FT. Above Land Surface*

*Top of casing terminated at/or below land surface may require a variance in accordance with 15A NCAC 2C .0118.

e. YIELD (gpm): METHOD OF TEST

f. DISINFECTION: Type Amount

g. WATER ZONES (depth):

From To From To

From To From To

From To From To

6. CASING:

From	To	Depth	Diameter	Thickness/Weight	Material
+3	8.0	8.0	2"	Sch 40	PVC

7. GROUT:

From	To	Depth	Material	Method
6.0	8.0	8.0	Bentonite	Tremie
0.0	6.0	6.0	PORTLAND	Pump

8. SCREEN:

From	To	Depth	Diameter	Slot Size	Material
8.0	18.0	18.0	2" in.	010 in.	PVC

9. SAND/GRAVEL PACK:

From	To	Depth	Size	Material
6.0	18.0	18.0	#3	SAND

10. DRILLING LOG

From To Formation Description

11. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

David Barron

4-11-08

SIGNATURE OF CERTIFIED WELL CONTRACTOR

DATE

DAVID BARRON

PRINTED NAME OF PERSON CONSTRUCTING THE WELL

Submit the original to the Division of Water Quality within 30 days: Attn: Information Mgt., 1617 Mail Service Center - Raleigh, NC 27699-1617 Phone No. (919) 733-7015 ext 568.

Form GW-1b Rev. 7/05

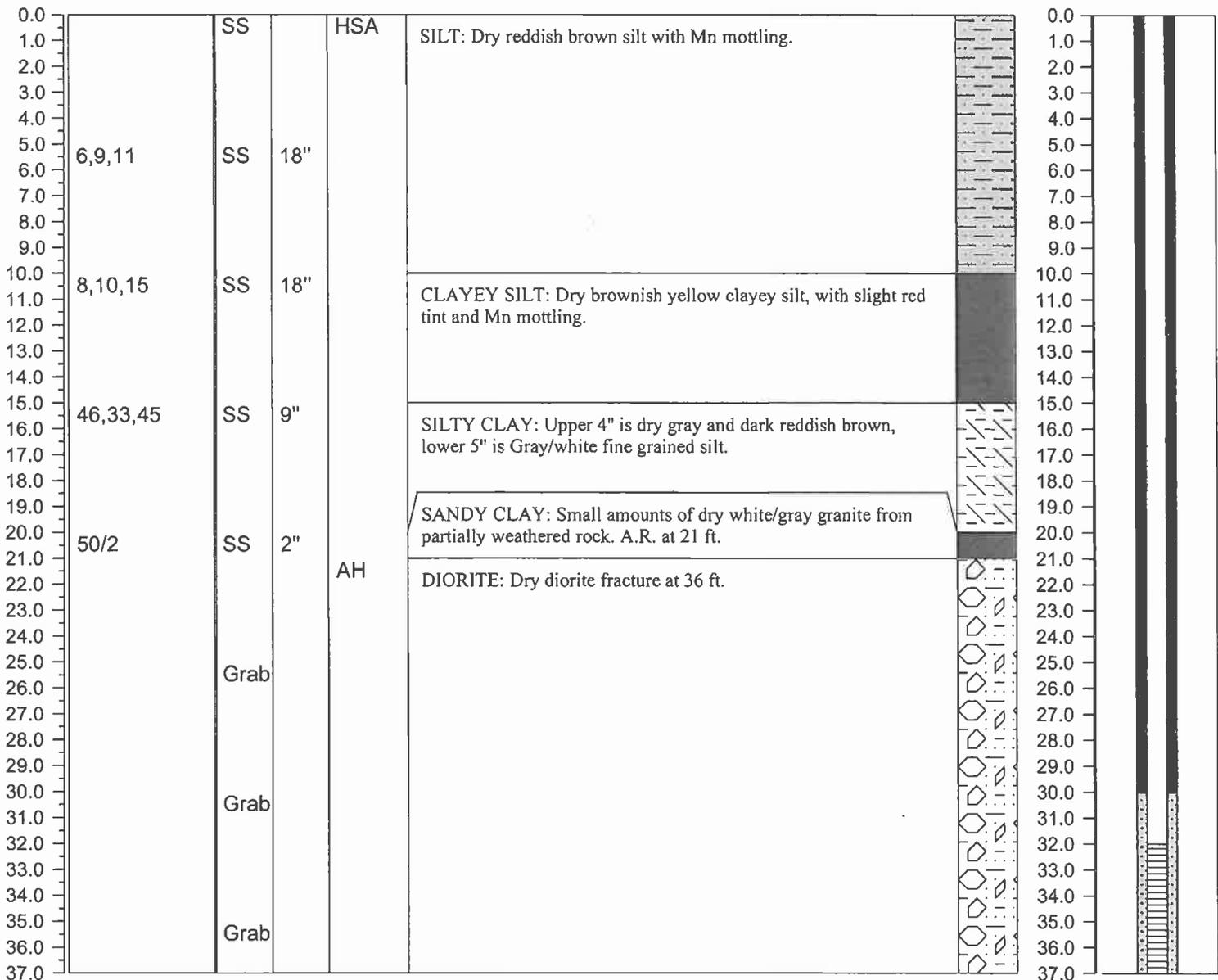


PROJECT NAME: **Davidson County**
 LOCATION: **Davidson County Landfill**
 DRILLING CO: **Engineering Tectonics, P.A.**
 DRILLING METHOD: **HSA and AH**
 FIELD PARTY: **David Barron**
 GEOLOGIST: **Clark Wipfield**
 DATE BEGUN: **3/26/08** DATE COMPLETED: **3/26/08**

TOTAL DEPTH: **37 ft.**
 GROUND SURFACE ELEVATION:
 TOP OF CASING ELEVATION:

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

DEPTH	BLOW COUNT	SAMPLING METHOD	RECOVERY	DRILL METHOD	DESCRIPTION	LITHOLOGY	DEPTH	WELL INSTALLATION
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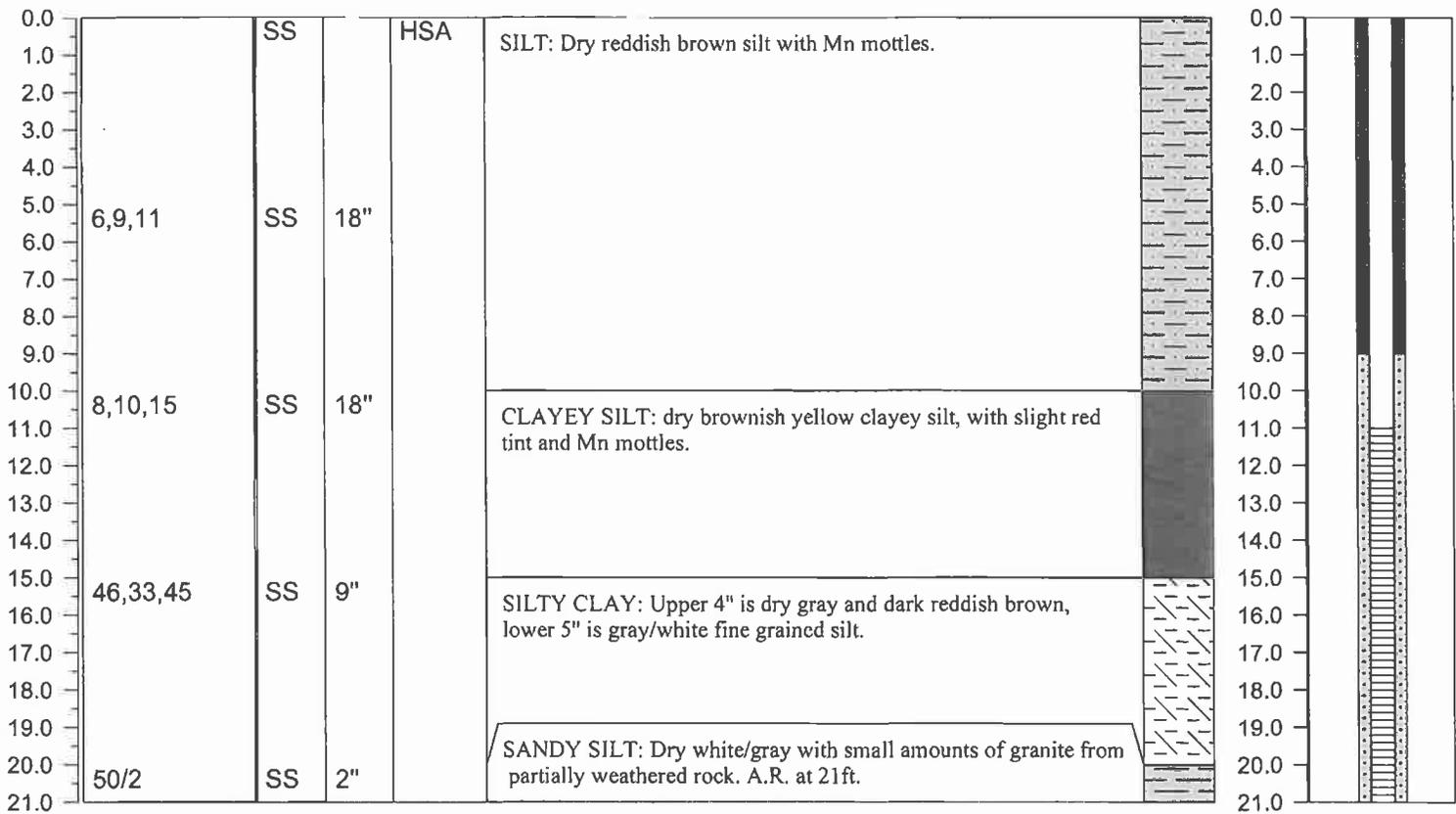


PROJECT NAME: **Davidson County**
 LOCATION: **Davidson County Landfill**
 DRILLING CO: **Engineering Tectonics, P.A.**
 DRILLING METHOD: **HSA**
 FIELD PARTY: **David Barron**
 GEOLOGIST: **Clark Wipfield**
 DATE BEGUN: **3/24/08** DATE COMPLETED: **3/24/08**

TOTAL DEPTH: **21**
 GROUND SURFACE ELEVATION:
 TOP OF CASING ELEVATION:

STATIC WATER LEVEL (TOC)		
Depth (ft)	18.97	
Time	1:30pm	
Date	3/27/08	

DEPTH	BLOW COUNT	SAMPLING METHOD	RECOVERY	DRILL METHOD	DESCRIPTION	LITHOLOGY	DEPTH	WELL INSTALLATION
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PROJECT NAME: **Davidson County**
 LOCATION: **Davidson County Landfill**
 DRILLING CO: **Engineering Tectonics, P.A.**
 DRILLING METHOD: **HSA**
 FIELD PARTY: **David Barron**
 GEOLOGIST: **Clark Wipfield**
 DATE BEGUN: **3/25/08** DATE COMPLETED: **3/25/08**

TOTAL DEPTH: **40 ft.**
 GROUND SURFACE ELEVATION:
 TOP OF CASING ELEVATION:

STATIC WATER LEVEL (TOC)		
Depth (ft)	33.60	
Time	2:00pm	
Date	3/27/08	

DEPTH	BLOW COUNT	SAMPLING METHOD	RECOVERY	DRILL METHOD	DESCRIPTION	LITHOLOGY	DEPTH	WELL	INSTALLATION
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0.0				HSA	SANDY SILT: Brownish fine grained yellow sandy silt with Mn spots in upper 10". Lower portion is white/ gray compacted fine grained sand with silt quartz fragments, increase in size with depth. Increased percent of Fe banding and oxidation with depth.		0.0		
1.0							1.0		
2.0							2.0		
3.0							3.0		
4.0							4.0		
5.0	28,37,50/1	SS	13"				5.0		
6.0							6.0		
7.0							7.0		
8.0							8.0		
9.0							9.0		
10.0	20,36,31	SS	17"		10.0				
11.0					11.0				
12.0					12.0				
13.0					13.0				
14.0					14.0				
15.0	23,36,50/6	SS	14"		15.0				
16.0					16.0				
17.0					17.0				
18.0					18.0				
19.0					19.0				
20.0	32,44,50/5	SS	18"		20.0				
21.0					21.0				
22.0					22.0				
23.0					23.0				
24.0					24.0				
25.0	50/5	SS	18"		25.0				
26.0				SILT: Upper 14" is sticky wet viscous silt with Fe oxidation. Lower 4" hard compact gray/white silt.	26.0				
27.0					27.0				
28.0					28.0				
29.0					29.0				
30.0	29,32,50/4	SS	12"		30.0				
31.0				SANDY SILT: Moist brownish yellow sandy silt, with Fe oxidation and quartz bands at 45 degree angles.	31.0				
32.0					32.0				
33.0					33.0				
34.0					34.0				
35.0	28,50/5	SS	10"		35.0				
36.0				GRAVEL AND SAND: Moist brownish yellow sandy silt, with Fe oxidation and quartz banks at 45 degree angles.	36.0				
37.0					37.0				
38.0					38.0				
39.0					39.0				
40.0	42,50/6	SS	5"		40.0				
41.0				SANDY SILT: Upper 2" is wet silty gray sand. Bottom 3" is dry white & gray sandy silt, with black and Fe oxidation spots. B.T. at 40 ft.	41.0				



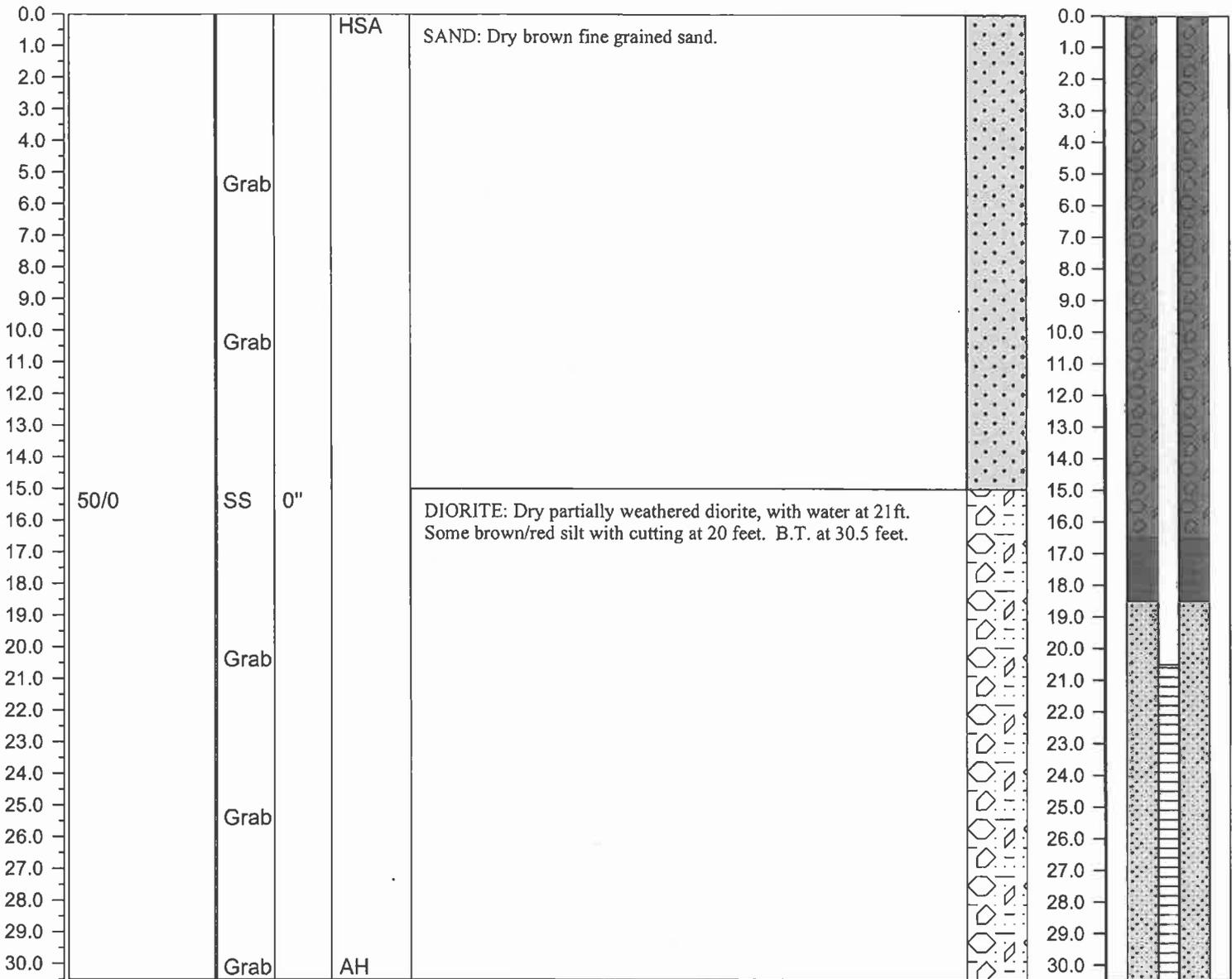
FIELD BOREHOLE LOG

PROJECT NAME: **Davidson County - Phase 2**
 LOCATION: **Lexington, NC**
 DRILLING CO: **Engineering Tectonics, P.A.**
 DRILLING METHOD: **HSA/AH**
 FIELD PARTY: **David Barron**
 GEOLOGIST: **Clark Wipfield**
 DATE BEGUN: **8/12/08** DATE COMPLETED: **8/14/08**

TOTAL DEPTH: **30.5**
 GROUND SURFACE ELEVATION:
 TOP OF CASING ELEVATION:

STATIC WATER LEVEL (TOC)		
Depth (ft)	19.35	
Time	2:30 pm	
Date	8/14/08	

DEPTH	BLOW COUNT	SAMPLING METHOD	RECOVERY	DRILL METHOD	DESCRIPTION	LITHOLOGY	DEPTH	WELL INSTALLATION
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NON RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources- Division of Water Quality

WELL CONTRACTOR CERTIFICATION # 2089

1. WELL CONTRACTOR:
DAVID BARRON
 Well Contractor (Individual) Name
Eng. Tectonics
 Well Contractor Company Name
 STREET ADDRESS 1720 UARGRAVE ST.
W-Salem N.C. 27107
 City or Town State Zip Code
336-724-6994
 Area code- Phone number

2. WELL INFORMATION:
 SITE WELL ID #(if applicable) MW+9
 WELL CONSTRUCTION PERMIT #(if applicable)
 OTHER ASSOCIATED PERMIT #(if applicable)

3. WELL USE (Check Applicable Box) Monitoring Municipal/Public
 Industrial/Commercial Agricultural Recovery Injection
 Irrigation Other (list use)
 DATE DRILLED 8-14-08
 TIME COMPLETED 8-19-08 AM PM

4. WELL LOCATION:
 CITY: Thomasville COUNTY: DAVIDSON
1160 old Hwy 29 27360-0024
 (Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)
 TOPOGRAPHIC / LAND SETTING:
 Slope Valley Flat Ridge Other
 (check appropriate box)
 LATITUDE _____
 LONGITUDE _____
 Latitude/longitude source: GPS Topographic map
 (location of well must be shown on a USGS topo map and attached to this form if not using GPS)

May be in degrees, minutes, seconds or in a decimal format

5. FACILITY- is the name of the business where the well is located.
 FACILITY ID #(if applicable)
 NAME OF FACILITY DAVIDSON CO. LANDFILL
 STREET ADDRESS 1160 old Hwy 29
Thomasville NC 27360-0024
 City or Town State Zip Code
 CONTACT PERSON Charlie Brushwood
 MAILING ADDRESS 1242 old Hwy 29
Thomasville N.C. 27360-0024
 City or Town State Zip Code
336-242-2284
 Area code - Phone number

6. WELL DETAILS:
 a. TOTAL DEPTH: 30.50
 b. DOES WELL REPLACE EXISTING WELL? YES NO
 c. WATER LEVEL Below Top of Casing: 20.0 FT.
 (Use "+" if Above Top of Casing)

d. TOP OF CASING IS Flush FT. Above Land Surface*
 *Top of casing terminated at/or below land surface may require a variance in accordance with 15A NCAC 2C .0118.

e. YIELD (gpm): _____ METHOD OF TEST _____

f. DISINFECTION: Type _____ Amount _____

g. WATER ZONES (depth):
 From 20.5 To 30.5 From _____ To _____
 From _____ To _____ From _____ To _____
 From _____ To _____ From _____ To _____

7. CASING:
 Depth Diameter Thickness/Weight Material
 From 0 To 20.5 Ft. 2" sch 40 PVC
 From _____ To _____ Ft. _____ _____
 From _____ To _____ Ft. _____ _____

8. GROUT: Depth Material Method
 From 0 To 15.5 Ft. Portland Tremie
 From 15.5 To 18.5 Ft. Bestonite Tremie
 From _____ To _____ Ft. _____ _____

9. SCREEN: Depth Diameter Slot Size Material
 From 20.5 To 30.5 Ft. 2" in. .010 in. PVC
 From _____ To _____ Ft. _____ in. _____ in. _____
 From _____ To _____ Ft. _____ in. _____ in. _____

10. SAND/GRAVEL PACK:
 Depth Size Material
 From 18.5 To 30.5 Ft. #3 SAND
 From _____ To _____ Ft. _____ _____
 From _____ To _____ Ft. _____ _____

11. DRILLING LOG
 From _____ To _____ Formation Description

12. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.
David Barron 8-20-08
 SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE
DAVID BARRON
 PRINTED NAME OF PERSON CONSTRUCTING THE WELL



G. N. Richardson & Associates, Inc.

14 North Boylan Avenue, Raleigh NC 27603
(919) 828-0577

FIELD BOREHOLE LOG

BOREHOLE NUMBER **PZ-37**

Page 1 of 1

PROJECT NAME: **Davidson County - Phase 2**

LOCATION: **Lexington, NC**

DRILLING CO: **Engineering Tectonics, P.A.**

DRILLING METHOD: **HSA**

FIELD PARTY: **R. Barron**

GEOLOGIST: **J. Smyth**

DATE BEGUN: **9/21/04** COMPLETED: **9/21/04**

TOTAL DEPTH: **27**

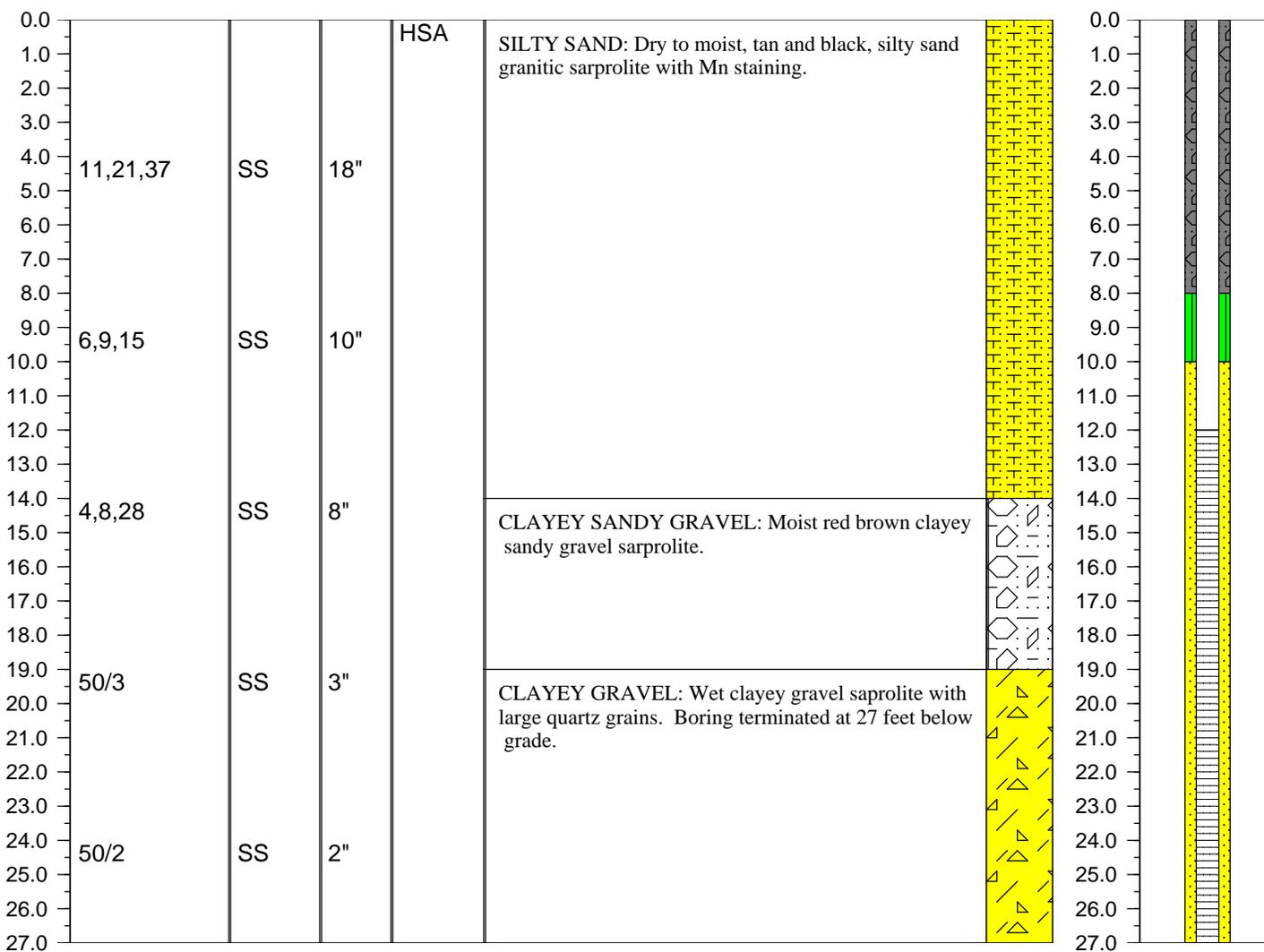
GROUND SURFACE ELEVATION:

TOP OF CASING ELEVATION:

STATIC WATER LEVEL (BLS)

Depth (ft)	19	16.98
Time	2 pm	4:15
Date	9/21/04	10/12/04

DEPTH	BLOW COUNT	SAMPLING METHOD	RECOVERY	DRILL METHOD	DESCRIPTION	LITHOLOGY	DEPTH	WELL INSTALLATION
					Converted to MW-10S			



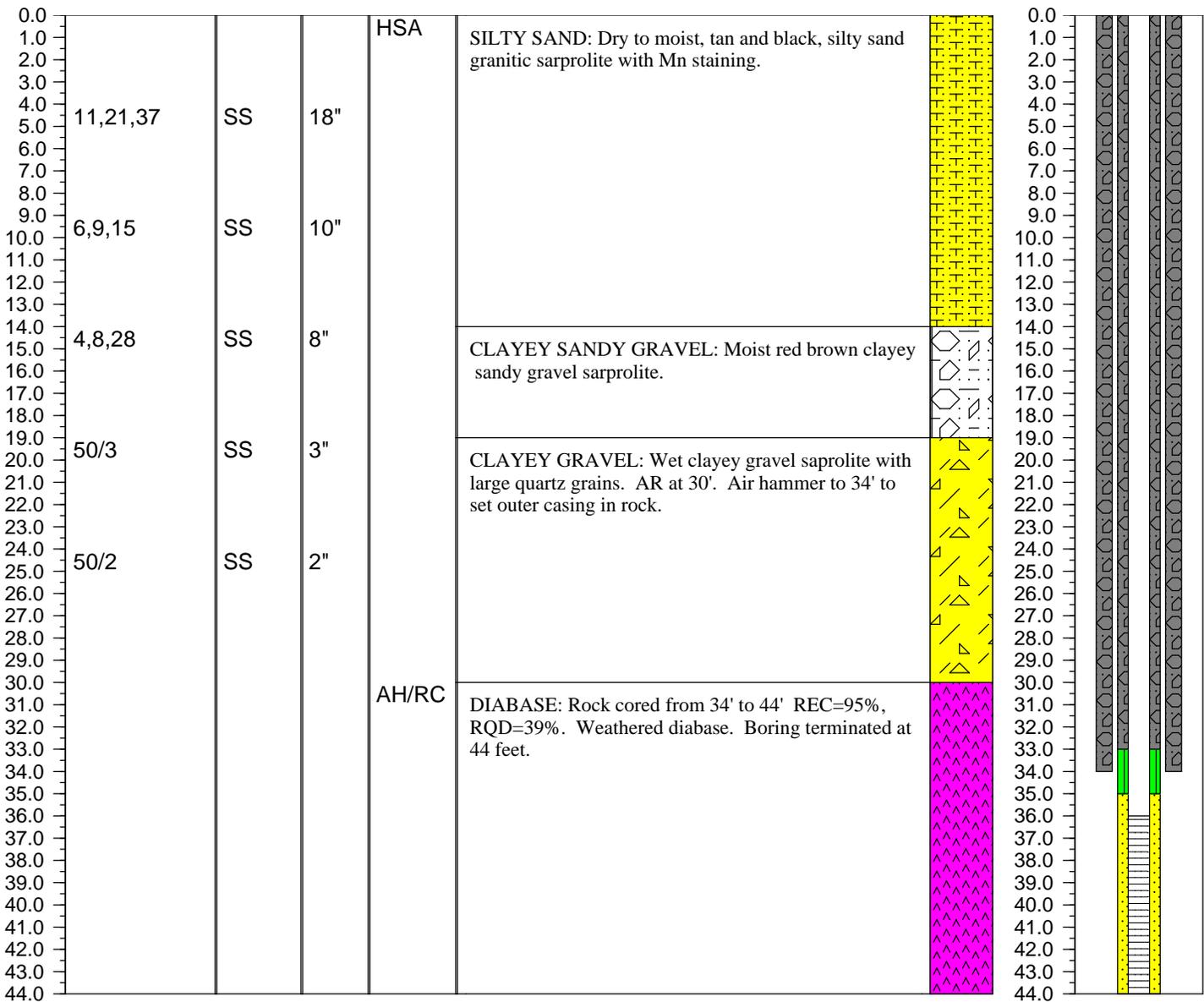


PROJECT NAME: **Davidson County - Phase 2**
 LOCATION: **Lexington, NC**
 DRILLING CO: **Engineering Tectonics, P.A.**
 DRILLING METHOD: **HSA**
 FIELD PARTY: **R. Barron**
 GEOLOGIST: **J. Smyth**
 DATE BEGUN: **9/21/04** COMPLETED: **10/14/06**

TOTAL DEPTH: **44**
 GROUND SURFACE ELEVATION:
 TOP OF CASING ELEVATION:

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

DEPTH	BLOW COUNT	SAMPLING METHOD	RECOVERY	DRILL METHOD	DESCRIPTION	LITHOLOGY	DEPTH	WELL INSTALLATION
					Converted to MW-10D			



Appendix B

Laboratory Analytical Report

**April 2015 Groundwater Monitoring Report
Davidson County Phase 2 MSW 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#: 6059 A

DAVIDSON COUNTY (PHASE 2)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH ,NC 27603

DATE COLLECTED: 04/16/15
DATE REPORTED : 06/10/15

REVIEWED BY: 

PARAMETERS	MDL	SW-1		SW-2		Leachate		Analysis		Method	
		SWSL						Date	Analyst	Code	
BOD, mg/l	2.0	2.0				734	04/17/15	TRB	5210B-01		
COD, mg/l	20.0	20.0				1000	04/20/15	TRB	H8000-79		
Total Suspended Residue, mg/l		2.5				81	04/20/15	KKP	2540D-97		
Ammonia Nitrogen as N, mg/l	0.003	0.01				42.50	04/21/15	RND	350.1 R2-93		
Nitrate Nitrogen as N, mg/l	0.04	10.0				---	U	04/21/15	KDB	353.2 R2-93	
Total Phosphorus as P, mg/l	0.002	0.02				2.20	04/23/15	KDB	365.4-74		
Sulfate, mg/l	5.0	250.0				19.8 J	04/22/15	TRB	4500SO42E97		
Antimony, ug/l	0.12	6.0	0.236 J	0.27 J	3.3 J	04/28/15	LFJ	EPA200.8			
Arsenic, ug/l	0.63	10.0	0.35 J	0.50 J		04/28/15	LFJ	EPA200.8			
Arsenic, ug/l	0.63	10.0			8 J	06/02/15	MTM	3113B-04			
Barium, ug/l	0.12	100.0	34.1 J	40.5 J	158	04/28/15	LFJ	EPA200.8			
Beryllium, ug/l	0.04	1.0	---	U	0.09 J	0.09 J	04/28/15	LFJ	EPA200.8		
Cadmium, ug/l	0.04	1.0	---	U	0.04 J	1	04/28/15	LFJ	EPA200.8		
Cobalt, ug/l	0.12	10.0	0.84 J	1.6 J	12	04/28/15	LFJ	EPA200.8			
Total Chromium, ug/l	0.14	10.0	0.69 J	2.7 J	25	04/28/15	LFJ	EPA200.8			
Copper, ug/l	0.10	10.0	4.4 J	5.8 J	52	04/28/15	LFJ	EPA200.8			
Lead, ug/l	0.13	10.0	2.0 J	3.2 J	2.2 J	04/28/15	LFJ	EPA200.8			
Nickel, ug/l	0.12	50.0	1.5 J	2.6 J	96	04/28/15	LFJ	EPA200.8			
Selenium, ug/l	0.44	10.0	0.21 J	0.37 J		04/28/15	LFJ	EPA200.8			
Selenium, ug/l	0.44	10.0			7 J	06/09/15	MTM	3113B-04			
Silver, ug/l	0.04	10.0	---	U	0.04 J	0.16 J	04/28/15	LFJ	EPA200.8		
Thallium, ug/l	0.13	5.5	---	U	---	U	04/28/15	LFJ	EPA200.8		
Vanadium, ug/l	0.06	25.0	3.3 J	6.3 J	29	04/28/15	LFJ	EPA200.8			
Zinc, ug/l	0.53	10.0	8.8 J	29	2222	04/28/15	LFJ	EPA200.8			

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 (PHASE 2)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH, NC 27603

CLIENT ID: 6059 A
ANALYST: MAO
DATE COLLECTED: 04/16/15
DATE ANALYZED: 04/28/15
DATE REPORTED: 06/10/15

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B R1 (96)

PARAMETERS, ug/l	MDL	SWSL	SW-1	SW-2	Leachate
1. Chloromethane	0.77	1.0	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	1.90
3. Bromomethane	0.67	10.0	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	2.70 J
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	862.00
8. Iodomethane	0.26	10.0	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	2.30
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	1.80 J
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	2.50 J
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	1.50 J
15. 2-Butanone	2.21	100.0	--- U	--- U	948.00
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	13.20
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	4.50
22. Trichloroethene	0.23	1.0	--- U	--- U	0.80 J
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	12.70
24. Bromodichloromethane	0.21	1.0	--- U	--- U	24.30
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U
29. 1,1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	42.10 J
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	0.60 J
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	13.90
37. Xylenes	0.68	5.0	--- U	--- U	32.60
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	0.90 J
40. Bromoform	0.20	3.0	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	4.50
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U

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

NOTE: EPA METHOD 8260B R1 (96): Leachate received at pH > 2.

CHAIN OF CUSTODY RECORD

CLIENT: 6059 A Week: 13

DAVIDSON COUNTY (PHASE 2)
 MS. JOAN SMYTH
 SMITH GARDNER, INC.
 14 NORTH BOYLAN AVE.
 RALEIGH NC 27603

(919) 828-0577

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			BOD	COD	TSR	Ammonia Nitro.	Nitrate	T. Phosphorus	Sulfate	Metals	EPA 8260B	8260 Dup. 1	8260 Dup. 2	PARAMETERS/TESTS	CLASSIFICATION:	
	DATE	TIME				CHLORINE	UV	NONE														
SW-1	4/16/15	13:00			4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
SW-2	4/16/15	11:43			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
Leachate	4/16/15	15:02			10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)
<i>Bryan Harker</i>	4/16/15 4:30pm	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>	4/16/15 5:00	<i>[Signature]</i>
COMMENTS: CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY SAMPLES COLLECTED BY: <i>[Signature]</i> (Please Print) <i>Bryan Harker</i> SAMPLES RECEIVED IN LAB AT 0°C LEACHATE RECEIVED XI PH > 2 UVET																						

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 281138

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#: 6059

DAVIDSON COUNTY (PHASE 2)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH ,NC 27603

DATE COLLECTED: 04/16/15
DATE REPORTED : 06/01/15

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-1	MW-2	MW-3S	MW-4S	MW-5	Analysis		Method
								Date	Analyst	Code
Antimony, ug/l	0.12	6.0	--- U					04/27/15	LFJ	EPA200.8
Antimony, ug/l	0.12	6.0		--- U	0.30 J	0.12 J	---	04/28/15	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	0.73 J					04/27/15	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0		0.52 J	0.17 J	0.82 J	0.12 J	04/28/15	LFJ	EPA200.8
Barium, ug/l	0.12	100.0	366					04/27/15	LFJ	EPA200.8
Barium, ug/l	0.12	100.0		44.1 J	23.5 J	293	13.5 J	04/28/15	LFJ	EPA200.8
Beryllium, ug/l	0.04	1.0	0.37 J					04/27/15	LFJ	EPA200.8
Beryllium, ug/l	0.04	1.0		0.10 J	---	0.21 J	---	04/28/15	LFJ	EPA200.8
Cadmium, ug/l	0.04	1.0	0.09 J					04/27/15	LFJ	EPA200.8
Cadmium, ug/l	0.04	1.0		0.06 J	---	0.10 J	---	04/28/15	LFJ	EPA200.8
Cobalt, ug/l	0.12	10.0	49					04/27/15	LFJ	EPA200.8
Cobalt, ug/l	0.12	10.0		5.8 J	0.76 J	24	2.3 J	04/28/15	LFJ	EPA200.8
Total Chromium, ug/l	0.14	10.0	32					04/27/15	LFJ	EPA200.8
Total Chromium, ug/l	0.14	10.0		26	2.7 J	48	2.5 J	04/28/15	LFJ	EPA200.8
Copper, ug/l	0.10	10.0	630					04/27/15	LFJ	EPA200.8
Copper, ug/l	0.10	10.0		26	1.5 J	294	8.3 J	04/28/15	LFJ	EPA200.8
Lead, ug/l	0.13	10.0	7.5 J					04/27/15	LFJ	EPA200.8
Lead, ug/l	0.13	10.0		3.0 J	0.19 J	4.8 J	0.60 J	04/28/15	LFJ	EPA200.8
Nickel, ug/l	0.12	50.0	19.6 J					04/27/15	LFJ	EPA200.8
Nickel, ug/l	0.12	50.0		6.2 J	0.97 J	22.1 J	2.8 J	04/28/15	LFJ	EPA200.8
Selenium, ug/l	0.16	10.0	0.38 J					04/27/15	LFJ	EPA200.8
Selenium, ug/l	0.16	10.0		0.31 J	0.49 J	---	---	04/28/15	LFJ	EPA200.8
Silver, ug/l	0.04	10.0	0.34 J					04/27/15	LFJ	EPA200.8
Silver, ug/l	0.04	10.0		0.13 J	---	0.21 J	---	04/28/15	LFJ	EPA200.8
Thallium, ug/l	0.13	5.5	0.17 J					04/27/15	LFJ	EPA200.8
Thallium, ug/l	0.13	5.5		---	---	---	---	04/28/15	LFJ	EPA200.8
Vanadium, ug/l	0.06	25.0	178					04/27/15	LFJ	EPA200.8
Vanadium, ug/l	0.06	25.0		34	10.8 J	183	11.3 J	04/28/15	LFJ	EPA200.8
Zinc, ug/l	0.53	10.0	146					04/27/15	LFJ	EPA200.8
Zinc, ug/l	0.53	10.0		13	4.3 J	120	9.7 J	04/28/15	LFJ	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#: 6059

DAVIDSON COUNTY (PHASE 2)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH ,NC 27603

DATE COLLECTED: 04/16/15
DATE REPORTED : 06/01/15

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-6S	MW-8	MW-9	MW-10S	Trip	Analysis		Method
							Blank	Date	Analyst	Code
Antimony, ug/l	0.12	6.0	--- U	0.13 J	--- U	--- U		04/28/15	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	1.1 J	0.33 J	0.59 J	0.43 J		04/28/15	LFJ	EPA200.8
Barium, ug/l	0.12	100.0	599	4.8 J	77.1 J	57.6 J		04/28/15	LFJ	EPA200.8
Beryllium, ug/l	0.04	1.0	0.31 J	0.05 J	0.18 J	0.16 J		04/28/15	LFJ	EPA200.8
Cadmium, ug/l	0.04	1.0	0.11 J	--- U	0.54 J	0.04 J		04/28/15	LFJ	EPA200.8
Cobalt, ug/l	0.12	10.0	18	1.2 J	5.5 J	6.7 J		04/28/15	LFJ	EPA200.8
Total Chromium, ug/l	0.14	10.0	8.1 J	4.4 J	8.5 J	29		04/28/15	LFJ	EPA200.8
Copper, ug/l	0.10	10.0	258	4.3 J	38	45		04/28/15	LFJ	EPA200.8
Lead, ug/l	0.13	10.0	4.6 J	0.76 J	2.5 J	1.7 J		04/28/15	LFJ	EPA200.8
Nickel, ug/l	0.12	50.0	8.2 J	2.2 J	4.7 J	15.0 J		04/28/15	LFJ	EPA200.8
Selenium, ug/l	0.16	10.0	0.97 J	0.54 J	0.22 J	0.22 J		04/28/15	LFJ	EPA200.8
Silver, ug/l	0.04	10.0	0.08 J	--- U	0.08 J	0.04 J		04/28/15	LFJ	EPA200.8
Thallium, ug/l	0.13	5.5	0.18 J	--- U	--- U	--- U		04/28/15	LFJ	EPA200.8
Vanadium, ug/l	0.06	25.0	109	8.7 J	43	40		04/28/15	LFJ	EPA200.8
Zinc, ug/l	0.53	10.0	183	4.0 J	42	45		04/28/15	LFJ	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
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CLIENT: DAVIDSON COUNTY (PHASE 2)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH, NC 27603

CLIENT ID: 6059
ANALYST: MAO
DATE COLLECTED: 04/16/15
DATE REPORTED: 06/01/15

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	Date Analyzed:		04/27/15	04/28/15	04/28/15	04/28/15	04/28/15
	MDL	SWSL	MW-1	MW-2	MW-3S	MW-4S	MW-5
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				

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

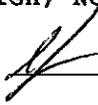
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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

CLIENT: DAVIDSON COUNTY (PHASE 2)
MS. JOAN SMYTH
SMITH GARDNER, INC.
14 NORTH BOYLAN AVE.
RALEIGH, NC 27603

CLIENT ID: 6059
ANALYST: MAO
DATE COLLECTED: 04/16/15
DATE REPORTED: 06/01/15

Page: 2

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	Date Analyzed:		04/28/15	04/28/15	04/28/15	04/28/15	04/28/15
	MDL	SWSL	MW-6S	MW-8	MW-9	MW-10S	04/28/15 Trip Blank
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				

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

Environment 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858
 environment1inc.com
 Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6059 Week: 13

DAVIDSON COUNTY (PHASE 2)
 MS. JOAN SMYTH
 SMITH GARDNER, INC.
 14 NORTH BOYLAN AVE.
 RALEIGH NC 27603

(919) 828-0577

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTANT			Metals	EPA 8260B	8260 Dup. 1	8260 Dup. 2	PARAMETERS/TESTS	
	DATE	TIME				<input type="checkbox"/> CHLORINE	<input type="checkbox"/> UV	<input type="checkbox"/> NONE						
MW-1 ✓	4/16/15	15:20			4								CLASSIFICATION: <input type="checkbox"/> WASTEWATER (NPDES) <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> DMO/GW <input checked="" type="checkbox"/> SOLID WASTE SECTION CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY SAMPLES COLLECTED BY: (Y) N (Please Print) SAMPLES RECEIVED IN LAB AT 0-2°C	
MW-2 ✓		14:38			3									
MW-3S ✓		14:50			3									
MW-4S ✓		14:17			3									
MW-5 ✗		13:52			3									
MW-6S ✓		13:39			4									
MW-8 ✓		13:30			3									
MW-9 ✓		14:03			3									
MW-10S ✓		14:44			3									
Trip Blank					2									
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	COMMENTS:

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

FORM #5

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested. NO 281139

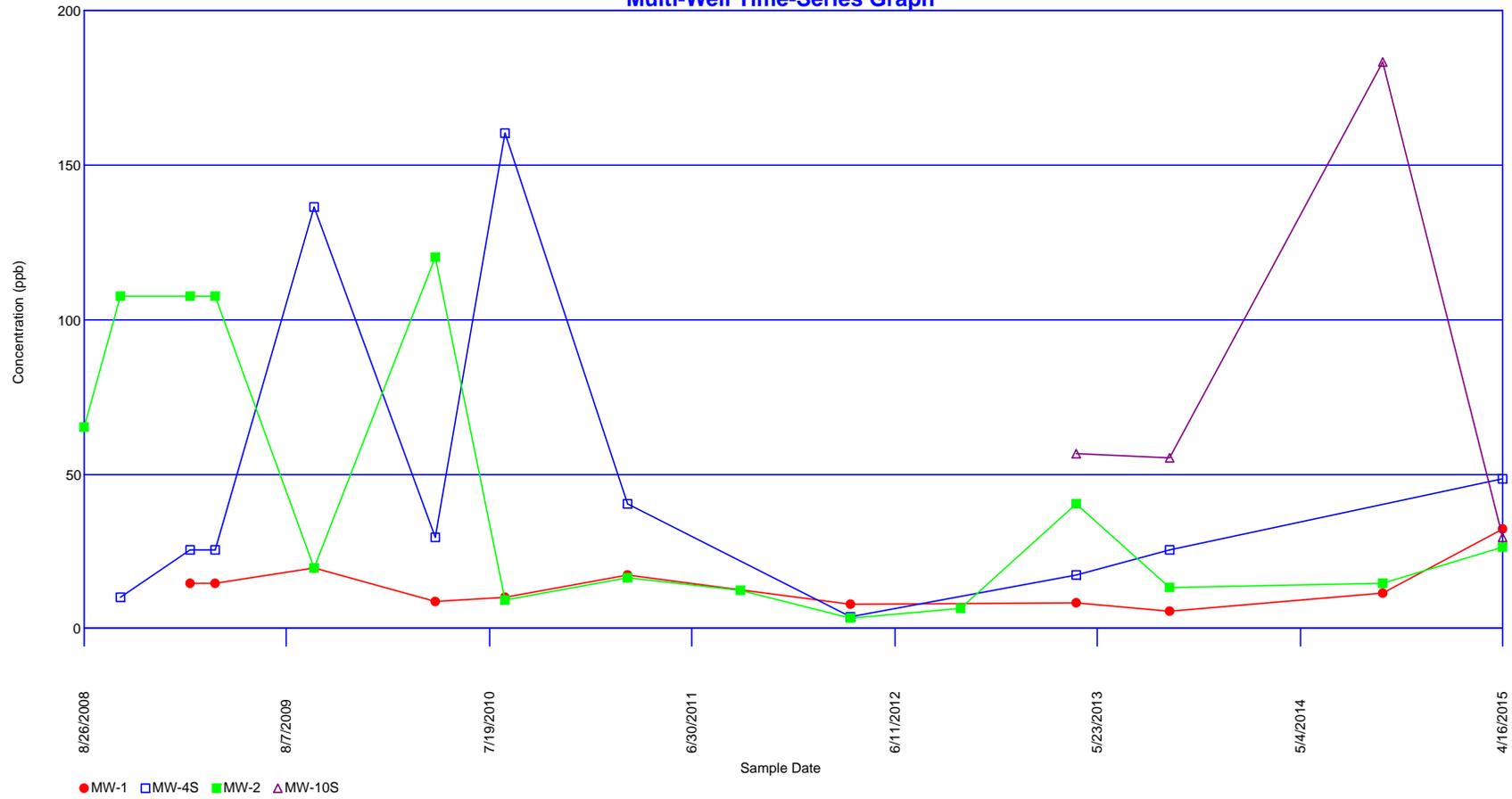
Appendix C

Time vs. Concentration Graphs

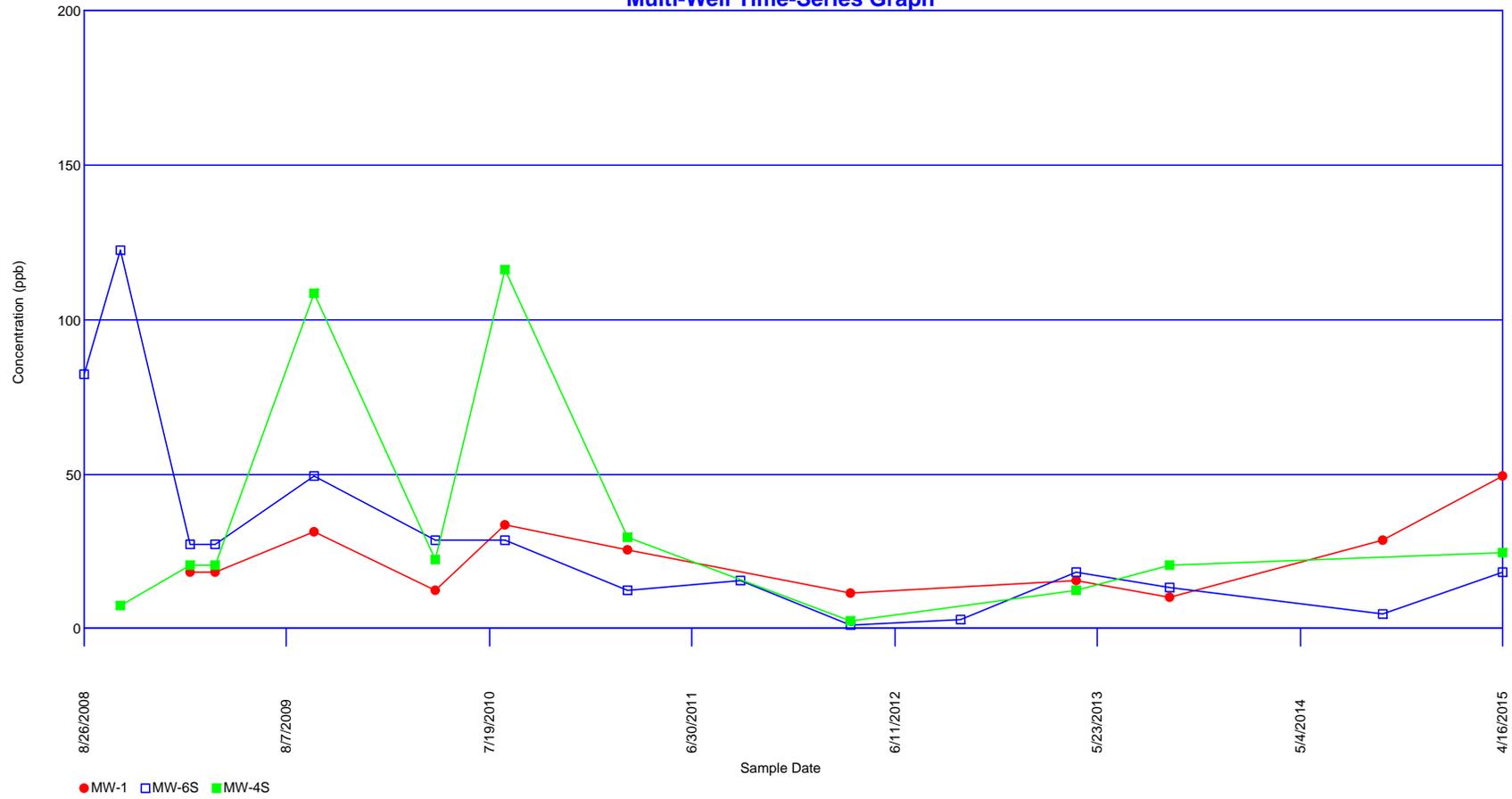
**April 2015 Groundwater Monitoring Report
Davidson County Phase 2 MSW Landfill
NC Solid Waste Permit No. 29-06**

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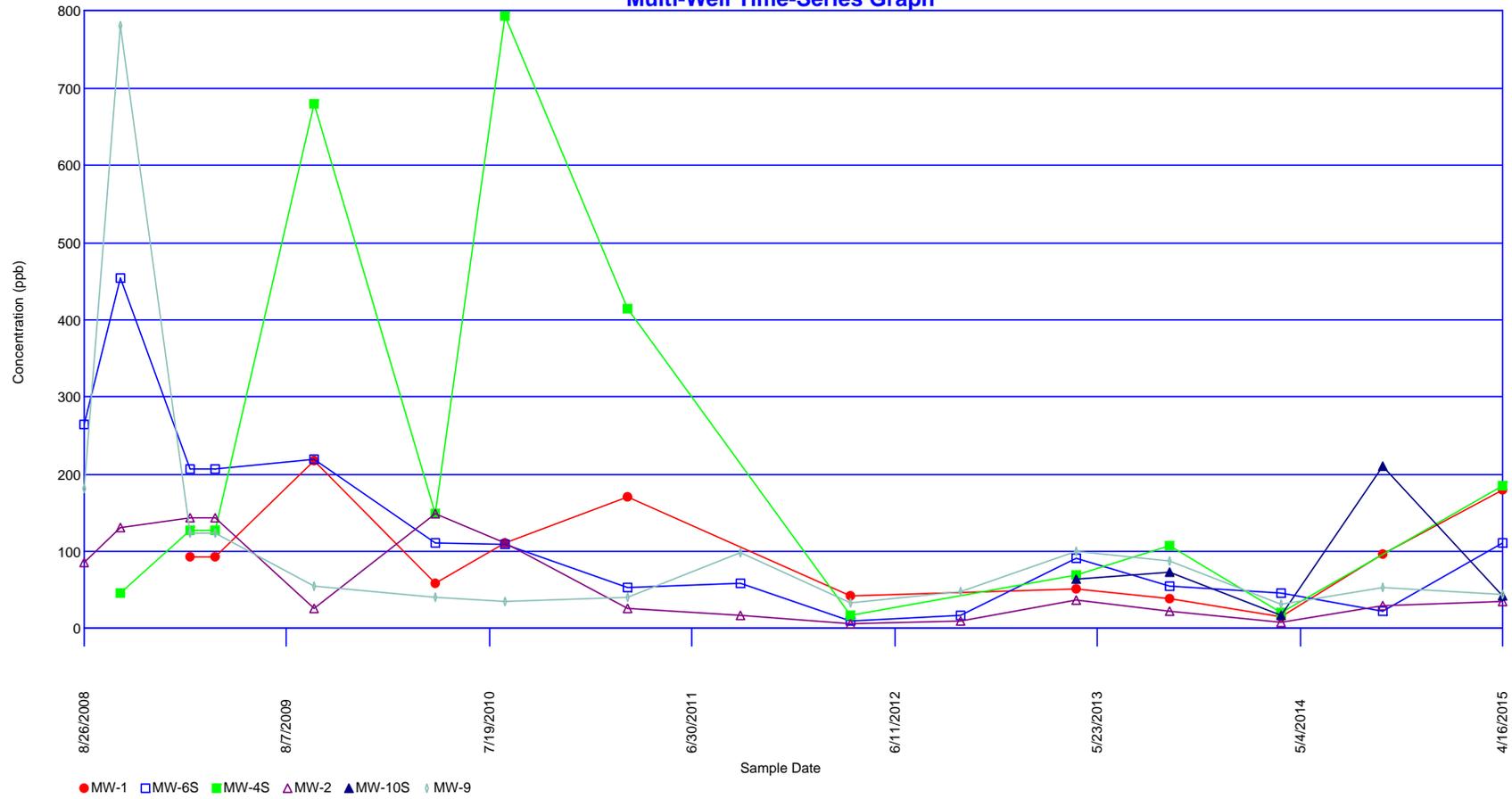
Chromium, total Multi-Well Time-Series Graph



Cobalt, total Multi-Well Time-Series Graph



Vanadium Multi-Well Time-Series Graph



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