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

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

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

Instructions:

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

Solid Waste Monitoring Data Submittal Information

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

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 Holly Grove Landfill	1242 Old Highway 29 Thomasville, NC 27360	29-02	0.0500	October 3, 2012

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

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

Notification attached?

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

Certification

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

Madeline Germsn	Geologist	919-828-0577 x 222
Facility Representative Name (Print)	Title	(Area Code) Telephone Number

Affix NC Licensed/ Professional Geologist Seal

Signature 1/14/13 Date

14 N. Boylan Ave. Raleigh, NC 27603

Facility Representative Address

C-0828

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

NORTH CAROLINA LICENSED SEAL 2275 GEOLOGIST MADELINE GERMAN

Revised 6/2009

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Groundwater Monitoring Report
October 2012 Semi-Annual Event

Davidson County Closed Holly Grove Landfill
NC Solid Waste Permit No. 29-02

Prepared for:

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

January 2013

Prepared by:

SMITH+GARDNER

14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

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Groundwater Monitoring Report – October 2012

Davidson County Closed Holly Grove Landfill
NC Solid Waste Permit No. 29-02

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

S+G Project No. DAVDCO -1

Madeline German P.G.
Project Geologist

1/4/13

Joan Smyth, P.G.
Senior Hydrogeologist

January 2013

SMITH+GARDNER
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

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Davidson County Holly Grove Landfill
NC Solid Waste Permit No. 29-02

October 2012 Groundwater Monitoring Report

Table of Contents

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1.0 INTRODUCTION

Smith Gardner, Inc. (S+G) was contracted by Davidson County to execute their semi-annual ground water monitoring at the Davidson County Closed Holly Grove Landfill, permit number 29-02, as required by 15A NCAC 13B .0600. Sampling was conducted October 3, 2012. 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.

Three landfills are currently monitored under permit 29-02, as the Holly Grove Landfill, due to their waste margins close proximity to one another. Areas 1 and 2, located in the Holly Grove Landfill, were unlined municipal solid waste facilities owned and operated by Davidson County Integrated Solid Waste. The third area, the Scarlett Landfill located west of Areas 1 and 2, is a private landfill originally owned and operated by Mr. Scarlett, then owned by Ms. Virginia White who sold the Scarlett property to Hale Artificier Inc in 2001; it is currently used to house storage containers

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 Holly Grove groundwater monitoring network includes fifteen monitoring wells (MW-1A, MW-2, MW-3A, MW-5, MW-6, MW-8, MW-9, MW-10, MW11, MW-12, MW-13, MW-14, MW-15, MW-16 and MW-17) and three surface water locations (SW-1, SW-2 and SW-3). Monitoring well MW-7 was previously removed from the monitoring network therefore, was not sampled for this event. MW-6 only recharged a limited amount that did not produce sufficient volume for metals analysis. SW-3 was not sampled because it was dry. A trip blank (TB) was submitted for quality control purposes.

The background well for the Holly Grove site is also the background well for the Phase 1 lined Davidson County Landfill (Permit 29-06). Since that well is located in the Phase 1 area, it was sampled and reported with the Phase 1 wells (Environment 1 Report ID# 6038). The background well was recorded in the Phase 1 report as MW-1S, and that data is included herein under its original name MW-4.

A map illustrating the sampling locations is provided as **Figure 1.**

4.0 SAMPLING PROCEDURES

Sampling procedures followed the protocols set forth in North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities (North Carolina Department of Environment and Natural Resources, Division of Waste Management). Each well was gauged to determine ground water depth and purged three to five well volumes or until dry. Field measurements for pH, specific conductivity and temperature were recorded at each well. 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.

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

5.0 FIELD & LABORATORY RESULTS

5.1 Field Results

Temperature, pH, 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 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 included metals via EPA Test Method 200.8 and Appendix I Volatile Organic Compounds (VOCs) via EPA Test Method 8260B. Analytical results were compared to the NC DWM Solid Waste Section Quantitation Limits (SWSLs) and 15A NCAC 2L.0200 (2LStandard). The laboratory analysis is presented in **Appendix B**.

5.2.1 Inorganic Constituents

Seven inorganic constituents barium (MW-1A, MW-2, MW-9, MW-10, MW-13 and MW-17), cobalt (MW-1A, MW-9, MW-10, MW-13 and MW-15), copper (MW-10), lead (MW-16), selenium (MW-10, MW-12 and MW-13), vanadium (MW-17) and zinc (MW-10, MW-15 and MW-17) were detected above their respective SWSL standards. No constituents were detected above their 2L Standards. Most inorganic constituents were either below the method detection limit (MDL) or were "J-values" indicating a non-quantifiable value.

No inorganics were detected above 2B Standards in surface water samples.

5.2.2 Organic Constituents

Ten organic constituents: 1,1-dichloroethane, 1,2-dichloroethane, 1,2-dichloropropane, 1,4-dichlorobenzene, benzene, chlorobenzene, cis-1,2-dichloroethene, trichlorofluoromethane, trichloroethene and vinyl chloride were detected above their respective SWSL. The following constituents were found at concentrations above their respective 2L Standards:

- 1,1-Dichloroethane (MW-1A, MW-6, MW-8, MW-12 and MW-17);
- 1,2-Dichloroethane (MW-1A);
- 1,2-Dichloropropane (MW-1A);
- 1,4-Dichlorobenzene (MW-9 and MW-13)
- Benzene (MW-1A, MW-9 and MW-13) and
- Vinyl Chloride (MW-1A, MW-11 and MW-12).

Constituent concentrations reported between the MDL and MRL are estimated values and are denoted with a "J" qualifier. Inorganic and organic detections are provided on **Tables 3 & 4**, respectively.

Organic constituents were not detected in surface water samples.

6.0 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
I = ground water gradient
n = porosity

Ground water velocities in the uppermost aquifer at the Holly Grove Landfill ranged from 0.027 feet/day (MW-3A) to 1.672 feet/day (MW-15) and averaging 0.685 feet/day. Calculations are included in **Table 5**. Groundwater elevations indicate the flow direction is generally south and southwest across the site; which is consistent with historically reported ground water flow patterns. The potentiometric surface map is included as **Figure 1**.

7.0 CONCLUSIONS

Overall reported detections remain consistent with historically reported results. Monitoring event results indicate detections of both inorganic and organic constituents above the SWSL. Inorganic detections (barium, cobalt, copper, chromium, selenium and zinc) can be attributed to natural occurrence in the soils in this area of North Carolina and/or sample turbidity and are

not due to landfill impact. Both chlorinated and volatile organic compounds were detected across the site. However, total organic detections have consistently decreased since fall 2010. No 2B exceedances were reported for this event indicating surface waters remain un-impacted.

The next ground water monitoring event is tentatively scheduled for April 2013. Sampling results will be reported to NCDENR with laboratory analysis.

FIGURES

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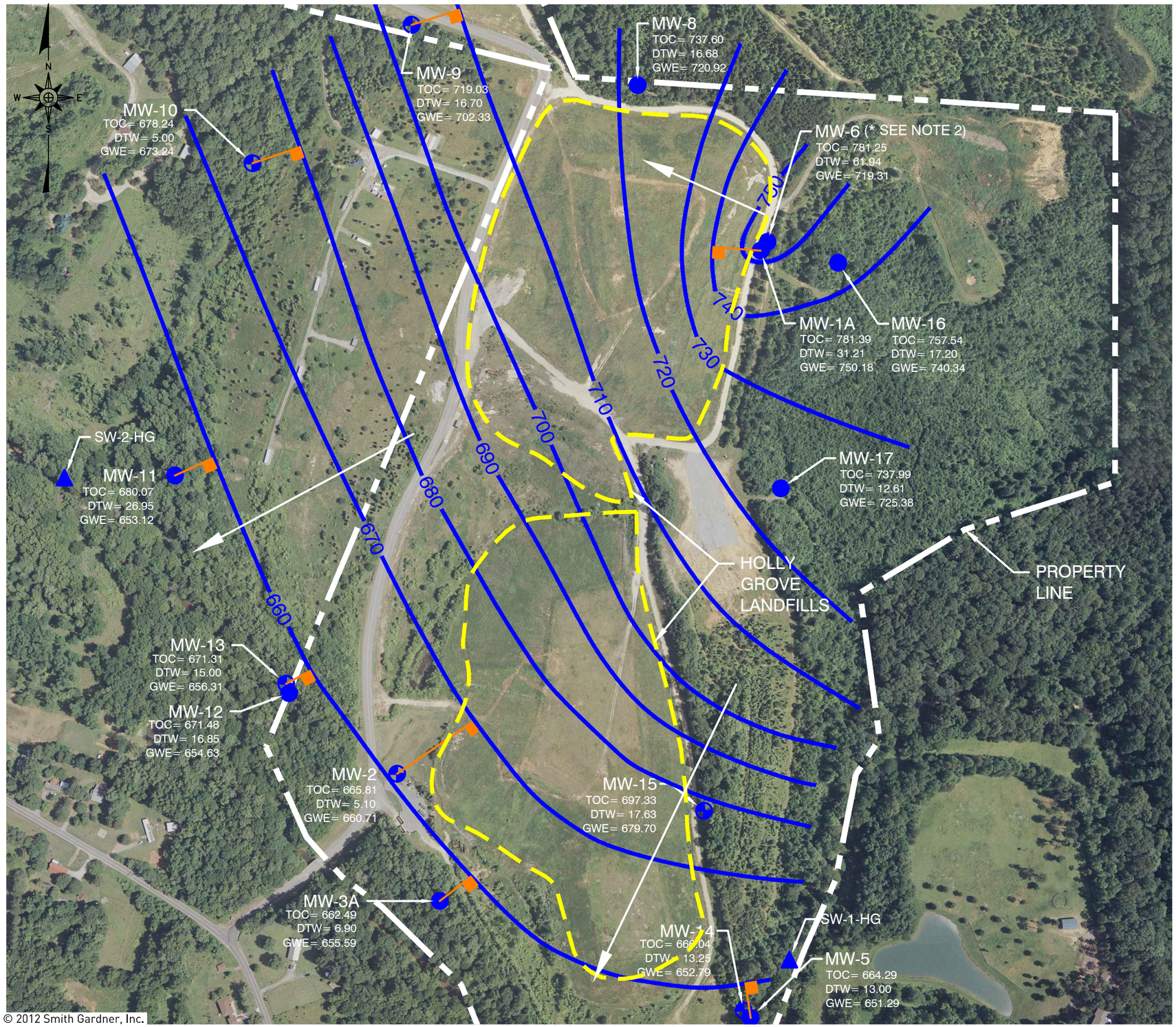

LEGEND:

MW-1A	EXISTING MONITORING WELL
MW-5	BEDROCK MONITORING WELL
SW-2	EXISTING SURFACE WATER MONITORING STATION
710	GROUNDWATER SURFACE CONTOUR
	PROPERTY LINE (SHOWN AS WHITE ON MAP)
	WASTE BOUNDARY
	MEASUREMENT FOR HYDRAULIC GRADIENT CALCULATION
	DIRECTION OF GROUNDWATER FLOW
TOC	TOP OF CASING ELEVATION
DTW	DEPTH TO WATER MEASUREMENT
GWE	GROUNDWATER ELEVATION

NOTE

1. GROUNDWATER DATA RECORDED ON OCTOBER 3, 2012 BY SMITH GARDNER, INC. PERSONNEL.
2. NOT USED FOR GROUNDWATER CONTOURS.

0 300' 600'

PREPARED BY:

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

PREPARED FOR:

POTENTIOMETRIC SURFACE MAP
FALL 2012
CLOSED HOLLY GROVE LANDFILL
DAVIDSON COUNTY, NC

FIGURE NO.	1
FILENAME:	DAVDCO-B0707
SCALE:	AS SHOWN
PROJECT NO:	DAVDCO-1
APPROVED:	
DRAWN:	J.A.L.
DATE:	Dec 2012

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TABLES

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SMITH+GARDNER

By: MG
Date: 12/17/2012

Table 1
Ground Water Elevations
Davidson County Holly Grove Landfill
10/03/12

Well	Northing	Easting	Top of Casing	Depth to Water	Water Table Elevation
MW-1a	761805.92	1652937.78	781.39	31.21	750.18
MW-2	760300.50	1651891.20	665.81	5.10	660.71
MW-3a	759934.68	1652014.48	662.49	6.90	655.59
MW-4*	763311.06	1650889.31	736.20	54.85	681.35
MW-5	759598.21	1652909.22	664.29	13.00	651.29
MW-6	761831.31	1652957.39	781.25	61.94	719.31
MW-8	762282.39	1652584.06	737.60	16.68	720.92
MW-9	762456.06	1651933.56	719.03	16.70	702.33
MW-10	762057.74	1651474.85	678.24	5.00	673.24
MW-11	761158.90	1651252.18	680.07	26.95	653.12
MW-12	760532.63	1651580.20	671.48	16.85	654.63
MW-13	760559.79	1651571.95	671.31	15.00	656.31
MW-14	762282.39	1652584.06	666.04	13.25	652.79
MW-15	760193.97	1652774.91	697.33	17.63	679.70
MW-16	761771.23	1653160.68	757.54	17.20	740.34
MW-17	761121.95	1652995.87	737.99	12.61	725.38

* MW-4 is the same well as MW-1 associated with Davidson County Phase 1 Lined Landfill.

SMITH+GARDNER

By: MG
Date: 11/21/2012

Table 2
Field Parameters
Davidson County Holly Grove Landfill
10/03/12

Well	pH (std units)	Sp. Conductivity (uMhos)	Temperature (degrees C)	Turbidity (NTU)
MW-1a	6.65	1344	17.26	-
MW-2	6.39	904	21.38	-
MW-3A	7.41	669	18.12	-
MW-4*	6.46	589	18.53	-
MW-5	6.32	296	17.32	-
MW-6	-	-	-	-
MW-8	7.05	894	15.83	-
MW-9	6.41	1253	17.06	-
MW-10	6.83	1253	18.84	-
MW-11	6.55	1461	15.6	-
MW-12	6.93	2142	16.27	-
MW-13	6.49	2866	18.6	-
MW-14	7.3	407	17.27	-
MW-15	6.16	216	16.35	-
MW-16	7.34	690	16.35	-
MW-17	6.42	578	16.37	-
SW-1	7.43	188	21.7	-
SW-2	7.67	132	21.36	-
SW-3	-	-	-	-

Note: * MW-4 is the same well as MW-1 associated with Davidson County Phase 1 Lined Landfill.
Data Collected S+G Engineers Inc. personel Don Misenheimer.
SW-3 was not sampled because it was dry.
Turbidity data was not measured this event due to a broken meter.

SMITH+GARDNER

By: EB
Date: 11/14/2012

Table 3
Detected Inorganic Parameters
Davidson County Holly Grove Landfill
10/03/12

Constituent	MDL	SWSL	2L or GWP	2B	MW-1A	MW-2	MW-3A	MW-4*	MW-5	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	SW-1	SW-2
Antimony	0.02	6	1 §	640	<0.02	0.05 J	<0.02	2.1 J	<0.02	1 J	0.11 J	0.26 J	0.27 J	0.25 J	0.81 J	0.03 J	0.18 J	0.09 J	0.13 J	0.18 J	0.09 J
Arsenic	0.13	10	10	10	2.5 J	0.31 J	<0.13	0.52 J	<0.13	0.42 J	1.9 J	3.8 J	0.95 J	2.9 J	7 J	0.41 J	0.41 J	0.46 J	1.4 J	0.27 J	0.33 J
Barium	0.07	100	700	2000000	**225**	**156**	26.8 J	33.8 J	49.7 J	31.4 J	**216**	**293**	80.2 J	77.5 J	**199**	47.4 J	71.4 J	42.6 J	**239**	20 J	19.8 J
Beryllium	0.07	1	4 §	6.5	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.13 J	<0.07	<0.07	0.09 J	<0.07	0.09 J	<0.07	<0.07	<0.07	<0.07
Cadmium	0.03	1	2	2	0.07 J	0.05 J	0.14 J		0.05 J	0.07 J	0.07 J	0.48 J	0.14 J	0.24 J	0.05 J	0.09 J	0.15 J	0.11 J	0.31 J	<0.03	0.07 J
Cobalt	0.02	10	1 §	270	**107**	8.1 J	0.31 J	0.09 J	2.9 J	0.4 J	**11**	**12**	2.2 J	0.52 J	**12**	2 J	**17**	0.6 J	5.2 J	0.35 J	0.38 J
Copper	0.06	10	1000	7	0.99 J	1.2 J	0.64 J	0.83 J	4.8 J	0.38 J	3.8 J	**13**	2.6 J	0.71 J	2.9 J	9.2 J	7.2 J	0.75 J	3.2 J	2.1 J	3.7 J
Total Chromium	0.18	10	10	50	<0.18	<0.18	<0.18	<0.18	2.2 J	0.33 J	2.8 J	3 J	0.19 J	0.23 J	1 J	3 J	9.6 J	0.81 J	<0.18	0.3 J	0.29 J
Lead	0.08	10	15	25	0.09 J	0.13 J	0.23 J	<0.08	0.46 J	<0.08	0.43 J	2.8 J	0.11 J	0.44 J	0.36 J	0.32 J	0.45 J	**11**	0.26 J	0.36 J	0.58 J
Nickel	0.06	50	100	88	4.7 J	3.2 J	2 J	1.1 J	4.4 J	2.5 J	8 J	22.3 J	11.3 J	8.6 J	10.6 J	2.4 J	9 J	2.7 J	2.1 J	2.4 J	3.4 J
Selenium	0.17	10	20	5	0.47 J	1.7 J	1 J	0.7 J	0.18 J	1.2 J	1.1 J	**11**	4.1 J	**11**	**17**	1.1 J	0.57 J	1.6 J	0.88 J	0.24 J	<0.17
Thallium	0.07	5.5	0.28 §	0.47	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.08 J	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.08 J
Vanadium	0.1	25	0.3 §	NE	2.7 J	1.3 J	3.8 J	2.6 J	11 J	2.4 J	5.6 J	19.4 J	2 J	2 J	12.4 J	13.4 J	15.6 J	5 J	**26**	3.1 J	2.8 J
Zinc	0.48	10	1000	50	1.8 J	2.8 J	1.1 J	1.3 J	8.3 J	0.91 J	9.3 J	**11**	3.4 J	<0.48	4 J	3.8 J	**14**	3.4 J	**36**	8 J	31

SWSL	-	Solid Waste Section Quantitation Limits
2L	-	Groundwater Standards (15A NCAC 2L 0200)
GWP	-	Groundwater Protection Standards (noted by §)
2B	-	NCAC 2B Standard for Class C waters
MDL	-	Method Detection Limit
Shading	-	Detection above 2L Standard
Bold Letters	-	Constituents detected above SWSL
J	-	Detected between MDL and SWSL limit
< MDL	-	Constituent not detected above the MDL value

*MW-4 is also known as MW-1S for the Phase 1 lined landfill.

Table units are presented in ug/l.

Lab data analysis by Environment 1, Inc. report dated 04/17/2012, ID#6037A.

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SMITH+GARDNER

By: EB
Date: 11/14/2012

Table 4
Detected Organic Parameters
Davidson County Holly Grove Landfill
10/03/12

Parameter	SWSL	2L	MDL	MW-1A	MW-2	MW-3A	MW-5	MW-6	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-17
1,1-dichloroethane	5	6	0.20	**29.2**	0.7 J	4.8 J	0.70 J	**8.2**	**17**	0.4 J	<0.2	2.6 J	**11.9**	0.7 J	0.8 J	3.2 J	**11.5**
1,1-dichloroethene	5	7	0.17	0.3 J	<0.17	<0.17	<0.17	<0.17	0.3 J	<0.17	<0.17	<0.17	0.9 J	<0.17	<0.17	<0.17	<0.17
1,2-dichlorobenzene	5	20	0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	0.5 J	<0.32	0.6 J	0.5 J	1.2 J	<0.32	<0.32	<0.32
1,2-dichloroethane	1	0.4	0.27	**2.2**	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	0.6 J	<0.27	<0.27	<0.27	<0.27
1,2-dichloropropane	1	0.6	0.21	**4.1**	<0.21	<0.21	<0.21	0.6 J	<0.21	0.4 J	<0.21	0.4 J	0.6 J	<0.21	<0.21	<0.21	0.9 J
1,4-dichlorobenzene	1	6	0.39	**4.70**	0.8 J	0.5 J	<0.39	<0.39	<0.39	**6.20**	0.4 J	**2**	**5.80**	**9.5**	<0.39	<0.39	<0.39
acetone	100	6000	9.06	<9.06	<9.06	<9.06	<9.06	<9.06	<9.06	<9.06	<9.06	<9.06	9.8 J	30.9 J	<9.06	9.3 J	<9.06
benzene	1	1	0.24	**4.60**	<0.24	0.3 J	<0.24	<0.24	0.8 J	**2**	<0.24	0.3 J	0.9 J	**2.7**	<0.24	<0.24	<0.24
chlorobenzene	3	50	0.30	0.5 J	1.5 J	<0.30	<0.30	<0.30	<0.30	**6.20**	<0.30	**4.10**	**3.40**	**15.1**	<0.30	<0.30	<0.30
chloroethane	10	3000	0.48	3.4 J	2.1 J	1.2 J	<0.48	<0.48	1.3 J	1.1 J	<0.48	<0.48	10.2 J	21.2	<0.48	1.5 J	0.8 J
cis-1,2-dichloroethene	5	70	0.25	**46.8**	<0.25	0.5 J	<0.25	1.1 J	0.4 J	<0.25	<0.25	0.3 J	0.3 J	<0.25	<0.25	<0.25	2.3 J
trichlorofluoromethane	1	2000	0.24	<0.24	<0.24	<0.24	0.40 J	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	**1.7**	<0.24	<0.24
trans-1,2-dichloroethene	5	100	0.23	0.6 J	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23
tetrachloroethene	1	0.7	0.17	0.6 J	<0.17	0.2 J	<0.17	0.5 J	0.4 J	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.4 J
trichloroethene	1	3	0.23	**2.00**	<0.23	0.3 J	<0.23	0.3 J	**2.1**	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	0.6 J
toluene	1	600	0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	0.3 J	<0.23	<0.23	<0.23
vinyl chloride	1	0.03	0.63	**2.40**	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	**1.1**	**1.90**	<0.63	<0.63	<0.63	<0.63

SWSL	-	Solid Waste Section Quantitation Limits
2L	-	Groundwater Standards (15A NCAC 2L 0200)
MDL	-	Method Detection Limit
Shading	-	Detection above 2L standard
Bold Letters	-	Constituents detected above SWSL
J	-	Detected between MDL and SWSL limit
<MDL	-	Constituent not detected above MDL

Table units are presented in ug/l.
Lab data analysis by Environment 1, Inc. report dated 10/31/2012, ID#6037.

SMITH+GARDNER

By: MG

Date: 12/17/2012

Table 5
Ground Water Velocity Calculations
Holly Grove Landfill - Davidson County
10/03/12

Well Number	Aquifer	Conductivity (ft/day)	Conductivity (ft/min)	Assumed Porosity (n)	Gradient (I)	Velocity (ft/day)
MW-1a	Bedrock	0.415	2.88E-04	0.15	0.075	0.208
MW-2	Unconsolidated	1.440	1.00E-03	0.20	0.035	0.255
MW-3a	Bedrock	0.105	7.27E-05	0.15	0.039	0.027
MW-5	Bedrock	1.814	1.26E-03	0.20	0.083	0.753
MW-9	Unconsolidated	3.787	2.63E-03	0.20	0.054	1.019
MW-10	Unconsolidated	1.541	1.07E-03	0.20	0.047	0.365
MW-11	Bedrock	1.440	1.00E-03	0.15	0.057	0.550
MW-13	Unconsolidated	5.890	4.09E-03	0.20	0.045	1.316
MW-15	Unconsolidated	5.688	3.95E-03	0.20	0.059	1.672

Notes:

Velocity calculated from V=KI/n:

V = Velocity
K = Hydraulc Conductivity
I = Gradient
n = Porosity

Hydraulic conductivity data from slug testing
Porosity estimated from soil types

Appendix A

Field Data Sheets

October 2012 – Groundwater Monitoring Report
Davidson County Holly Grove Landfill
Solid Waste Permit No. 29-02

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SMITH + GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: DAVIDSON (HG) **Date:** 10.2.12

Well ID: MW-2 **Initials:** MD

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

1. Well Vicinity	YES	NO
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:

O.K.

2. Concrete Apron and Steel Case	YES	NO
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:

If concrete apron is present, it appears to be buried

3. PVC Riser	YES	NO
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:

O.K.

SMITH+GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: Davidson (HFW) Date: 10.2.12

Well ID: MW-3a Initials: AD

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

1. Well Vicinity	YES	NO
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:

o.k.

2. Concrete Apron and Steel Case	YES	NO
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:

if concrete apron is present, it appears to be buried

3. PVC Riser	YES	NO
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:

o.k.

SMITH+GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: Davidson (46) Date: 10.2.12

Well ID: MW-1a Initials: JD

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

1. Well Vicinity	YES	NO
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:

ok.

2. Concrete Apron and Steel Case	YES	NO
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:

o.k.

3. PVC Riser	YES	NO
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:

o.k.

SMITH + GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: DAVIDSON (HG) **Date:** 10-2-12

Well ID: MW-5 **Initials:** ND

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

1. Well Vicinity	YES	NO
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:

o.k.

2. Concrete Apron and Steel Case	YES	NO
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:

concrete apron is broken in half, with half removed

3. PVC Riser	YES	NO
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:

ok.

SMITH + GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: Davidson (HG) Date: 10.2.12

Well ID: MW-6 Initials: JD

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

1. Well Vicinity	YES	NO
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:

o.k.

2. Concrete Apron and Steel Case	YES	NO
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:

o.k.

3. PVC Riser	YES	NO
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:

o.k.

SMITH+GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: DAVIDSON (HG) Date: 10-2-12

Well ID: MW-8 Initials: JD

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

1. Well Vicinity	YES	NO
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:

O.K.

2. Concrete Apron and Steel Case	YES	NO
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:

O.K.

3. PVC Riser	YES	NO
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:

O.K.

SMITH+GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: Davidson (HC) Date: 10-2-12

Well ID: MW-9 Initials: JD

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

1. Well Vicinity	YES	NO
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:

o.k.

2. Concrete Apron and Steel Case	YES	NO
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:

o.k.

3. PVC Riser	YES	NO
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:

o.k.

SMITH + GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: DAVIDSON (40) **Date:** 10.2.12

Well ID: MW-9 **Initials:** JD

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

1. Well Vicinity	YES	NO
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:

o.k.

2. Concrete Apron and Steel Case	YES	NO
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:

o.k.

3. PVC Riser	YES	NO
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:

o.k.

SMITH+GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: DAVIDSON (GHG) **Date:** 10-2-12

Well ID: MW-10 **Initials:** JD

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

1. Well Vicinity	YES	NO
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:

o.k.

2. Concrete Apron and Steel Case	YES	NO
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:

o.k.

3. PVC Riser	YES	NO
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:

o.k.

SMITH+GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: DAVIDSON (HG) Date: 10.2.12

Well ID: MW-11 Initials: [illegible]

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

1. Well Vicinity	YES	NO
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:

ok.

2. Concrete Apron and Steel Case	YES	NO
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:

dead fallen tree is laying across concrete apron - apron appears to be broken.

3. PVC Riser	YES	NO
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:

ok.

SMITH+GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: Davidson (HC) **Date:** 10-2-12

Well ID: MW-12 **Initials:** JD

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

1. Well Vicinity	YES	NO
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:

o.k.

2. Concrete Apron and Steel Case	YES	NO
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:

o.k.

3. PVC Riser	YES	NO
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:

o k.

SMITH+GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: DAVIDSON (HC) **Date:** 10-2-12

Well ID: MW-13 **Initials:** JD

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

1. Well Vicinity	YES	NO
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:

O.K.

2. Concrete Apron and Steel Case	YES	NO
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:

O.K.

3. PVC Riser	YES	NO
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:

O.K.

SMITH + GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: Davidson (HQ) **Date:** 10-2-12

Well ID: MW-14 **Initials:** JD

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

1. Well Vicinity	YES	NO
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:

ok.

2. Concrete Apron and Steel Case	YES	NO
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:

o.k.

3. PVC Riser	YES	NO
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:

ok.

SMITH+GARDNER **Groundwater Monitoring Well Inspection Checklist**

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: DAVIDSON (HG) Date: 10.2.12

Well ID: MW-15 Initials: JD

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

1. Well Vicinity	YES	NO
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:

O.K.

2. Concrete Apron and Steel Case	YES	NO
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:

O.K.

3. PVC Riser	YES	NO
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:

O.K.

SMITH + GARDNER

Groundwater Monitoring Well Inspection Checklist

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: Davidson (HG) **Date:** 10.2.12

Well ID: MW-16 **Initials:** JD

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

1. Well Vicinity	YES	NO
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:

o.k.

2. Concrete Apron and Steel Case	YES	NO
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:

O.K.

3. PVC Riser	YES	NO
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:

o.k.

SMITH + GARDNER

Groundwater Monitoring Well Inspection Checklist

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: MADISON (HG) **Date:** 10-2-12

Well ID: MW-17 **Initials:** JD

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

1. Well Vicinity	YES	NO
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:

o.k.

2. Concrete Apron and Steel Case	YES	NO
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:

o-k

3. PVC Riser	YES	NO
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:

o-k.

Appendix B

Laboratory Analytical Report

October 2012 – Groundwater Monitoring Report
Davidson County Holly Grove Landfill
NC Solid Waste Permit No. 29-02

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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#: 6037

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

DATE COLLECTED: 10/03/12
DATE REPORTED : 10/31/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-1A	MW-2	MW-3A	MW-5	MW-6	Analysis Date	Analyst	Method Code
Antimony, ug/l	0.02	6.0	--- U	0.05 J	--- U	--- U		10/15/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	2.5 J	0.31 J	--- U	--- U		10/15/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	225	156	26.8 J	49.7 J		10/15/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	--- U	- - U	--- U	--- U		10/15/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.07 J	0.05 J	0.14 J	0.05 J		10/15/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	107	8.1 J	0.31 J	2.9 J		10/15/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	0.99 J	1.2 J	0.64 J	4.8 J		10/15/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	--- U	- - U	--- U	2.2 J		10/15/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	0.09 J	0.13 J	0.23 J	0.46 J		10/15/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	4.7 J	3.2 J	2.0 J	4.4 J		10/15/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.47 J	1.7 J	1.0 J	0.18 J		10/15/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	- - U	--- U	--- U		10/15/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U	- - U	--- U	--- U		10/15/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	2.7 J	1.3 J	3.8 J	11.0 J		10/15/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	1.8 J	2.8 J	1.1 J	8.3 J		10/15/12	LFJ	EPA200.8

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

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

ID#: 6037

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

DATE COLLECTED: 10/03/12
DATE REPORTED : 10/31/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-8	MW-9	MW-10	MW-11	MW-12	Analysis Date	Analyst	Method Code
Antimony, ug/l	0.02	6.0	1.00 J	0.11 J	0.26 J	0.27 J	0.25 J	10/15/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	0.42 J	1.9 J	3.8 J	0.95 J	2.9 J	10/15/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	31.4 J	216	293	80.2 J	77.5 J	10/15/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	--- U	--- U	0.13 J	--- U	--- U	10/15/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.07 J	0.07 J	0.48 J	0.14 J	0.24 J	10/15/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.40 J	11	12	2.2 J	0.52 J	10/15/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	0.38 J	3.8 J	13	2.6 J	0.71 J	10/15/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	0.33 J	2.8 J	3.0 J	0.19 J	0.23 J	10/15/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	--- U	0.43 J	2.8 J	0.11 J	0.44 J	10/15/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	2.5 J	8.0 J	22.3 J	11.3 J	8.6 J	10/15/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	1.2 J	1.1 J	11	4.1 J	11	10/15/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	--- U	--- U	--- U	--- U	10/15/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U	--- U	0.08 J	--- U	--- U	10/15/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	2.4 J	5.6 J	19.4 J	2.0 J	2.0 J	10/15/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	0.91 J	9.3 J	11	3.4 J	--- U	10/15/12	LFJ	EPA200.8

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

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

ID#: 6037

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

DATE COLLECTED: 10/03/12
DATE REPORTED : 10/31/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-13	MW-14	Analysis Date	Analyst	Method Code
Antimony, ug/l	0.02	6.0	0.81 J	0.03 J	10/15/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	7 J	0.41 J	10/15/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	199	47.4 J	10/15/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.09 J	- - U	10/15/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.05 J	0.09 J	10/15/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	12	2.0 J	10/15/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	2.9 J	9.2 J	10/15/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	1.0 J	3.0 J	10/15/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	0.36 J	0.32 J	10/15/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	10.6 J	2.4 J	10/15/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	17	7.1 J	10/15/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	- - U	10/15/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U	- - U	10/15/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	12.4 J	13.4 J	10/15/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	4.0 J	3.8 J	10/15/12	LFJ	EPA200.8

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

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

CLIENT ID: 6037

ANALYST: MAO
DATE COLLECTED: 10/03/12
DATE ANALYZED: 10/11/12
DATE REPORTED: 10/31/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	MW-1A	MW-2	MW-3A	MW-5	MW-6
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	2.40	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	3.40 J	2.10 J	1.20 J	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	0.40 J	--- U
6. 1,1-Dichloroethene	0.17	5.0	0.30 J	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	0.60 J	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	29.20	0.70 J	4.80 J	0.70 J	8.20
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	46.80	--- U	0.50 J	--- U	1.10 J
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	4.60	--- U	0.30 J	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	2.20	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	2.00	--- U	0.30 J	--- U	0.30 J
23. 1,2-Dichloropropane	0.21	1.0	4.10	--- U	--- U	--- U	0.60 J
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- 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	0.60 J	--- U	0.20 J	--- U	0.50 J
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	0.50 J	1.50 J	--- 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	4.70	0.80 J	0.50 J	--- 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 Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

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

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

CLIENT ID: 6037

ANALYST: MAO
DATE COLLECTED: 10/03/12
DATE ANALYZED: 10/11/12
DATE REPORTED: 10/31/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	MW-8	MW-9	MW-10	MW-11	MW-12
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	1.10	1.90
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	1.30 J	1.10 J	--- U	--- U	10.20
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	0.30 J	--- U	--- U	--- U	0.90 J
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	9.80 J
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	17.00	0.40 J	--- U	2.60 J	11.90
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	0.40 J	--- U	--- U	0.30 J	0.30 J
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	0.80 J	2.00	--- U	0.30 J	0.90 J
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	0.60 J
22. Trichloroethene	0.23	1.0	2.10	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	0.40 J	--- U	0.40 J	0.60 J
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- 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	0.40 J	--- 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	6.20	--- U	4.10	3.40
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	6.20	0.40 J	2.00	5.80
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	0.50 J	--- U	0.60 J	0.50 J
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 Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

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

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

CLIENT ID: 6037

ANALYST: MAO
DATE COLLECTED: 10/03/12
DATE ANALYZED: 10/11/12
DATE REPORTED: 10/31/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	MW-13	MW-14
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	21.20	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	1.70
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U
7. Acetone	9.06	100.0	30.90 J	--- 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	0.70 J	0.80 J
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	2.70	--- 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	0.30 J	--- 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	15.10	--- 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	9.50	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	1.20 J	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U

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

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

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

CHAIN OF CUSTODY RECORD

CLIENT: 6037 **Week:** 39

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

(919) 828-0577

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

CONTAINER TYPE, P/G

CHEMICAL PRESERVATION

PARAMETERS

A - NONE D - NAOH
B - HNO_3 E - HCL
C - H_2SO_4 F - ZINC ACETATE
G - NA THIOSULFATE

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Metals	EPA 8260B	8260 Dup. 1	8260 Dup. 2	
						12	12	12	12	pH CHECK (LAB)
						P	G	G	G	CONTAINER TYPE, P/G
						A	E	E	E	CHEMICAL PRESERVATION
MW-1A	10-3-12	3:00p		17.5	4	▒	▒	▒	▒	
MW-2	10-3-12	1:50p		21.5	3	▒	▒	▒		
MW-3A	10-3-12	2:10p		18.0	3	▒	▒	▒		
MW-5	10-3-12	2:25p		17.5	3	▒	▒	▒		not enough H2O for metals
MW-6	10-3-12	3:05p		n/a	3	no	▒	▒		not enough H2O for metals
MW-8	10-3-12	3:30p		16	3	▒	▒	▒		
MW-9	10-3-12	1:00p		17	3	▒	▒	▒		
MW-10	10-3-12	12:55p		19	3	▒	▒	▒		
MW-11	10-3-12	1:20p		15.5	3	▒	▒	▒		
MW-12	10-3-12	1:40p		16.2	3	▒	▒	▒		
MW-13	10-3-12	1:35p		18.8	3	▒	▒	▒		

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
(Y) N

SAMPLES COLLECTED BY: (Please Print)
DMM JAL

SAMPLES RECEIVED IN LAB AT 1.2 °C

RELINQUISHED BY (SIG.) / (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
[signature]	10-4-12 3:00p	[signature]	10/5/12 807
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

FORM #5

Nº 244675

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

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

CHAIN OF CUSTODY RECORD

CLIENT: 6037 Week: 39

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

(919) 828-0577

DISINFECTION
- ☐ CHLORINE
- ☐ UV
- ☐ NONE
- ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Metals	EPA 8260B	8260 Dup. 1	8260 Dup. 2
MW-14	10.3.12	2:15p		17.25	3	▒	▒	▒	

CHLORINE NEUTRALIZED AT COLLECTION									
pH CHECK (LAB)	12	12	12						
CONTAINER TYPE, P/G	P	G	G	G					
CHEMICAL PRESERVATION	A	E	E	E					

PARAMETERS

A - NONE D - NAOH
B - HNO_3 E - HCL
C - H_2SO_4 F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
✓ Y N

SAMPLES COLLECTED BY: (Please Print)
DMM JAL

SAMPLES RECEIVED IN LAB AT 1.2 °C

	DATE/TIME		DATE/TIME
RELINQUISHED BY (SIG.) (SAMPLER)	10-4-12 3:00p	RECEIVED BY (SIG.)	10/5/12 8:07
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

FORM #5

Nº 244674

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#: 6037 A

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

DATE COLLECTED: 10/03/12
DATE REPORTED : 10/31/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-15	MW-16	MW-17	SW-1	SW-2	Analysis Date	Analyst	Method Code
Antimony, ug/l	0.02	6.0	0.18 J	0.09 J	0.13 J	0.18 J		10/15/12	LFJ	EPA200.8
Antimony, ug/l	0.02	6.0					0.09 J	10/16/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	0.41 J	0.46 J	1.4 J	0.27 J		10/15/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0					0.33 J	10/16/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	71.4 J	42.6 J	239	20.0 J		10/15/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0					19.8 J	10/16/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.09 J	--- U	--- U	--- U		10/15/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0					--- U	10/16/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.15 J	0.11 J	0.31 J	--- U		10/15/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0					0.07 J	10/16/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	17	0.60 J	5.2 J	0.35 J	0.38 J	10/15/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	7.2 J	0.75 J	3.2 J	2.1 J		10/15/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0					3.7 J	10/16/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	9.6 J	0.81 J	--- U	0.30 J		10/15/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0					0.29 J	10/16/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	0.45 J	11	0.26 J	0.36 J		10/15/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0					0.58 J	10/16/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	9.0 J	2.7 J	2.1 J	2.4 J		10/15/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0					3.4 J	10/16/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.57 J	1.6 J	0.88 J	0.24 J		10/15/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0					--- U	10/16/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	--- U	--- U	--- U		10/15/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0					--- U	10/16/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U	--- U	--- U	--- U		10/15/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5					0.08 J	10/16/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	15.6 J	5.0 J	26	3.1 J		10/15/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0					2.8 J	10/16/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	14	3.4 J	36	8.0 J		10/15/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0					31	10/16/12	LFJ	EPA200.8

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

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

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

CLIENT ID: 6037 A

ANALYST: MAO
DATE COLLECTED: 10/03/12
DATE ANALYZED: 10/11/12
DATE REPORTED: 10/31/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	MW-15	MW-16	MW-17	SW-1	SW-2
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	1.50 J	--- U	0.80 J	--- 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	9.30 J	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	3.20 J	--- U	11.50	--- 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	2.30 J	--- 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	0.60 J	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	0.90 J	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- 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	0.40 J	--- 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 Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

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

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

CLIENT ID: 6037 A
ANALYST: MAO
DATE COLLECTED: 10/03/12
DATE ANALYZED: 10/11/12
DATE REPORTED: 10/31/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	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 Quanititation Limits.

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

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

CHAIN OF CUSTODY RECORD

CLIENT: 6037 A Week: 39

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

(919) 828-0577

DISINFECTION
- ☐ CHLORINE
- ☐ UV
- ☐ NONE
- ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Metals	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION									
pH CHECK (LAB)						≤2	≤2	≤2	≤2
CONTAINER TYPE, P/G						P	G	G	G
CHEMICAL PRESERVATION						A	E	E	E
MW-15	10·3·12	2:40p		16.6	3	■	■	■	
MW-16	10·3·12	3:10p		15.5	3	■	■	■	
MW-17	10·3·12	2:45p		16.5	4	■	■	■	■
SW-1	10·3·12	2:30p		21.5	3	■	■	■	
SW-2	10·3·12	1:25p		21.5	3	■	■	■	
SW-3	10·3·12	Dry			3	■	■	■	
Trip Blank					2		■	■	

PARAMETERS

A - NONE D - NAOH
B - HNO_3 E - HCL
C - H_2SO_4 F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
(Y) N

SAMPLES COLLECTED BY: (Please Print)
DMN & JAL

SAMPLES RECEIVED IN LAB AT 1.6 °C

	DATE/TIME		DATE/TIME
RELINQUISHED BY (SIG.) (SAMPLER)	10·4·12 3:00p	RECEIVED BY (SIG.)	10/5/12 8:14
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

FORM #5

№ 244673