PREPARED FOR:

REPUBLIC SERVICES OF NORTH CAROLINA, LLC
D.B.A. EAST CAROLINA ENVIRONMENTAL
1922 REPUBLICAN ROAD
AULANDER, NORTH CAROLINA 27805

EAST CAROLINA REGIONAL LANDFILL
PERMIT NO. 08-03

SECOND SEMIANNUAL WATER QUALITY MONITORING REPORT OF 2013

AUGUST 2013

PREPARED BY:

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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):

Joyce Engineering on behalf of Republic Services of NC, LLC

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

Name: G. Van Ness Burbach, Ph.D., P.G. Phone: (336)-323-0092

E-mail: vburbach@joyceengineering.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
East Carolina Regional Landfill	1922 Republican Road Aulander, NC 27805	08-03	.1600	July 17, 2013

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.

G. VanNess Burbach, Ph.D., PG — Technical Consultant — (336)-323-0092

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

Signature — Date: 8/9/13

Affix NC Licensed Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 1349 GEOLOGIST G. VAN NESS BURBACH

2211 W. Meadowview Rd. Ste. 101, Greensboro, NC 27407

Facility Representative Address

C-0782

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

Revised 6/2009

EXECUTIVE SUMMARY

This report presents the results of the second semiannual water quality monitoring event conducted at the East Carolina Regional Landfill on July 17, 2013. Samples were collected by representatives of Joyce Engineering for groundwater monitoring wells, surface water monitoring points, and the leachate collection system. The analytical results from the July 2013 monitoring event have been reported by Analytical Services, Inc. of Norcross, Georgia.

Five inorganic constituents (barium, beryllium cobalt, copper, and zinc) were detected in samples from one or more groundwater or surface water monitoring points at concentrations above their respective Solid Waste Section Reporting Limits (SWSLs). Barium was detected above the SWSL in GW-2, GW-9, GW-13, GW-15, and GW-17. Beryllium was detected above the SWSL in GW-2, GW-7, GW-9, and GW-15. Cobalt was detected above the SWSL in GW-2 and GW-7. Copper was detected above the SWSL in PW-1. Zinc was detected above the SWSL in GW-2, GW-9, GW-15, PW-1, SW-1, and SW-3. No other inorganic or organic constituents were detected above their respective SWSLs in monitoring wells or surface water monitoring points during the July 2013 monitoring event.

One inorganic constituent (cobalt) was detected at a quantified concentration in monitoring wells GW-2 and GW-7 above its respective Solid Waste Section (SWS) Groundwater Protection Standard (GWPS) during the July 2013 event. No other inorganic or organic constituents were detected at quantified concentrations above their respective NC 2L or GWPS during the July 2013 event. The cobalt detections were statistically evaluated in accordance with the procedures outlined in 15A NCAC 13B.1632 (g) and (h) to determine if the quantified concentrations exceeded the facility background concentration. Based on the statistical evaluation, the detections of cobalt were not identified as statistically significant and are representative of historical background concentrations. No other inorganic or organic constituents were detected at quantified concentrations above their respective NC 2L, GWPS, or NC 2B surface water standards during the July 2013 event.

Based on the results summarized herein, Republic Services of NC, LLC, will continue monitoring the uppermost aquifer beneath the East Carolina Regional Landfill in accordance with the requirements for Detection Monitoring Program as outlined in Title 15A NCAC 13B .1633.

Second Semiannual Water Quality Monitoring Report of 2013
East Carolina Regional Landfill
Bertie County, North Carolina

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1.0 INTRODUCTION

This report summarizes the monitoring results from the July 17, 2013 water quality monitoring event at the East Carolina Regional Landfill in Bertie County, North Carolina, in accordance with Title 15A of the North Carolina Administrative Code (NCAC) Subchapter 13B .1632. The East Carolina Regional Landfill, which is an active municipal solid waste landfill, is owned and operated by Republic Services of North Carolina, LLC (Republic) under Permit No. 08-03, issued by the North Carolina Department of Environment and Natural Resources (DENR).

1.1 Site Description and Background

The East Carolina Regional Landfill is an active Subtitle D municipal solid waste landfill that began operating in 1993. The location of the facility is shown on the inlay on Drawing 1. The East Carolina Regional Landfill is located approximately 7.5 miles northwest of Windsor, NC at the intersection of State Routes 1221 and 1225. The facility is bounded to the north and east by undeveloped property and the Connaritsa Swamp, to the west by State Route 1225 and undeveloped and agricultural property, and to the south by State Route 1221, wooded property, and undeveloped bottomlands associated with the easterly flowing Cashie River.

Topographic elevations at the facility range from approximately 30 to 70 feet above mean sea level. Along the northern and eastern portions of the facility, surface drainage from the facility and surrounding areas is routed by drainage channels and storm water control structures to tributaries of the southerly flowing Connaritsa Swamp, a tributary system of the Cashie River. Along the western and southern portions of the facility, surface drainage from the facility and surrounding areas is routed by drainage channels and storm water control structures to tributaries of the southeasterly flowing Cashie River. The Cashie River discharges to the Roanoke River south of the Town of Windsor.

1.2 Compliance Monitoring History

Groundwater monitoring at the facility was initiated in January 1995 under the Detection Monitoring Program for municipal solid waste landfills. The facility's monitoring network historically consisted of 14 monitoring wells (GW-1 through GW-14), which monitored the uppermost Yorktown Formation (GW-2, GW-3, GW-5, GW-7 through GW-11, GW-13, and GW-14) and the lower Black Creek Formation (GW-1, GW-4, GW-6, and GW-12). Monitoring wells GW-1 and GW-2 were considered upgradient background wells and the remaining wells were considered to be downgradient or side-gradient compliance wells. Well GW-16 was decommissioned following the January 2007 sampling event during the construction of Cell 12. Bunnell Lammons Engineering, Inc. (BLE) installed monitoring well GW-16R as a replacement well prior to the January 2008 monitoring event. BLE installed GW-17 following the January 2008 sampling event as an additional monitoring well during the construction of Cell 12. Monitoring well GW-14 was decommissioned and GW-18 was installed prior to the January 2009 water quality monitoring event in order to construct Cell 13. Piezometer PZ-110 was

renamed GW-21 prior to the January 2009 water quality monitoring event. A background sampling event for GW-18 and GW-21 was performed during the January 2009 monitoring event. Wells GW-18 and GW-21 will become part of the compliance network once Cell 13 is constructed and begins receiving waste.

In accordance with the facility's permit, the current compliance monitoring network monitors the Yorktown formation and is composed of GW-2 (background), GW-7, GW-8, GW-9, GW-10, GW-11, GW-13, GW-15, GW-16R, and GW-17, with the remaining monitoring wells used for static water level observation. Per the June 2005 revision to the Water Monitoring Procedures (BLE, 2005), the groundwater wells screened in the Black Creek Formation are no longer sampled.

In addition to the routine groundwater monitoring points, the facility's monitoring network includes one upstream surface water monitoring point (SW-1), and three downstream surface water sampling points (SW-2, SW-3, and SW-4), which are sampled in conjunction with the groundwater monitoring wells. Water supply well PW-1 is sampled during each routine monitoring event. The leachate is also sampled semiannually per the Solid Waste Section requirements.

1.3 Hydrogeologic Setting

Geologically, the facility is located within the Carolina Coastal Plain Physiographic Province of NC (NCGS 1985). The Coastal Plain Province is generally described as being composed of easterly dipping strata that thicken towards the east. Based on hydrogeologic characteristics, these strata are generally classified as aquifer systems separated by aquitard units. The strata underlying the facility include the Tertiary Yorktown Formation and the Cretaceous Black Creek Formation, both of which are classified as aquifers. The Yorktown Formation is unconfined at this location, and the lower Black Creek Formation, which is separated from the overlying Yorktown Formation by a low permeability unit, is confined.

The uppermost groundwater beneath the facility is present in the shallow, unconfined Yorktown Aquifer. Depending on topographic elevation, the depth to water in the Yorktown Formation ranges from approximately 5 feet below grade along the southwestern perimeter of the facility to approximately 25 feet below grade near the central and northeastern portion of the facility. In the lower Black Creek Formation, the depth to water ranges from 10 to 20 feet below grade in the monitoring wells screened in this unit. Historical static water level data are presented on Tables 1 and 2.

As presented on Table 1, the water level in the uppermost Yorktown aquifer beneath the facility is fairly consistent, with temporal variation from the long-term average limited to approximately four-five feet in the upgradient wells and three-four feet in the downgradient wells. Similarly, as presented in Table 2, the fluctuation in the Black Creek aquifer is limited to approximately three feet from the average. As expected, the range in fluctuation appears to be greater in the

upgradient wells, as these wells are more centrally located to the regional groundwater recharge area. The range in fluctuation in the downgradient compliance wells, which are generally located near groundwater discharge areas, is less likely due to the stabilizing effect of hydraulic discharge boundaries.

Static water level measurements obtained during the July 17, 2013 sampling event were used to prepare the groundwater surface contours presented on Drawing 1. In the upper Yorktown Formation, groundwater flow across most of the site is toward the south-southwest. This is consistent with previously submitted interpretations for this facility. Previous maps of the Black Creek Formation show an apparent flow direction towards the southeast.

Based on the July 17, 2013 potentiometric surface contour map, the hydraulic gradient in the uppermost aquifer underlying the site, as measured along the conceptual flow paths shown on the contour map, was calculated to be approximately 0.00194 to 0.0330 ft/ft (Table 3). The estimated rate of groundwater flow for the uppermost aquifer beneath the facility was calculated using the following modified Darcy equation:

$$V_{gw} = Ki/_{ne}$$

Where V_{gw} = average linear velocity (feet per day), K = hydraulic conductivity (feet per day), i = horizontal hydraulic gradient, and $_{ne}$ = effective porosity.

The average estimated linear groundwater flow velocity under the waste management unit is approximately 0.00672 to 0.01144 ft/day generally to the southwest (Table 3). The linear velocity equation and resultant rates are based on the simplified assumptions of a homogeneous and isotropic aquifer. This equation can overestimate velocity when applied to heterogeneous and/or anisotropic conditions.

2.0 FIELD PROGRAM, MONITORING RESULTS, AND DISCUSSION

2.1 Visual Inspection Program

In order to detect potential releases of leachate and/or landfill gas migration in a timely manner, a visual inspection program has been implemented at the East Carolina Regional Landfill. This inspection program involves field personnel making the following observations:

- Observation of stress induced on the biological community (i.e., dead or dying vegetation),
- Indications of leachate impact (i.e., seeps, impacted surface water),
- Observations of erosion; and
- Negative changes around the waste facility.

During the July 2013 monitoring event, no physical indicators were observed in the vicinity of

the waste management areas.

2.2 Well Network and Groundwater Elevation Measurements

Monitoring well GW-2 is the facility's background well and monitoring wells GW-7, GW-8, GW-9, GW-10, GW-11, GW-13, GW-15, GW-16R, and GW-17 are the facility's compliance wells. These wells are all screened within the upper Yorktown Formation. Wells GW-18 and GW-21 have been installed, but have not been included as part of the monitoring network at this time. The remaining monitoring wells are used as observation wells to monitor the depth to groundwater. Monitoring well construction information is summarized in Table 4 and the well locations are shown on Drawing 1. The network of monitoring wells was constructed to intercept the flow path for groundwater in the uppermost aquifer underlying the waste disposal areas.

Depth-to-water measurements were recorded to the nearest 0.01 foot prior to initiating groundwater purging and sampling activities. The water level elevations for this event are presented in Tables 1 and 2.

2.3 July 2013 Monitoring Event

Personnel from Joyce Engineering visited the facility on July 17, 2013 to purge and sample monitoring wells GW-2, GW-7, GW-8, GW-9, GW-10, GW-11, GW-13, GW-15, GW-16R, and GW-17. In addition to the groundwater samples from the monitoring wells, a groundwater sample was collected from the on-site water supply well (PW-1) and a leachate sample was collected from the facility's holding tank (Tank B). Additional depth-to-water measurements were obtained from GW-1, GW-3, GW-4, GW-5, GW-6, GW-12, GW-18, and GW-21. Surface water samples were collected from one upstream point SW-1 and one downstream monitoring point SW-3. SW-2 and SW-4 were dry and were not sampled during the July 2013 monitoring event

Monitoring wells GW-2, GW-7, GW-8, GW-9, GW-10, GW-11, GW-13, GW-15, GW-16R, and GW-17 were purged with dedicated bladder pumps using micropurge procedures pursuant to the facility's approved monitoring plan. Measurements of pH, specific conductance, dissolved oxygen, oxidation-reduction potential, temperature, and turbidity were recorded after each system volume collected during the purge with field-calibrated instruments to monitor for stabilization of water quality.

Prior to sampling, the laboratory-supplied sample containers were prepared. Each sample container was labeled with the sample identification number, sampling personnel, date and time of sample collection, project name and number, and requested chemical analyses.

The required groundwater samples were collected directly from the dedicated bladder pump discharge lines in the labeled, laboratory-supplied, pre-preserved sample containers after purging

was completed based on stabilization of all field parameters. The on-site supply well was purged for 15 minutes by the spigot prior to sample collection. After collection, the samples were placed in a cooler on ice, under chain-of-custody control. Copies of the sampling logs are presented in Appendix A. Included in each log is a description of the sampling location, sampling equipment, sampling method, field observations, and field parameters.

The surface water samples were collected directly from the stream flow, by lowering the sample containers into the stream flow, taking care to prevent the overflow of the sample containers and to minimize sample induced turbidity. Measurements of temperature, pH, specific conductivity, and turbidity were recorded during the collection of the surface water samples.

The leachate sample was collected directly from the leachate piping manifold that serves the leachate holding tank (Tank B). Measurements of temperature, pH, specific conductivity, and turbidity were recorded during the collection of the leachate sample.

2.4 Laboratory Analysis Program

The July 17, 2013 groundwater, surface water, and leachate samples were submitted to Analytical Services, Inc. of Norcross, Georgia under chain-of-custody control for analysis. The groundwater and surface water, including the Field Blank, were analyzed for North Carolina Appendix I constituents. The leachate sample was analyzed for NC Appendix I constituents, mercury, biochemical oxygen demand, chemical oxygen demand, cyanide, nitrate as N, nitrate/nitrite as N, nitrite as N, phosphorous, sulfate, total kjeldahl nitrogen, total suspended solids, phenolics, and oil & grease. The Trip Blank was analyzed for North Carolina Appendix I organic constituents only. Joyce Engineering requested a Level II data report for the final laboratory report. The samples were received by the laboratory on July 18, 2013 in good condition, properly preserved, and within analysis hold times.

2.5 July 2013 Sampling Results

Analytical results for the July 17, 2013 groundwater, surface water, and leachate samples are summarized in Tables 5, 6, and 7 with available historical data. The laboratory's certificates-of-analysis and chains-of-custody for this monitoring event are included in Appendix B.

As presented in Table 5 and the laboratory certificates-of-analysis, five NC Appendix I inorganic constituents (barium, beryllium, cobalt, copper, and zinc) were detected in samples from one or more groundwater or surface water monitoring points at concentrations above their respective Solid Waste Section Reporting Limits (SWSL) during the July 2013 sampling event. Barium was detected above the SWSL in GW-2, GW-9, GW-13, GW-15, and GW-17. Beryllium was detected above the SWSL in GW-2, GW-7, GW-9, and GW-15. Cobalt was detected above the SWSL in GW-2 and GW-7. Copper was detected above the SWSL in PW-1. Zinc was detected above the SWSL in GW-2, GW-9, GW-15, PW-1, SW-1, and SW-3. No other inorganic or organic constituents were detected above their respective SWSLs in monitoring wells or surface

water monitoring points during the July 2013 monitoring event. The results from the July 17, 2013 monitoring event are generally consistent with historical concentrations.

The constituent concentrations reported for the leachate samples collected during the July 17, 2013 monitoring event are generally consistent with historical data.

3.0 LABORATORY AND FIELD QA/QC

A Field Blank was collected by Joyce Engineering as part of the July 2013 monitoring event. In addition to the Field Blank, a laboratory-prepared Trip Blank accompanied the volatile sample containers for the sampling event to and from the laboratory. The Field Blank was analyzed for NC Appendix I constituents and the Trip Blank for NC Appendix I VOCs only. In addition to the Field and Trip Blanks, at least one Method Blank was analyzed by the laboratory for each method used.

Upon receipt of the laboratory data package, the data was reviewed by Joyce Engineering for the following:

- General typographical errors,
- Correct analyses performed and within method specified hold times,
- Correct reporting limits
- Biased data results based on Surrogate Recoveries, Matrix Spike, Matrix Spike Duplicate, and Laboratory Control Samples,
- Blank qualified data (B-flags),
- Detections above the groundwater and surface water standards; and
- Detections that are above historical levels.

4.0 DATA EVALUATION

4.1 Comparisons to Groundwater and Surface Water Standards

One NC Appendix I constituent (cobalt) was detected at a quantified concentration in monitoring wells GW-2 and GW-7 above the Solid Waste Section's Groundwater Protection Standard (GWPS) during the July 2013 sampling event. The cobalt detected in GW-2 and GW-7 were not in exceedance of the facility background (see section 4.2); therefore, the results do not represent exceedancs as defined by Rule .1634(g)(5). There were no other NC Appendix I constituents detected above the GWPS or NC 2L standards in monitoring wells from the compliance monitoring network during the July 2013 monitoring event.

There were no NC Appendix I constituents detected above the NC 2B standards in surface water monitoring points during the July 2013 monitoring event.

4.2 Statistical Evaluations

The data were evaluated through the use of the Shapiro-Wilkes Test, Parametric Prediction Limits, Parametric Tolerance Intervals, Aitchison's Adjustment, Non-parametric Prediction Limits, and Poisson Prediction Limits, as appropriate. Background data, tests for normality, outliers, Aitchison's adjustment, tolerance interval, or prediction limits are used, as appropriate based on the background data.

The statistical test by which downgradient data are compared to facility background data is based upon the nature of the data and the number of data values that are less than the laboratory limit of detection. All statistical tests are evaluated at the 0.05 level of significance, 95% confidence level, and are conducted as one-tailed tests.

Cobalt was detected in the samples from downgradient monitoring wells GW-2 and GW-7 above the SWSL and the GWPS during the July 2013 sampling event. The cobalt detections were statistically evaluated in accordance with the procedures outlined in 15A NCAC 13B.1632 (g) and (h) to determine if the reported concentrations exceeded the facility background concentrations. The statistical worksheets and summary table for cobalt are presented in Appendix C. Based on the statistical evaluation; the detections of cobalt were not identified as statistically significant and are representative of historical background concentrations.

5.0 CONCLUSIONS

Based on the results summarized herein, Republic Services of NC, LLC will continue monitoring the uppermost aquifer beneath the East Carolina Regional Landfill in accordance with the requirements for Detection Monitoring Program as outlined in Title 15A NCAC 13B .1633. The relevant water quality standard for cobalt, used for monitoring result comparison, will be based on the background concentration. The next compliance monitoring event for this facility is tentatively scheduled for January 2014.

6.0 REFERENCES

BLE (Bunnell-Lammons Engineering, Inc.), December 2004. *Report of Ground Water Quality Results & Statistical Analysis, Second Semi-Annual Sampling Event of 2004 (N27) East Carolina Regional MSW Landfill, Bertie County, North Carolina.* 5 pp.

BLE (Bunnell-Lammons Engineering, Inc.), 2005. *Water Monitoring Procedures*, *June 2005 Revision.*

Law Engineering, August 1996. Design Hydrogeologic Report Phase II (Cells 7 and 8). 15 pp.

Golder Associates NC, Inc., August, 2011. Second Semi-Annual 2011 Sampling Event. Prepared for Republic Services of North Carolina, LLC.

North Carolina Dept. Environment, Health, and Natural Resources (NCDEHNR), 1995, N.C. Water Quality Monitoring Guidance Document for Solid Waste Facilities.

North Carolina Geologic Survey, 1985, Geologic Map of North Carolina; North Carolina Department of Natural Resources and Community Development, Geological Survey Section; scale 1:500,000.

Tables

TABLE 1

Summary of Historical Groundwater Elevations for the Yorktown Formation
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Location	Background	Downgradient														
	GW-2	GW-3	GW-5	GW-7	GW-8	GW-9	GW-10	GW-11	GW-13	GW-14	GW-15	GW-16	GW-16R	GW-17	GW-18	GW-21
TOC Elevation	66.36	66.23	62.60	58.79	60.04	51.94	53.22	72.42	74.76	78.74	78.23	63.02	66.12	85.68	62.00	62.07
Jan-95	51.79	54.53	48.45	47.12	46.43	47.89	-	-	-	-	-	-	-	-	-	-
Jul-95	55.85	51.80	50.42	53.84	48.12	48.13	-	-	-	-	-	-	-	-	-	-
Jan-96	58.36	53.73	51.42	49.89	49.09	49.43	-	-	-	-	-	-	-	-	-	-
Oct-96	59.92	55.53	53.05	49.87	49.14	50.32	50.32	-	-	-	-	-	-	-	-	-
Apr-97	57.00	51.96	50.85	47.77	47.50	49.15	49.67	50.20	-	-	-	-	-	-	-	-
Oct-97	50.20	48.05	46.74	44.79	44.41	45.61	45.41	43.67	-	-	-	-	-	-	-	-
Apr-98	55.12	51.65	50.52	47.78	47.26	48.01	47.00	44.22	-	-	-	-	-	-	-	-
Oct-98	51.35	49.25	48.24	46.30	45.58	47.82	45.43	DRY	-	-	-	-	-	-	-	-
07-Apr-99	53.54	51.25	50.01	48.15	47.50	47.45	45.85	DRY	-	-	-	-	-	-	-	-
20-Oct-99	57.26	52.67	51.25	48.79	52.38	49.12	47.80	45.82	-	-	-	-	-	-	-	-
26-Apr-00	54.03	50.93	49.56	48.02	47.52	47.46	45.75	DRY	-	-	-	-	-	-	-	-
18-Oct-00	52.71	49.70	48.56	46.80	46.23	45.57	43.40	DRY	-	-	-	-	-	-	-	-
18-Apr-01	53.54	50.36	48.94	47.37	46.85	46.32	43.93	DRY	48.31	-	-	-	-	-	-	-
24-Oct-01	50.78	47.97	47.00	45.50	44.75	44.84	44.48	43.99	47.95	-	-	-	-	-	-	-
22-Apr-02	51.64	49.10	47.94	46.92	46.38	45.67	46.46	46.07	49.30	-	-	-	-	-	-	-
21-Oct-02	50.06	47.73	46.41	45.70	45.30	46.22	47.07	46.61	48.82	-	-	-	-	-	-	-
01-Apr-03	56.58	51.55	50.37	48.69	48.07	48.30	49.81	48.94	53.08	-	-	-	-	-	-	-
27-Oct-03	54.61	50.14	48.86	46.99	46.42	47.81	48.57	48.63	51.91	53.64	-	-	-	-	-	-
26-Apr-04	55.24	50.59	49.25	47.69	47.10	48.45	48.82	48.74	52.02	54.55	-	-	-	-	-	-
26-Oct-04	53.01	48.53	47.38	45.91	45.49	46.99	48.20	48.27	50.79	52.11	-	-	-	-	-	-
15-Mar-05	54.56	49.40	47.93	46.88	46.57	47.72	48.48	48.42	51.96	54.34	-	-	-	-	-	-
12-Jul-05	53.25	48.88	47.74	46.35	45.86	47.22	47.98	48.34	51.00	52.71	-	-	-	-	-	-
19-Jan-06	55.12	49.82	48.23	46.81	46.60	48.28	48.74	48.40	51.66	53.92	53.10	-	-	-	-	-
11-Jul-06	54.89	49.63	48.44	47.28	46.79	47.78	48.06	48.25	51.46	53.16	52.90	51.00	-	-	-	-
17-Jan-07	56.09	51.21	47.81	48.67	48.00	49.68	48.67	48.28	52.23	54.74	53.59	53.11	-	-	-	-
09-Jul-07	52.58	48.30	47.41	45.21	44.69	46.44	46.82	46.11	50.50	50.84	51.42	49.53	-	-	-	-
14-Jan-08	50.15	46.67	45.64	44.76	44.95	46.45	<32.68	47.54	49.43	49.93	49.75	-	47.23	-	-	
30-Apr-08	-	-	-	-	-	-	-	-	-	-	-	-	-	52.99	-	-
14-Jul-08	51.58	47.34	46.60	46.22	46.11	46.67	<32.68	47.91	50.00	50.19	50.60	-	47.40	49.54	-	-
02-Oct-08	-	-	-	-	-	-	-	-	-	-	-	-	-	48.44	-	-
19-Jan-09	50.24	46.83	45.93	46.51	47.00	47.80	48.69	48.28	49.63	49.29	49.88	-	46.92	48.96	-	-
20-Jul-09	51.00	47.38	46.39	46.22	46.00	46.29	47.49	47.70	49.64	-	50.16	-	48.33	49.60	46.67	48.69
25-Jan-10	53.27	48.91	47.84	49.17	49.39	49.15	50.01	48.70	51.24	-	51.83	-	54.40	56.38	49.24	53.82
06-Jul-10	52.53	48.86	47.87	47.67	47.09	47.01	47.06	47.86	50.61	-	51.38	-	50.97	51.49	49.85	50.68
04-Jan-11	51.80	48.72	47.50	48.04	47.81	48.06	48.58	48.17	50.60	-	51.08	-	53.27	53.50	52.30	50.32
05-Jul-11	51.86	48.14	47.21	46.61	46.00	46.15	46.67	47.47	49.77	-	50.69	-	50.32	51.07	49.50	50.11
09-Jan-12	51.53	48.64	47.41	47.15	46.84	47.47	48.34	47.95	49.68	-	50.49	-	51.53	52.48	50.55	49.75
09-Jul-12	51.12	48.79	47.62	46.79	46.19	46.66	47.24	47.68	48.33	-	49.39	-	50.88	51.47	49.98	50.08
28-Jan-13	49.73	47.62	46.65	47.01	47.00	47.36	48.34	48.00	48.64	-	49.12	-	51.09	51.44	49.88	48.69
17-Jul-13	50.85	48.91	47.53	47.61	47.54	47.13	48.08	47.98	49.01	-	49.62	-	53.41	54.58	52.68	49.37
MEAN	*53.28*	*49.77*	*48.34*	*47.34*	*46.89*	*47.47*	*47.49*	*47.52*	*50.29*	*52.45*	*50.94*	*51.21*	*50.48*	*51.69*	*50.07*	*50.17*
MAXIMUM	*59.92*	*55.53*	*53.05*	*53.84*	*52.38*	*50.32*	*50.32*	*50.20*	*53.08*	*54.74*	*53.59*	*53.11*	*54.40*	*56.38*	*52.68*	*53.82*
MINIMUM	*49.73*	*46.67*	*45.64*	*44.76*	*44.41*	*44.84*	*43.40*	*43.67*	*47.95*	*49.29*	*49.12*	*49.53*	*46.92*	*48.44*	*46.67*	*48.69*

Notes:
1. ft AMSL = feet above mean sea level
2. TOC = top of casing
3. '- = not measured
4. *MW-16 was decommissioned after the installation of MW-16R.
5. All data prior to 2012 taken from previous report by Golder Associates NC, Inc.

TABLE 2

Summary of Historical Groundwater Elevations for the Black Creek Formation
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Location	Background	Downgradient		
	GW-1	GW-4	GW-6	GW-12
TOC Elevation	65.87	62.53	58.95	66.13
Jan-95	48.13	47.31	47.78	51.62
Jul-95	51.12	49.35	49.95	49.51
Jan-96	51.98	49.68	50.10	49.89
Oct-96	53.44	51.38	51.85	51.70
Apr-97	53.46	51.00	51.60	51.38
Oct-97	47.00	46.10	46.44	46.24
Apr-98	52.44	50.03	50.33	50.29
Oct-98	48.24	48.23	48.00	47.70
07-Apr-99	51.94	49.27	49.64	49.50
20-Oct-99	52.13	49.56	49.45	49.83
26-Apr-00	52.15	49.13	49.60	49.37
18-Oct-00	51.04	48.09	48.49	48.36
18-Apr-01	52.14	48.40	48.81	48.64
24-Oct-01	48.58	46.29	46.73	48.20
22-Apr-02	50.40	47.41	47.85	49.45
21-Oct-02	48.08	45.93	46.37	45.93
01-Apr-03	53.40	49.65	50.18	49.75
27-Oct-03	52.07	48.91	49.32	49.03
26-Apr-04	52.83	49.05	49.66	49.16
26-Oct-04	50.57	47.45	48.00	47.54
15-Mar-05	53.10	48.31	48.96	48.47
12-Jul-05	50.96	47.51	48.29	47.82
19-Jan-06	52.27	48.24	48.85	48.40
11-Jul-06	50.95	47.82	48.30	47.92
17-Jan-07	52.62	48.11	49.95	49.14
09-Jul-07	49.96	46.83	47.34	46.80
14-Jan-08	47.41	45.14	45.64	45.02
14-Jul-08	48.65	45.92	46.46	45.90
19-Jan-09	48.13	45.31	45.92	45.35
20-Jul-09	48.79	45.78	46.27	45.78
25-Jan-10	51.98	47.45	48.15	47.56
06-Jul-10	50.61	47.22	47.77	47.37
04-Jan-11	50.35	46.98	47.53	47.16
05-Jul-11	49.88	46.64	46.47	46.79
09-Jan-12	50.39	47.10	47.71	47.25
09-Jul-12	50.09	47.13	47.64	47.31
28-Jan-13	49.00	45.94	46.54	45.99
17-Jul-13	50.47	46.88	47.40	46.98
MEAN	*50.70*	*47.80*	*48.30*	*48.16*
MAXIMUM	*53.46*	*51.38*	*51.85*	*51.70*
MINIMUM	*47.00*	*45.14*	*45.64*	*45.02*

Notes:
1. ft AMSL = feet above mean sea level.
2. TOC = top of casing
3. All data prior to 2012 taken from previous report by Golder Associates NC. Inc.

TABLE 3

Summary of Estimated Hydraulic Gradients and Average Linear Velocities
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

			Yorktown Formation - July 2013				
Gradient Calculation Segment	**Flow Line Length (feet)**	**Flow Direction**	**Ground-water Elevation (feet)**	**Horizontal Gradient i (ft/ft)**	**Hydraulic Conductivity K (ft/day)**	**Effective Porosity n**	**Linear Velocity V (ft/day)**
i_1	3608	SW	54	0.00194	0.935	0.27	0.00672
			47				
i_2	1816	SW	54	0.00330	0.935	0.27	0.01144
			48				

Notes:

1. Horizontal velocities based on the modified Darcy equation $V_{gw} = Ki/N_e$
2. Values for K and n were taken from BLE's 2004 report reference in the text.

TABLE 4

Summary of Well Construction Information
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Well Identification	Construction Date	Ground Surface Elevation (ft AMSL)	Measuring Point Elevation (ft AMSL)	Well Depth (feet)	Well Diameter (inches)	Screened Interval (ft AMSL)	Screened Geologic Formation
GW-1	1993	63.72	65.87	62	2	11.72 to 1.72	Black Creek Formation
GW-2	1993	64.02	66.36	26	2	48.02 to 38.02	Yorktown Formation
GW-3	1993	63.72	66.23	26	2	47.72 to 37.72	Yorktown Formation
GW-4	1993	60.68	62.53	59	2	11.68 to 1.68	Black Creek Formation
GW-5	1993	60.94	62.60	24	2	46.94 to 36.94	Yorktown Formation
GW-6	1993	57.53	58.95	63	2	4.53 to -5.47	Black Creek Formation
GW-7	1993	57.44	58.79	18	2	49.44 to 39.44	Yorktown Formation
GW-8	1993	58.60	60.04	18	2	50.60 to 40.60	Yorktown Formation
GW-9	1993	50.14	51.94	13	2	47.14 to 37.14	Yorktown Formation
GW-10	1996	50.47	53.22	22	2	40.47 to 30.47	Yorktown Formation
GW-11	1997	68.60	72.42	28	2	49.60 to 39.60	Yorktown Formation
GW-12	1993	63.70	66.13	54	2	19.70 to 9.70	Black Creek Formation
GW-13	2001	72.16	74.76	41.30	2	45.86 to 30.86	Yorktown Formation
GW-15	2005	75.25	78.23	39.22	2	51.03 to 36.03	Yorktown Formation
GW-16R	2007	63.02	66.12	24.24	2	53.78 to 38.78	Yorktown Formation
GW-17	2008	82.92	85.68	41.33	2	51.59 to 41.59	Yorktown Formation
GW-18	2009	59.20	62.07	26.71	2	47.49 to 32.49	Yorktown Formation
GW-21	2006	60.86	62.98	28.00	2	47.86 to 32.86	Yorktown Formation

Note:
1. ft AMSL = feet above mean sea level
2. GW-1, -3, -4, -5, -6, -12, -18, and -21 are used for collection of water level data only.
3. All data prior to 2012 taken from report by Golder Associates NC, Inc

TABLE 5
Summary of Historical Groundwater Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Yorktown Formation																								Blanks	
				Background		Downgradient																							
				GW-2		GW-7		GW-8		GW-9		GW-10		GW-11		GW-13		GW-15		GW-16R		GW-17			
Antimony	µg/L	09-Jan-12	6	ND		ND		ND		ND		ND		ND		0.18	J	ND		ND		ND		ND	
GWPS = 1 µg/L	µg/L	09-Jul-12	6	0.70	J	0.24	J	ND		ND		ND		ND		ND		ND		ND		ND		ND	
	µg/L	28-Jan-13	6	1.47	J	0.40	J	ND		ND		ND		ND		ND		ND		ND		ND		ND	
	µg/L	17-Jul-13	6	2.85	B	0.97	B	0.55	B	0.34	B	ND		0.58	B	0.28	B	ND		ND		ND		0.39	J
Arsenic	µg/L	12-Jul-05	10	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
NC 2L = 10 µg/L	µg/L	19-Jan-06	10	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	28-Jun-06	10	--		--		--		--		--		--		--		--		--		--		ND	
	µg/L	11-Jul-06	10	ND		ND		ND		ND		ND		ND		ND		ND		--		--		ND	
	µg/L	31-Oct-06	10	--		--		--		--		--		--		--		ND		--		--		ND	
	µg/L	17-Jan-07	10	2.10	B	ND		2.10	B	ND		ND		2.10	B	ND		ND		--		--		3.40	J
	µg/L	09-Jul-07	10	ND		ND		2.10	J	ND		ND		ND		ND		ND		--		--		ND	
	µg/L	14-Jan-08	10	ND		ND		2.10	J	2.70	J	ND		2.30	J	ND		ND		ND		--		ND	
	µg/L	30-Apr-08	10	--		--		--		--		--		--		--		--		--		ND		2.20	J
	µg/L	14-Jul-08	10	ND		ND		ND		ND		ND		ND		ND		2.90	J	ND		3.50	J	ND	
	µg/L	03-Oct-08	10	--		--		--		--		--		--		--		--		--		ND		ND	
	µg/L	19-Jan-09	10	3.80	B	ND		2.80	B	5.20	B	3.70	B	3.90	B	4.40	B	4.50	B	4.10	B	ND		3.60	J
	µg/L	20-Jul-09	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	µg/L	25-Jan-10	10	ND		4.61	J	3.57	J	5.19	J	ND		ND		4.10	J	4.24	J	ND		ND		ND	
	µg/L	06-Jul-10	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	µg/L	04-Jan-11	10	3.06	J	5.85	J	ND		6.00	J	ND		ND		ND		8.04	J	ND		ND		ND	
	µg/L	05-Jul-11	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	µg/L	09-Jan-12	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	µg/L	09-Jul-12	10	ND		1.35	J	1.74	J	2.11	J	1.45	J	1.77	J	ND		ND		ND		ND		ND	
	µg/L	28-Jan-13	10	ND		ND		ND		3.49	J	ND		ND		ND		ND		ND		ND		ND	
	µg/L	17-Jul-13	10	ND		ND		ND		3.68	J	ND		ND		ND		ND		ND		0.93	J	ND	
Barium	µg/L	28-Oct-98	500	ND		ND		ND		ND		ND		Dry		--		--		--		--		ND	
NC 2L = 700 µg/L	µg/L	07-Apr-99	500	ND		ND		ND		ND		ND		Dry		--		--		--		--		ND	
	µg/L	08-Dec-99	500	ND		ND		ND		ND		ND		ND		--		--		--		--		ND	
	µg/L	27-Apr-00	500	ND		ND		ND		ND		ND		Dry		--		--		--		--		ND	
	µg/L	18-Oct-00	500	ND		ND		ND		ND		ND		Dry		ND		--		--		--		ND	
	µg/L	28-Nov-00	500	--		--		--		--		--		--		ND		--		--		--		--	
	µg/L	03-Jan-01	500	--		--		--		--		--		--		ND		--		--		--		--	
	µg/L	08-Feb-01	500	--		--		--		--		--		--		ND		--		--		--		--	
	µg/L	19-Apr-01	500	ND		ND		ND		--		ND		Dry		ND		--		--		--		ND	
	µg/L	24-Dec-01	500	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	23-Apr-02	500	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	23-Oct-02	500	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	01-Apr-03	500	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	02-Sep-03	500	--		--		--		--		--		--		--		--		--		--		--	
	µg/L	28-Oct-03	500	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	27-Apr-04	500	500		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	26-Oct-04	500	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	15-Mar-05	500	500		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	12-Jul-05	500	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	12-Jan-06	30	--		--		--		--		--		--		--		ND		--		--		ND	
	µg/L	19-Jan-06	500	523		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	28-Jun-06	500	--		--		--		--		--		--		--		--		--		--		ND	
	µg/L	11-Jul-06	500	517		ND		ND		ND		ND		ND		ND		ND		--		--		ND	
	µg/L	31-Oct-06	500	--		--		--		--		--		--		--		ND		--		--		ND	
	µg/L	17-Jan-07	100	516		122		137		82.1		95.7		17.8		273		98.3		--		--		0.30	J
	µg/L	09-Jul-07	100	448		162		121		93.5	J	89.3	J	20.8	J	259		114		--		--		0.80	J
	µg/L	14-Jan-08	100	405		129		127		59.0	J	94.6	J	18.5	J	291		117		38.0	J	--		0.30	J
	µg/L	30-Apr-08	100	--		--		--		--		--		--		--		--		--		106		0.50	J
	µg/L	14-Jul-08	100	500		130		123		76.0	J	103		18.7	J	317		94.7	J	32.2	J	127		ND	
	µg/L	03-Oct-08	100	--		--		--		--		--		--		--		--		--		116		ND	
	µg/L	19-Jan-09	100	534		135		148		62.9	J	88.4	J	20.1	J	357		116		41.2	J	138		ND	
	µg/L	20-Jul-09	100	534		96.4	J	145		89.2	J	88.6	J	20.0	J	332		112		39.3	J	168		ND	
	µg/L	25-Jan-10	100	545		116		0.681	B	67.6	J	91.3	J	22.0	J	312		117		32.9	J	143		0.434	J
	µg/L	06-Jul-10	100	419		49.1	J	103		89.2	J	73.5	J	18.1	J	245		92.7	J	32.5	J	117		ND	
	µg/L	04-Jan-11	100	409		100		120		207		92.8	J	21.8	J	261		105		37.8	J	156		1.11	J
	µg/L	05-Jul-11	100	455		53.8	J	119		167		101		27.5	J	317		115		41.5	J	149		ND	
	µg/L	09-Jan-12	100	427		21.8	J	105		212		93.8	J	19.2	J	343		120		38.8	J	156		0.24	J
	µg/L	09-Jul-12	100	414		45.1	J	108		196		114		21.1	J	369		124		46.9	J	135		0.75	J
	µg/L	28-Jan-13	100	387		72.0	J	91.9	J	257		107		19.2	J	331		125		46.3	J	140		ND	
	µg/L	17-Jul-13	100	426		72.0		86.9	J	186		91.2	J	21.2	J	318		154		55.3	J	150		0.37	J
Beryllium	µg/L	28-Oct-98	2	ND		ND		ND		ND		ND		Dry		--		--		--		--		ND	
GWPS = 4 µg/L	µg/L	07-Apr-99	2	ND		2.0		ND		ND		ND		Dry		--		--		--		--		ND	
	µg/L	08-Dec-99	2	ND		ND		ND		ND		ND		ND		--		--		--		--		ND	
	µg/L	27-Apr-00	2	ND		ND		ND		ND		ND		Dry		--		--		--		--		ND	
	µg/L	18-Oct-00	2	ND		ND		ND		ND		ND		Dry		ND		--		--		--		ND	
	µg/L	28-Nov-00	2	--		--		--		--		--		--		ND		--		--		--		--	
	µg/L	03-Jan-01	2	--		--		--		--		--		--		ND		--		--		--		--	
	µg/L	08-Feb-01	2	--		--		--		--		--		--		4.0		--		--		--		--	
	µg/L	19-Apr-01	2	ND		ND		ND		--		ND		Dry		ND		--		--		--		ND	
	µg/L	24-Dec-01	2	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	23-Apr-02	2	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	23-Oct-02	2	ND		3.0		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	01-Apr-03	2	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	02-Sep-03	2	--		--		--		--		--		--		--		--		--		--		--	
	µg/L	28-Oct-03	2	ND		3.0		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	27-Apr-04	2	ND		3.0		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	26-Oct-04	2	ND		3.0		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	15-Mar-05	2	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	12-Jul-05	2	ND		2.2		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	12-Jan-06	2	--		--		--		--		--		--		--		ND		--		--		ND	
	µg/L	19-Jan-06	2	ND		2.0		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	28-Jun-06	2	--		--		--		--		--		--		--		--		--		--		ND	
	µg/L	11-Jul-06	2	ND		ND		ND		ND		ND		ND		ND		ND		--		--		ND	
	µg/L	31-Oct-06	2	--		--		--		--		--		--		--		ND		--		--		ND	
	µg/L	17-Jan-07	1	1.00		1.90		ND		ND		ND		ND		ND		ND		--		--		ND	
	µg/L	09-Jul-07	1	0.70	J	1.90		ND		ND		ND		ND		ND		ND		--		--		ND	
	µg/L	14-Jan-08	1	ND		1.50		ND		ND		ND		ND		ND		ND		ND		--		ND	
	µg/L	30-Apr-08	1	--		--		--		--		--		--		--		--		--		ND		ND	
	µg/L	14-Jul-08	1	0.80	J	1.60		ND		ND		ND		ND		0.10	J	ND		ND		0.10	J	ND	
	µg/L	03-Oct-08	1	--		--		--		--		--		--		--		--		--		0.20	J	ND	
	µg/L	19-Jan-09	1	0.90	J	1.30		ND		ND		ND		ND		0.30	J	ND		ND		0.10	J	ND	
	µg/L	20-Jul-09	1	1.26		2.11		0.802	J	0.485	J	0.252	B	0.390	J	0.600	J	0.311	B	0.121	B	0.593	J	0.0779	J
	µg/L	25-Jan-10	1	1.34		2.11		1.52		0.460	J	0.256	J	0.453	J	0.614	J	0.352	J	0.150	J	0.349	J	ND	
	µg/L	06-Jul-10	1	0.873	J	1.98		0.465	J	0.448	J	0.164	J	0.249	J	0.373	J	0.232	J	ND		0.212	J	ND	
	µg/L	04-Jan-11	1	1.08		2.38		0.799	J	0.574	J	0.296	J	0.427	J	0.506	J	0.284	J	0.152	J	0.420	J	ND	
	µg/L	05-Jul-11	1	0.979	J	2.01		0.699	J	0.945	J	0.312	J	0.401	J	0.555	J	0.301	J	ND		0.377	J	ND	
	µg/L	09-Jan-12	1	0.99	J	0.80	J	0.60	J	0.49	J	0.16	J	0.29	J	0.58	J	0.44	J	0.07	J	0.50	J	ND	
	µg/L	09-Jul-12	1	1.03		1.94		0.62	J	1.11		0.52	J	0.28	J	0.61	J	0.27	J	0.10	J	0.31	J	ND	
	µg/L	28-Jan-13	1	0.85	J	2.01		0.46	J	1.38		0.22	J	0.23	J	0.52	J	0.27	J	ND		0.35	J	ND	
	µg/L	17-Jul-13	1	1.23		2.19		0.57	J	1.34		0.12	J	0.36	J	0.64	J	1.05		0.15	J	0.43	J	ND	

TABLE 5
Summary of Historical Groundwater Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Yorktown Formation										Blanks
				Background	Downgradient									
				GW-2	GW-7	GW-8	GW-9	GW-10	GW-11	GW-13	GW-15	GW-16R	GW-17	
Cadmium	µg/L	28-Oct-98	1	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
NC 2L = 2 µg/L	µg/L	07-Apr-99	1	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	08-Dec-99	1	ND	ND	ND	ND	ND	ND	--	--	--	--	ND
	µg/L	27-Apr-00	1	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	18-Oct-00	1	ND	ND	ND	ND	ND	Dry	ND	--	--	--	ND
	µg/L	28-Nov-00	1	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	03-Jan-01	1	--	--	--	--	--	--	5.0	--	--	--	--
	µg/L	08-Feb-01	1	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	19-Apr-01	1	ND	ND	ND	--	ND	Dry	ND	--	--	--	ND
	µg/L	24-Dec-01	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Apr-02	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Oct-02	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	01-Apr-03	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	02-Sep-03	1	--	--	--	--	--	--	--	--	--	--	--
	µg/L	28-Oct-03	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	27-Apr-04	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	26-Oct-04	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	15-Mar-05	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jul-05	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jan-06	1	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	19-Jan-06	1	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	28-Jun-06	1	--	--	--	--	--	--	--	--	--	--	ND
	µg/L	11-Jul-06	1	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	31-Oct-06	1	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	17-Jan-07	1	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	09-Jul-07	1	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	14-Jan-08	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND
	µg/L	30-Apr-08	1	--	--	--	--	--	--	--	--	--	ND	ND
	µg/L	14-Jul-08	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	03-Oct-08	1	--	--	--	--	--	--	--	--	--	ND	ND
	µg/L	19-Jan-09	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	20-Jul-09	1	0.144 B	0.261 B	0.106 B	ND	0.159 B	0.0999 B	ND	ND	0.179 B	0.0940 B	0.112 J
	µg/L	25-Jan-10	1	0.388 B	0.351 B	1.59	0.876 B	0.357 B	0.257 B	0.332 B	0.391 B	0.359 B	0.429 B	0.277 J
	µg/L	06-Jul-10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	04-Jan-11	1	0.434 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	05-Jul-11	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	09-Jan-12	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	09-Jul-12	1	0.07 J	ND	ND	ND	ND	ND	ND	0.06 J	0.28 J	ND	ND
	µg/L	28-Jan-13	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	1	ND	ND	ND	ND	ND	0.19 J	0.14 J	ND	0.19 J	ND	ND
Chromium	µg/L	28-Oct-98	10	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
NC 2L = 10 µg/L	µg/L	07-Apr-99	10	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	08-Dec-99	10	ND	ND	ND	ND	ND	ND	--	--	--	--	ND
	µg/L	27-Apr-00	10	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	18-Oct-00	10	ND	ND	ND	ND	ND	Dry	ND	--	--	--	ND
	µg/L	28-Nov-00	10	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	03-Jan-01	10	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	08-Feb-01	10	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	19-Apr-01	10	ND	ND	ND	--	ND	Dry	ND	--	--	--	ND
	µg/L	24-Dec-01	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Apr-02	10	ND	ND	10.0	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Oct-02	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	01-Apr-03	10	ND	ND	10.0	ND	ND	ND	ND	--	--	--	ND
	µg/L	02-Sep-03	10	--	--	--	--	--	--	--	--	--	--	--
	µg/L	28-Oct-03	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	27-Apr-04	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	26-Oct-04	10	ND	ND	10	ND	ND	ND	ND	--	--	--	ND
	µg/L	15-Mar-05	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jul-05	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jan-06	10	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	28-Jun-06	10	--	--	--	--	--	--	--	--	--	--	ND
	µg/L	11-Jul-06	10	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	31-Oct-06	10	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	17-Jan-07	10	ND	ND	ND	ND	ND	4.3 J	ND	ND	--	--	ND
	µg/L	09-Jul-07	10	ND	ND	ND	ND	ND	2.5 J	ND	ND	--	--	ND
	µg/L	14-Jan-08	10	2.6 J	ND	ND	ND	ND	5.9 J	3.8 J	ND	ND	--	ND
	µg/L	30-Apr-08	10	--	--	--	--	--	--	--	--	--	8.8 J	ND
	µg/L	14-Jul-08	10	ND	ND	ND	ND	ND	2.8 J	ND	ND	1.4 J	2.0 J	ND
	µg/L	03-Oct-08	10	--	--	--	--	--	--	--	--	--	1.6 J	ND
	µg/L	19-Jan-09	10	3.7 J	ND	ND	1.2 J	ND	4.6 J	ND	ND	3.0 J	1.6 J	ND
	µg/L	20-Jul-09	10	0.941 J	0.782 J	0.801 J	ND	ND	4.17 J	ND	1.56 J	0.998 J	7.39 J	ND
	µg/L	25-Jan-10	10	ND	ND	ND	ND	ND	5.97 J	ND	ND	ND	ND	ND
	µg/L	06-Jul-10	10	10.4	2.17 J	1.15 J	ND	ND	3.08 J	ND	ND	ND	1.58 J	ND
	µg/L	04-Jan-11	10	1.46 J	4.26 J	1.42 J	4.41 J	ND	4.82 J	ND	1.23 J	ND	5.21 J	ND
	µg/L	05-Jul-11	10	1.44 J	1.40 J	ND	3.65 J	1.90 J	9.73 J	ND	1.67 J	ND	2.96 J	ND
	µg/L	09-Jan-12	10	ND	ND	0.60 J	ND	ND	4.20 J	ND	2.62 J	ND	4.00 J	ND
	µg/L	09-Jul-12	10	1.88 J	2.28 J	ND	ND	ND	3.82 J	ND	ND	ND	ND	ND
	µg/L	28-Jan-13	10	2.40 B	2.06 B	1.82 B	3.18 B	1.27 B	5.98 B	0.75 B	2.24 B	0.78 B	3.08 B	1.38 J
	µg/L	17-Jul-13	10	3.22 J	2.53 J	1.96 J	2.55 J	ND	4.64 J	ND	9.50 J	ND	2.20 J	ND

TABLE 5
Summary of Historical Groundwater Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Yorktown Formation										Blanks
				Background	Downgradient									
				GW-2	GW-7	GW-8	GW-9	GW-10	GW-11	GW-13	GW-15	GW-16R	GW-17	
Cobalt	µg/L	28-Oct-98	10	ND	30.0	ND	ND	ND	Dry	--	--	--	--	ND
GWPS = 1 µg/L	µg/L	07-Apr-99	10	ND	20.0	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	08-Dec-99	10	10.0	20.0	ND	ND	ND	ND	--	--	--	--	ND
	µg/L	27-Apr-00	10	ND	30.0	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	18-Oct-00	10	ND	30.0	ND	ND	ND	Dry	30.0	--	--	--	ND
	µg/L	28-Nov-00	10	--	--	--	--	--	--	10.0	--	--	--	--
	µg/L	03-Jan-01	10	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	08-Feb-01	10	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	19-Apr-01	10	ND	30.0	ND	--	ND	Dry	ND	--	--	--	ND
	µg/L	24-Dec-01	10	ND	30.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Apr-02	10	ND	30.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Oct-02	10	ND	50.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	01-Apr-03	10	10.0	40.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	02-Sep-03	10	--	--	--	--	--	--	--	--	--	--	--
	µg/L	28-Oct-03	10	ND	50.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	27-Apr-04	10	ND	30.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	26-Oct-04	10	ND	40.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	15-Mar-05	10	10.0	36.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jul-05	10	ND	40.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jan-06	10	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	19-Jan-06	10	11.9	30.0	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	28-Jun-06	10	--	--	--	--	--	--	--	--	--	--	ND
	µg/L	11-Jul-06	10	12.5	31.6	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	31-Oct-06	10	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	17-Jan-07	10	10.3	34.9	3.9 J	ND	ND	ND	3.0 J	2.9 J	--	--	ND
	µg/L	09-Jul-07	10	10.0	37.5	2.9 J	ND	ND	ND	ND	2.6 J	--	--	ND
	µg/L	14-Jan-08	10	11.3	35.1	4.2 J	3.2 J	3.8 J	2.0 J	3.3 J	3.4 J	2.6 J	--	ND
	µg/L	30-Apr-08	10	--	--	--	--	--	--	--	--	--	20.5	ND
	µg/L	14-Jul-08	10	10.1	37.3	2.6 J	ND	ND	ND	2.7 J	2.1 J	1.2 J	4.5 J	ND
	µg/L	03-Oct-08	10	--	--	--	--	--	--	--	--	--	6.3 J	ND
	µg/L	19-Jan-09	10	12.0	23.7	3.7 J	3.0 J	4.6 J	ND	1.8 J	1.7 J	1.8 J	5.2 J	ND
	µg/L	20-Jul-09	10	11.4	35.4	3.93 J	1.47 J	2.91 J	0.586 J	2.00 J	2.67 J	0.772 J	3.93 J	ND
	µg/L	25-Jan-10	10	12.6	21.5	1.97 B	2.46 J	0.858 B	1.58 B	2.71 J	3.62 J	1.57 B	3.02 B	0.485 J
	µg/L	06-Jul-10	10	8.59 J	26.6	2.62 J	1.15 J	ND	ND	1.66 J	2.07 J	1.89 J	2.14 J	ND
	µg/L	04-Jan-11	10	9.65 J	29.8	3.63 J	3.19 J	ND	1.19 J	2.24 J	2.60 J	1.77 J	5.07 J	ND
	µg/L	05-Jul-11	10	10.4	39.0	3.19 J	2.17 J	2.03 J	1.40 J	2.34 J	2.80 J	2.18 J	3.65 J	ND
	µg/L	09-Jan-12	10	9.51 J	13.8	2.92 J	2.44 J	1.63 J	0.73 J	2.73 J	3.29 J	1.84 J	3.93 J	ND
	µg/L	09-Jul-12	10	9.76 J	26.1	3.39 J	2.19 J	2.52 J	0.78 J	3.44 J	2.94 J	3.29 J	3.13 J	ND
	µg/L	28-Jan-13	10	9.53 J	33.3	2.98 J	2.84 J	3.22 J	0.82 J	3.28 J	3.13 J	1.83 J	3.49 J	ND
	µg/L	17-Jul-13	10	10.8	28.0	2.50 J	2.67 J	1.14 J	0.95 J	2.89 J	6.64 J	3.91 J	3.79 J	ND
Copper	µg/L	12-Jul-05	200	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
NC 2L = 1000 µg/L	µg/L	19-Jan-06	200	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	28-Jun-06	200	--	--	--	--	--	--	--	--	--	--	ND
	µg/L	11-Jul-06	200	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	31-Oct-06	200	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	17-Jan-07	10	ND	0.80 J	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	09-Jul-07	10	ND	5.40 J	ND	ND	1.00 J	ND	ND	ND	--	--	ND
	µg/L	14-Jan-08	10	4.70 J	1.60 B	1.30 B	1.30 B	ND	1.00 B	0.80 B	0.80 B	1.10 B	--	0.70 J
	µg/L	30-Apr-08	10	--	--	--	--	--	--	--	--	--	2.60 B	1.40 J
	µg/L	14-Jul-08	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	03-Oct-08	10	--	--	--	--	--	--	--	--	--	ND	ND
	µg/L	19-Jan-09	10	ND	ND	1.70 J	ND	ND	ND	ND	ND	2.00 J	ND	ND
	µg/L	20-Jul-09	10	ND	ND	0.868 B	ND	ND	ND	ND	ND	ND	2.19 B	1.25 J
	µg/L	25-Jan-10	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	06-Jul-10	10	ND	ND	ND	2.56 J	ND	ND	ND	ND	ND	ND	ND
	µg/L	04-Jan-11	10	2.30 J	2.16 J	ND	3.09 J	1.80 J	4.68 J	ND	ND	ND	3.49 J	ND
	µg/L	05-Jul-11	10	8.78 J	1.60 J	ND	2.66 J	ND	ND	ND	ND	ND	ND	ND
	µg/L	09-Jan-12	10	1.57 B	1.54 B	1.06 B	0.62 B	0.62 B	0.68 B	0.59 B	1.87 B	0.32 B	2.32 B	0.66 J
	µg/L	09-Jul-12	10	1.24 J	0.88 J	0.31 J	ND	0.64 J	0.24 J	ND	ND	0.65 J	0.45 J	ND
	µg/L	28-Jan-13	10	1.12 B	1.13 B	1.23 B	1.39 B	1.45 B	1.15 B	0.84 B	1.19 B	0.46 B	1.74 B	0.26 J
	µg/L	17-Jul-13	10	1.67 J	1.18 J	1.05 J	1.15 J	0.63 J	1.03 J	0.39 J	3.59 J	0.91 J	1.73 J	ND
Lead	µg/L	28-Oct-98	10	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
NC 2L = 15 µg/L	µg/L	07-Apr-99	10	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	08-Dec-99	10	ND	ND	ND	ND	ND	ND	--	--	--	--	ND
	µg/L	27-Apr-00	10	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	18-Oct-00	10	ND	ND	ND	ND	ND	Dry	ND	--	--	--	ND
	µg/L	28-Nov-00	10	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	03-Jan-01	10	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	08-Feb-01	10	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	19-Apr-01	10	ND	ND	ND	--	ND	Dry	ND	--	--	--	ND
	µg/L	24-Dec-01	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Apr-02	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Oct-02	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	01-Apr-03	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	02-Sep-03	10	--	--	--	--	--	--	--	--	--	--	--
	µg/L	28-Oct-03	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	27-Apr-04	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	26-Oct-04	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	15-Mar-05	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jul-05	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jan-06	10	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	28-Jun-06	10	--	--	--	--	--	--	--	--	--	--	ND
	µg/L	11-Jul-06	10	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	31-Oct-06	10	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	17-Jan-07	10	ND	2.3 J	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	09-Jul-07	10	2.3 J	2.9 J	2.9 J	ND	ND	2.0 J	ND	2.2 J	--	--	ND
	µg/L	14-Jan-08	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND
	µg/L	30-Apr-08	10	--	--	--	--	--	--	--	--	--	4.3 J	ND
	µg/L	14-Jul-08	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1 J	ND
	µg/L	03-Oct-08	10	--	--	--	--	--	--	--	--	--	2.2 J	ND
	µg/L	19-Jan-09	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	20-Jul-09	10	2.82 B	2.21 B	ND	1.71 B	2.73 B	ND	ND	ND	2.68 B	6.81 B	2.16 J
	µg/L	25-Jan-10	10	ND	1.70 J	7.56 J	1.55 J	ND	ND	ND	ND	ND	2.06 J	ND
	µg/L	06-Jul-10	10	ND	2.40 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	04-Jan-11	10	ND	3.03 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	05-Jul-11	10	ND	3.52 J	ND	2.16 J	ND	ND	ND	ND	ND	ND	ND
	µg/L	09-Jan-12	10	0.77 B	1.21 B	0.47 B	0.75 B	0.45 B	0.20 B	2.43 B	2.33 B	0.43 B	3.19 B	0.94 J
	µg/L	09-Jul-12	10	0.84 J	2.69 J	0.22 J	0.29 J	0.37 J	ND	0.21 J	0.11 J	0.21 J	1.34 J	ND
	µg/L	28-Jan-13	10	0.25 J	1.14 J	0.22 J	1.77 J	0.52 J	ND	0.24 J	0.11 J	0.36 J	2.73 J	ND
	µg/L	17-Jul-13	10	0.68 J	1.55 J	0.42 J	0.76 J	0.11 J	0.15 J	0.18 J	3.59 J	0.57 J	2.43 J	ND

TABLE 5
Summary of Historical Groundwater Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Yorktown Formation										Blanks
				Background	Downgradient									
				GW-2	GW-7	GW-8	GW-9	GW-10	GW-11	GW-13	GW-15	GW-16R	GW-17	
Nickel	µg/L	28-Oct-98	50	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
NC 2L = 100 µg/L	µg/L	07-Apr-99	50	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	08-Dec-99	50	ND	ND	ND	ND	ND	ND	--	--	--	--	ND
	µg/L	27-Apr-00	50	ND	ND	ND	ND	ND	Dry	--	--	--	--	ND
	µg/L	18-Oct-00	50	ND	ND	ND	ND	ND	Dry	ND	--	--	--	ND
	µg/L	28-Nov-00	50	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	03-Jan-01	50	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	08-Feb-01	50	--	--	--	--	--	--	ND	--	--	--	--
	µg/L	19-Apr-01	50	ND	ND	ND	--	ND	Dry	ND	--	--	--	ND
	µg/L	24-Dec-01	50	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Apr-02	50	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	23-Oct-02	50	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	01-Apr-03	50	ND	ND	20	ND	ND	ND	ND	--	--	--	ND
	µg/L	02-Sep-03	50	--	--	--	--	--	--	--	--	--	--	--
	µg/L	28-Oct-03	50	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	27-Apr-04	50	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	26-Oct-04	50	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	15-Mar-05	50	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jul-05	50	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	12-Jan-06	50	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	19-Jan-06	50	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	28-Jun-06	50	--	--	--	--	--	--	--	--	--	--	ND
	µg/L	11-Jul-06	50	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	31-Oct-06	50	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	17-Jan-07	50	7.4 J	10.4	3.7 J	4.1 J	ND	ND	3.0 J	3.6 J	--	--	ND
	µg/L	09-Jul-07	50	6.0 J	9.1 J	3.8 J	2.0 J	ND	ND	2.3 J	2.5 J	--	--	ND
	µg/L	14-Jan-08	50	11.0 J	8.0 J	5.8 J	3.7 J	2.0 J	3.2 J	4.7 J	3.8 J	ND	--	ND
	µg/L	30-Apr-08	50	--	--	--	--	--	--	--	--	--	4.1 J	ND
	µg/L	14-Jul-08	50	3.9 J	7.1 J	2.4 J	2.0 J	ND	ND	2.5 J	ND	ND	ND	ND
	µg/L	03-Oct-08	50	--	--	--	--	--	--	--	--	--	2.4 J	ND
	µg/L	19-Jan-09	50	7.8 B	7.1 B	3.4 B	4.1 B	3.1 B	2.4 B	4.4 B	5.2 B	ND	ND	2.2 J
	µg/L	20-Jul-09	50	6.08 J	9.00 J	3.27 J	3.03 J	1.07 J	0.716 J	2.48 J	2.59 J	ND	2.56 J	ND
	µg/L	25-Jan-10	50	4.55 J	6.31 J	ND	ND	ND	ND	ND	1.75 J	ND	ND	ND
	µg/L	06-Jul-10	50	5.31 J	10.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	04-Jan-11	50	6.42 J	9.32 J	2.17 J	4.60 J	ND	ND	2.50 J	2.92 J	ND	2.54 J	ND
	µg/L	05-Jul-11	50	6.82 J	10.6 J	2.64 J	6.35 J	ND	ND	2.94 J	3.22 J	ND	ND	ND
	µg/L	09-Jan-12	50	6.14 J	6.14 J	3.28 J	6.42 J	1.37 J	1.14 J	3.10 J	3.66 J	0.67 J	1.76 J	ND
	µg/L	09-Jul-12	50	7.09 J	10.80 J	2.78 J	6.67 J	1.68 J	1.45 J	3.75 J	3.52 J	0.70 J	1.16 J	ND
	µg/L	28-Jan-13	50	7.35 J	9.57 J	2.60 J	8.82 J	5.06 J	2.37 J	3.48 J	3.57 J	0.74 J	1.70 J	ND
	µg/L	17-Jul-13	50	7.88 J	9.55 J	2.48 J	6.23 J	1.52 J	1.43 J	2.75 J	5.84 J	1.31 J	2.04 J	ND
Selenium	µg/L	12-Jul-05	20	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
NC 2L = 20 µg/L	µg/L	19-Jan-06	20	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	28-Jun-06	20	--	--	--	--	--	--	--	--	--	--	ND
	µg/L	11-Jul-06	20	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	31-Oct-06	20	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	17-Jan-07	10	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	09-Jul-07	10	ND	ND	ND	ND	2.0 J	ND	ND	ND	--	--	ND
	µg/L	14-Jan-08	10	2.3 J	ND	2.0 J	ND	ND	ND	ND	2.3 J	ND	--	ND
	µg/L	30-Apr-08	10	--	--	--	--	--	--	--	--	--	ND	ND
	µg/L	14-Jul-08	10	ND	3.3 J	ND	ND	ND	ND	2.9 J	ND	2.7 J	ND	ND
	µg/L	03-Oct-08	10	--	--	--	--	--	--	--	--	--	ND	ND
	µg/L	19-Jan-09	10	5.6 J	ND	4.4 J	2.9 J	ND	ND	ND	ND	ND	ND	ND
	µg/L	20-Jul-09	10	ND	4.33 B	3.90 B	ND	5.08 B	ND	ND	ND	ND	4.21 B	3.58 J
	µg/L	25-Jan-10	10	ND	1.62 J	1.08 J	1.86 J	1.32 J	ND	ND	0.918 J	0.878 J	0.855 J	ND
	µg/L	06-Jul-10	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	04-Jan-11	10	ND	ND	ND	1.89 J	ND	ND	ND	ND	ND	ND	ND
	µg/L	05-Jul-11	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	09-Jan-12	10	ND	ND	ND	0.80 J	ND	ND	ND	ND	ND	ND	ND
	µg/L	09-Jul-12	10	ND	1.43	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	28-Jan-13	10	ND	1.10 J	ND	1.49 J	ND	ND	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	10	ND	1.44 J	ND	1.09 J	ND	ND	ND	ND	ND	ND	ND
Silver	µg/L	12-Jul-05	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
NC 2L = 20 µg/L	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	28-Jun-06	10	--	--	--	--	--	--	--	--	--	--	ND
	µg/L	11-Jul-06	10	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	31-Oct-06	10	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	17-Jan-07	10	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	09-Jul-07	10	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	14-Jan-08	10	2.10 J	ND	ND	3.1 J	ND	ND	ND	2.1 J	ND	--	ND
	µg/L	30-Apr-08	10	--	--	--	--	--	--	--	--	--	ND	ND
	µg/L	14-Jul-08	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	03-Oct-08	10	--	--	--	--	--	--	--	--	--	ND	ND
	µg/L	19-Jan-09	10	ND	ND	ND	ND	ND	ND	ND	ND	3.6 J	ND	ND
	µg/L	20-Jul-09	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.05 J	ND
	µg/L	25-Jan-10	10	1.59 B	1.20 B	6.82 J	1.68 B	1.76 B	1.55 B	1.79 B	1.74 B	2.07 B	2.55 B	1.25 J
	µg/L	06-Jul-10	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	04-Jan-11	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	05-Jul-11	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	09-Jan-12	10	ND	1.58 J	ND	ND	ND	ND	0.43 J	0.27 J	ND	0.83 J	ND
	µg/L	09-Jul-12	10	ND	0.25 J	ND	0.50 J	0.43 J	0.68 J	1.00 J	0.83 J	ND	1.25 J	ND
	µg/L	28-Jan-13	10	ND	0.34 J	ND	0.90 J	1.17 J	0.86 J	1.09 J	0.17 J	ND	2.13 J	ND
	µg/L	17-Jul-13	10	ND	ND	ND	0.27 J	ND	ND	ND	1.64 J	ND	5.64 J	ND
Thallium	µg/L	12-Jul-05	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
GWPS = 0.2 µg/L	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND	ND	ND	--	--	--	ND
	µg/L	28-Jun-06	10	--	--	--	--	--	--	--	--	--	--	ND
	µg/L	11-Jul-06	10	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND
	µg/L	31-Oct-06	10	--	--	--	--	--	--	--	ND	--	--	ND
	µg/L	17-Jan-07	5.5	0.070 J	0.049 J	ND	ND	ND	ND	0.045 J	ND	--	--	ND
	µg/L	09-Jul-07	5.5	0.065 J	0.050 J	0.058 J	0.054 J	ND	ND	0.060 J	ND	--	--	ND
	µg/L	14-Jan-08	5.5	0.077 J	0.069 J	ND	ND	ND	ND	0.063 J	ND	ND	--	ND
	µg/L	30-Apr-08	5.5	--	--	--	--	--	--	--	--	--	0.136 J	ND
	µg/L	14-Jul-08	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	03-Oct-08	5.5	--	--	--	--	--	--	--	--	--	0.158 J	ND
	µg/L	19-Jan-09	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	20-Jul-09	5.5	0.0400 J	0.0520 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	25-Jan-10	5.5	0.117 J	0.146 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	06-Jul-10	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	04-Jan-11	5.5	ND	0.122 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	05-Jul-11	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	09-Jan-12	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	09-Jul-12	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	28-Jan-13	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	5.5	0.15 J	0.10 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 5
Summary of Historical Groundwater Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Yorktown Formation																				Blanks	
				Background		Downgradient																			
				GW-2		GW-7		GW-8		GW-9		GW-10		GW-11		GW-13		GW-15		GW-16R		GW-17			
Vanadium	µg/L	12-Jul-05	40	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
GWPS = 0.3 µg/L	µg/L	19-Jan-06	40	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	28-Jun-06	40	--		--		--		--		--		--		--		--		--		--		ND	
	µg/L	11-Jul-06	40	ND		ND		ND		ND		ND		ND		ND		ND		--		--		ND	
	µg/L	31-Oct-06	40	--		--		--		--		--		--		--		ND		--		--		ND	
	µg/L	17-Jan-07	25	ND		ND		ND		ND		ND		ND		1.00	J	1.10	J	--		--		ND	
	µg/L	09-Jul-07	25	ND		ND		ND		1.50	B	ND		ND		ND		ND		--		--		1.00	J
	µg/L	14-Jan-08	25	1.60	B	ND		1.10	B	2.70	B	ND		2.00	B	ND		1.00	B	ND		--		1.00	J
	µg/L	30-Apr-08	25	--		--		--		--		--		--		--		--		--		13.70	J	1.30	J
	µg/L	14-Jul-08	25	ND		ND		ND		ND		ND		ND		ND		ND		ND		2.0	J	ND	
	µg/L	03-Oct-08	25	--		--		--		--		--		--		--		--		--		ND		ND	
	µg/L	19-Jan-09	25	ND		ND		ND		ND		ND		ND		ND		ND		1.4	J	ND		ND	
	µg/L	20-Jul-09	25	1.55	B	0.778	B	ND		1.63	B	ND		ND		0.746	B	0.856	B	0.886	B	10.4	J	0.803	J
	µg/L	25-Jan-10	25	ND		ND		3.64	J	ND		ND		1.83	J	ND		ND		ND		0.508	J	ND	
	µg/L	06-Jul-10	25	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	µg/L	04-Jan-11	25	ND		6.03	J	ND		10.5	J	ND		ND		ND		ND		ND		8.25	J	ND	
	µg/L	05-Jul-11	25	ND		1.84	J	ND		7.12	J	1.42	J	2.51	J	ND		ND		ND		3.39	J	ND	
	µg/L	09-Jan-12	25	ND		ND		ND		ND		ND		ND		ND		ND		ND		8.37	J	ND	
	µg/L	09-Jul-12	25	2.41	J	1.85	J	ND		ND		ND		ND		ND		ND		ND		1.71	J	ND	
	µg/L	28-Jan-13	25	2.24	B	ND		ND		15.3	B	ND		ND		ND		ND		ND		6.45	B	2.68	J
	µg/L	17-Jul-13	25	3.64	J	ND		ND		11.8	J	ND		ND		2.29	J	15.3	J	ND		5.57	J	ND	
Zinc	µg/L	28-Oct-98	50	ND		ND		ND		ND		ND		Dry		--		--		--		--		ND	
NC 2L = 1000 µg/L	µg/L	07-Apr-99	50	50.0		40.0		30.0		ND		ND		Dry		--		--		--		--		30.0	
	µg/L	08-Dec-99	50	ND		40.0		80.0		ND		60.0		30.0		--		--		--		--		ND	
	µg/L	27-Apr-00	50	90.0		70.0		ND		150.0		ND		Dry		--		--		--		--		ND	
	µg/L	18-Oct-00	50	ND		ND		ND		ND		ND		Dry		ND		--		--		--		ND	
	µg/L	28-Nov-00	50	--		--		--		--		--		--		60.0		--		--		--		--	
	µg/L	03-Jan-01	50	--		--		--		--		--		--		ND		--		--		--		--	
	µg/L	08-Feb-01	50	--		--		--		--		--		--		ND		--		--		--		--	
	µg/L	19-Apr-01	50	ND		ND		ND		--		ND		Dry		ND		--		--		--		ND	
	µg/L	24-Dec-01	50	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	23-Apr-02	50	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	23-Oct-02	50	ND		ND		ND		90.0		ND		ND		ND		--		--		--		ND	
	µg/L	01-Apr-03	50	110.0		120.0		50.0		90.0		50.0		70.0		40.0		--		--		--		30.0	
	µg/L	02-Sep-03	50	--		--		--		--		--		--		--		--		--		--		--	
	µg/L	28-Oct-03	50	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	27-Apr-04	50	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	26-Oct-04	50	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	15-Mar-05	50	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	12-Jul-05	50	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	12-Jan-06	50	--		--		--		--		--		--		--		ND		--		--		ND	
	µg/L	19-Jan-06	50	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND	
	µg/L	28-Jun-06	50	--		--		--		--		--		--		--		--		--		--		ND	
	µg/L	11-Jul-06	50	ND		ND		ND		ND		ND		ND		ND		ND		--		--		ND	
	µg/L	31-Oct-06	50	--		--		--		--		--		--		--		ND		--		--		ND	
	µg/L	17-Jan-07	10	18.8	B	23.3	B	12.2	B	12.7	B	5.9	B	10.4	B	15.6	B	7.7	B	--		--		5.5	J
	µg/L	09-Jul-07	10	8.3	J	21.5		3.9	J	4.8	J	4.4	J	ND		3.9	J	5.2	J	--		--		ND	
	µg/L	14-Jan-08	10	13.3		5.7	B	4.1	B	6.0	B	2.9	B	5.2	B	4.8	B	3.7	B	13.6		--		1.3	J
	µg/L	30-Apr-08	10	--		--		--		--		--		--		--		--		--		18.8		ND	
	µg/L	14-Jul-08	10	10.2	B	7.4	B	4.9	B	6.1	B	ND		ND		4.4	B	5.9	B	ND		6.7	B	5.0	J
	µg/L	03-Oct-08	10	--		--		--		--		--		--		--		--		--		8.7	J	ND	
	µg/L	19-Jan-09	10	10.9		4.1	J	4.1	J	10.6		ND		ND		4.3	J	ND		ND		ND		ND	
	µg/L	20-Jul-09	10	10.3		28.0		9.27	J	12.2		ND		ND		7.25	J	5.40	J	8.07	J	17.6		ND	
	µg/L	25-Jan-10	10	13.0		6.56	J	ND		15.3		6.86	J	2.89	J	6.92	J	4.45	J	6.07	J	4.26	J	ND	
	µg/L	06-Jul-10	10	12.0		5.01	J	ND		9.64	J	ND		4.54	J	5.00	J	ND		6.07	J	ND		ND	
	µg/L	04-Jan-11	10	9.70	J	7.51	J	ND		14.0		ND		ND		ND		ND		ND		8.51	J	ND	
	µg/L	05-Jul-11	10	20.6		8.55	J	6.18	J	19.6		4.28	J	7.45	J	7.77	J	5.46	J	ND		6.28	J	ND	
	µg/L	09-Jan-12	10	12.4	B	3.07	B	3.85	B	13.8	B	2.31	B	3.53	B	7.41	B	73.8	B	3.38	B	7.26	B	15.9	
	µg/L	09-Jul-12	10	10.4	J	4.69	J	2.52	B	14.1		3.42	J	2.21	B	5.46	J	5.74	J	6.37	J	3.83	J	0.30	J
	µg/L	28-Jan-13	10	8.93	J	4.76	B	2.66	B	9.37	J	3.84	B	1.55	B	5.26	B	3.96	B	2.93	B	5.01	B	0.57	J
	µg/L	17-Jul-13	10	11.5		5.40	J	3.49	J	11.2		1.66	J	3.98	J	9.59	J	13.0		5.46	J	7.94	J	ND	

TABLE 5
Summary of Historical Groundwater Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Yorktown Formation														Blanks
				Background		Downgradient												
				GW-2		GW-7		GW-8		GW-9		GW-10		GW-11		GW-13		GW-15		GW-16R		GW-17		
Benzene	µg/L	28-Jan-13	1	0.7	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
NC 2L= 1 µg/L	µg/L	17-Jul-13	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
Chloroform	µg/L	17-Jan-07	5	ND		ND		ND		ND		ND		0.63	J	ND		ND		--		--		ND
NC 2L = 70 µg/L	µg/L	09-Jul-07	5	ND		ND		ND		ND		ND		0.37	J	ND		ND		--		--		ND
	µg/L	14-Jan-08	5	ND		ND		ND		ND		ND		0.62	J	ND		ND		0.54	J	--		ND
	µg/L	30-Apr-08	5	--		--		--		--		--		--		--		--		--		1.0	J	ND
	µg/L	14-Jul-08	5	ND		ND		ND		ND		ND		0.66	J	ND		ND		1.1	J	2.0	J	ND
	µg/L	03-Oct-08	5	--		--		--		--		--		--		--		--		--		2.7	J	ND
	µg/L	19-Jan-09	5	ND		ND		ND		ND		ND		0.58	J	ND		ND		0.52	J	2.6	J	ND
	µg/L	20-Jul-09	5	ND		ND		ND		ND		ND		0.52	J	ND		ND		0.65	J	1.5	J	ND
	µg/L	25-Jan-10	5	ND		ND		ND		ND		ND		0.68	J	ND		ND		1.1	J	3.2	J	ND
	µg/L	06-Jul-10	5	ND		ND		ND		ND		ND		0.55	J	ND		ND		ND		1.3	J	ND
	µg/L	04-Jan-11	5	ND		ND		ND		ND		ND		0.44	J	ND		ND		ND		2.3	J	ND
	µg/L	05-Jul-11	5	ND		ND		ND		ND		ND		ND		ND		ND		ND		1.2	J	ND
	µg/L	09-Jan-12	5	ND		ND		ND		ND		ND		ND		ND		ND		ND		1.2	J	ND
	µg/L	09-Jul-12	5	ND		ND		ND		ND		ND		0.50	J	ND		ND		ND		1.1	J	ND
	µg/L	28-Jan-13	5	ND		ND		ND		ND		ND		0.5	J	ND		ND		ND		1.2	J	ND
	µg/L	17-Jul-13	5	ND		ND		ND		ND		ND		0.5	J	ND		ND				1.8	J	
Chloromethane	µg/L	06-Jul-10	1	ND		ND		ND		ND		ND		ND		ND		ND		0.43	J	ND		ND
NC 2L = 3 µg/L	µg/L	04-Jan-11	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	05-Jul-11	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	09-Jan-12	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	09-Jul-12	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	28-Jan-13	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	17-Jul-13	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
1,4- Dichlorobenzene	µg/L	09-Jul-12	1	0.4	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
NC 2L = 6 µg/L	µg/L	28-Jan-13	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	17-Jul-13	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
Methylene Chloride	µg/L	28-Jan-13	1	0.5	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
NC 2L = 5 µg/L	µg/L	17-Jul-13	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
Toluene	µg/L	28-Jan-13	1	1.5	B	0.2	B	ND		ND		ND		ND		ND		ND		ND		ND		0.2	J
NC 2L = 200 µg/L	µg/L	17-Jul-13	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
Trichloroethene	µg/L	12-Jul-05	5	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND
NC 2L = 3 µg/L	µg/L	19-Jan-06	5	ND		ND		ND		ND		ND		ND		ND		--		--		--		ND
	µg/L	28-Jun-06	5	--		--		--		--		--		--		--		--		--		--		ND
	µg/L	11-Jul-06	5	ND		ND		ND		ND		ND		ND		ND		ND		--		--		ND
	µg/L	31-Oct-06	5	--		--		--		--		--		--		--		ND		--		--		ND
	µg/L	17-Jan-07	3	ND		ND		ND		ND		ND		ND		ND		ND		--		--		ND
	µg/L	09-Jul-07	1	0.47	J	ND		0.35	J	ND		ND		ND		ND		ND		--		--		ND
	µg/L	14-Jan-08	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		--		ND
	µg/L	30-Apr-08	1	--		--		--		--		--		--		--		--		--		ND		ND
	µg/L	14-Jul-08	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	03-Oct-08	1	--		--		--		--		--		--		--		--		--		ND		ND
	µg/L	19-Jan-09	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	20-Jul-09	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	25-Jan-10	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	06-Jul-10	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	04-Jan-11	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	05-Jul-11	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	09-Jan-12	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	09-Jul-12	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	28-Jan-13	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	µg/L	17-Jul-13	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND

TABLE 5
Summary of Historical Groundwater Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Yorktown Formation										Blanks
				Background	Downgradient									
				GW-2	GW-7	GW-8	GW-9	GW-10	GW-11	GW-13	GW-15	GW-16R	GW-17	
pH (Field)	S.U.	28-Oct-98	--	5.38	4.61	5.58	5.76	6.63	Dry	--	--	--	--	--
	S.U.	07-Apr-99	--	5.14	4.6	5.38	5.66	6.32	Dry	--	--	--	--	--
	S.U.	08-Dec-99	--	5.11	6.31	5.2	5.30	6.02	7.5	--	--	--	--	--
	S.U.	27-Apr-00	--	5.06	4.5	5.28	5.64	5.84	Dry	--	--	--	--	--
	S.U.	18-Oct-00	--	4.93	4.19	5.04	5.41	6.04	Dry	6.00	--	--	--	--
	S.U.	28-Nov-00	--	--	--	--	--	--	--	4.24	--	--	--	--
	S.U.	03-Jan-01	--	--	--	--	--	--	--	5.83	--	--	--	--
	S.U.	08-Feb-01	--	--	--	--	--	--	--	5.94	--	--	--	--
	S.U.	19-Apr-01	--	4.98	4.26	5.07	--	6.27	Dry	5.76	--	--	--	--
	S.U.	24-Dec-01	--	5.13	4.27	5.03	5.57	6.41	5.46	5.19	--	--	--	--
	S.U.	23-Apr-02	--	4.97	4.24	4.91	5.40	6.50	5.05	4.89	--	--	--	--
	S.U.	23-Oct-02	--	4.62	4.02	4.67	5.03	6.05	4.9	5.00	--	--	--	--
	S.U.	01-Apr-03	--	4.92	4.26	4.99	5.46	6.25	5.41	5.28	--	--	--	--
	S.U.	02-Sep-03	--	--	--	--	--	--	--	--	--	--	--	--
	S.U.	28-Oct-03	--	4.74	4.13	5.01	5.31	6.29	5.13	4.97	--	--	--	--
	S.U.	27-Apr-04	--	4.70	4.19	4.70	5.08	6.03	5.16	4.59	--	--	--	--
	S.U.	26-Oct-04	--	4.45	3.97	4.49	5.05	5.73	4.74	4.55	--	--	--	--
	S.U.	15-Mar-05	--	4.70	4.21	5.04	5.32	6.03	5.26	4.78	--	--	--	--
	S.U.	12-Jul-05	--	4.15	4.17	4.88	4.73	5.60	4.85	4.33	--	--	--	--
	S.U.	19-Jan-06	--	2.69	2.38	5.05	4.68	6.58	3.56	5.76	--	--	--	--
	S.U.	28-Jun-06	--	--	--	--	--	--	--	--	--	--	--	--
	S.U.	11-Jul-06	--	4.64	4.23	4.94	5.17	5.67	5.17	4.81	5.13	--	--	--
	S.U.	31-Oct-06	--	--	--	--	--	--	--	--	4.67	--	--	--
	S.U.	17-Jan-07	--	4.01	4.10	4.72	5.14	6.04	5.18	4.67	4.89	--	--	--
	S.U.	09-Jul-07	--	4.31	4.18	5.00	5.20	6.08	4.98	4.65	4.84	--	--	--
	S.U.	14-Jan-08	--	4.34	4.25	4.88	5.42	5.77	5.27	4.99	5.18	5.08	--	--
	S.U.	30-Apr-08	--	--	--	--	--	--	--	--	--	--	4.51	--
	S.U.	14-Jul-08	--	4.47	4.13	4.82	5.22	5.70	5.10	4.72	4.99	5.02	4.68	--
	S.U.	03-Oct-08	--	--	--	--	--	--	--	--	--	--	4.33	--
	S.U.	19-Jan-09	--	4.63	4.06	4.85	4.72	5.08	4.75	4.75	4.95	4.50	4.23	--
	S.U.	20-Jul-09	--	4.79	4.29	4.80	5.34	5.55	4.16	3.83	4.46	4.74	4.39	--
	S.U.	25-Jan-10	--	4.30	4.01	4.63	4.94	5.51	5.02	4.62	4.89	4.51	4.36	--
	S.U.	06-Jul-10	--	4.17	4.08	4.70	5.09	5.49	4.66	4.73	4.17	4.48	4.41	--
	S.U.	04-Jan-11	--	4.55	4.07	4.71	5.73	5.73	5.00	4.72	4.86	4.46	4.48	--
	S.U.	05-Jul-11	--	3.71	3.69	4.29	4.98	4.47	4.43	3.89	4.71	3.68	3.50	--
	S.U.	09-Jan-12	--	4.76	4.42	4.60	5.47	5.81	5.07	4.64	5.38	4.50	4.56	--
	S.U.	09-Jul-12	--	4.83	4.24	4.90	5.24	5.82	5.33	4.89	5.24	4.94	4.80	--
	S.U.	28-Jan-13	--	4.96	4.33	4.98	5.90	5.79	5.21	5.04	5.22	4.79	4.93	--
	S.U.	17-Jul-13	--	4.19	4.00	4.70	5.10	5.29	4.29	4.24	5.01	4.03	4.70	--
Conductivity (Field)	uS/cm	28-Oct-98	--	83.0	257.0	98.0	78.0	115	Dry	--	--	--	--	--
	uS/cm	07-Apr-99	--	69.41	173	75.21	52.07	67.89	Dry	--	--	--	--	--
	uS/cm	08-Dec-99	--	61.0	306	52.0	89.0	48.0	41.0	--	--	--	--	--
	uS/cm	27-Apr-00	--	78.0	210	87.0	57.0	57.0	Dry	--	--	--	--	--
	uS/cm	18-Oct-00	--	110	317	130	76.0	108	Dry	--	--	--	--	--
	uS/cm	28-Nov-00	--	--	--	--	--	--	--	191	--	--	--	--
	uS/cm	03-Jan-01	--	--	--	--	--	--	--	7.3	--	--	--	--
	uS/cm	08-Feb-01	--	--	--	--	--	--	--	75.0	--	--	--	--
	uS/cm	19-Apr-01	--	106	284	130	--	125	Dry	5.77	--	--	--	--
	uS/cm	24-Dec-01	--	85.0	224	105	71.0	104	46.0	80.0	--	--	--	--
	uS/cm	23-Apr-02	--	112	282	136	84.0	131	62.0	156	--	--	--	--
	uS/cm	23-Oct-02	--	62.0	161	77.0	49.0	75.0	37.0	41.0	--	--	--	--
	uS/cm	01-Apr-03	--	71.0	131	86.0	54.0	72.0	43.0	83.0	--	--	--	--
	uS/cm	02-Sep-03	--	--	--	--	--	--	--	--	--	--	--	--
	uS/cm	28-Oct-03	--	84.0	221	89.0	64.0	85.0	38.0	93.0	--	--	--	--
	uS/cm	27-Apr-04	--	99.0	227	108	82.0	102	53.0	118	--	--	--	--
	uS/cm	26-Oct-04	--	110	259	115	95.0	122	51.0	97.0	--	--	--	--
	uS/cm	15-Mar-05	--	108	223	94.0	79.0	97.0	47.0	91.0	--	--	--	--
	uS/cm	12-Jul-05	--	106	231	98.0	84.0	88.0	49.0	91.0	--	--	--	--
	uS/cm	19-Jan-06	--	103	214	100	66.0	98.0	47.0	89.0	--	--	--	--
	uS/cm	28-Jun-06	--	--	--	--	--	--	--	--	--	--	--	--
	uS/cm	11-Jul-06	--	147	307	146	121	129	70.0	126	106	--	--	--
	uS/cm	31-Oct-06	--	--	--	--	--	--	--	--	90.0	--	--	--
	uS/cm	17-Jan-07	--	136	291	164	112	132	52.0	98.0	92.0	--	--	--
	uS/cm	09-Jul-07	--	134	268	133	115	109	54.0	89.0	92.0	--	--	--
	uS/cm	14-Jan-08	--	212	442	208	128	279	120	252	248	53.0	--	--
	uS/cm	30-Apr-08	--	--	--	--	--	--	--	--	--	--	77.0	--
	uS/cm	14-Jul-08	--	146	301	155	113	127	69.0	118	107	39.0	82.0	--
	uS/cm	03-Oct-08	--	--	--	--	--	--	--	--	--	--	79.0	--
	uS/cm	19-Jan-09	--	138	264	164	84.0	108	64.0	113	100	38.0	86.0	--
	uS/cm	20-Jul-09	--	138	266	161	122	119	67.0	113	100	33.0	77.0	--
	uS/cm	25-Jan-10	--	139	260	149	90	127	61.0	108	100	33.0	76.0	--
	uS/cm	06-Jul-10	--	134	233	145	138	123	61.0	97.0	134	33.0	76.0	--
	uS/cm	04-Jan-11	--	140	269	148	342	135	62.0	101	100	32.0	82.0	--
	uS/cm	05-Jul-11	--	143	251	145	205	135	71.0	111	100	33.0	78.0	--
	uS/cm	09-Jan-12	--	116	201	111	219	105	51.0	93.0	79.0	29.0	62.0	--
	uS/cm	09-Jul-12	--	123.9	220.2	136.3	220.9	133.2	63.6	127.4	91.5	36.5	75.7	--
	uS/cm	28-Jan-13	--	117.6	190.1	105.1	4.2	108.9	45.9	96.5	79.8	27.5	61.4	--
	uS/cm	17-Jul-13	--	104.8	208.1	121.3	220.1	98.7	49.7	92.0	83.9	34.3	69.9	--
Temperature (Field)	°C	28-Oct-98	--	15.3	19	19.7	18.6	15.9	Dry	--	--	--	--	--
	°C	07-Apr-99	--	16.7	17.3	17.3	15.6	17.6	Dry	--	--	--	--	--
	°C	08-Dec-99	--	15.1	17.0	25.0	17.1	16.7	17.0	--	--	--	--	--
	°C	27-Apr-00	--	15.6	13.1	14.4	13.7	12.9	Dry	--	--	--	--	--
	°C	18-Oct-00	--	16.7	19.1	19.3	20.4	16.6	Dry	--	--	--	--	--
	°C	28-Nov-00	--	--	--	--	--	--	--	15.6	--	--	--	--
	°C	03-Jan-01	--	--	--	--	--	--	--	14.5	--	--	--	--
	°C	08-Feb-01	--	--	--	--	--	--	--	16.9	--	--	--	--
	°C	19-Apr-01	--	14.9	31.0	14.7	--	13.7	Dry	17.1	--	--	--	--
	°C	24-Dec-01	--	17.9	20.2	20.7	20.8	17.7	20.1	21.6	--	--	--	--
	°C	23-Apr-02	--	15.9	16.0	15.7	15.6	14.5	18.4	17.1	--	--	--	--
	°C	23-Oct-02	--	15.8	19.1	19.4	20.3	17	17.8	15.7	--	--	--	--
	°C	01-Apr-03	--	16.9	16.4	17	14.4	15.7	18.5	17.3	--	--	--	--
	°C	02-Sep-03	--	--	--	--	--	--	--	--	--	--	--	--
	°C	28-Oct-03	--	16.5	19.1	18.0	18.1	15.9	16.6	18.3	--	--	--	--
	°C	27-Apr-04	--	16.0	17.0	15.5	14.0	15.0	17.3	19.4	--	--	--	--
	°C	26-Oct-04	--	16.8	18.8	19.1	19.7	17	18.0	15.9	--	--	--	--
	°C	15-Mar-05	--	16.18	15.79	15.8	12.86	14.6	17.44	16.39	--	--	--	--
	°C	12-Jul-05	--	16.32	16.8	16.56	18.09	15.97	17.78	17.92	--	--	--	--
	°C	19-Jan-06	--	16.61	17.5	17.51	15.06	15.39	17.88	17.19	--	--	--	--
	°C	28-Jun-06	--	--	--	--	--	--	--	--	--	--	--	--
	°C	11-Jul-06	--	16.1	16.8	17.0	18.2	15.7	17.7	17.3	19.9	--	--	--
	°C	31-Oct-06	--	--	--	--	--	--	--	--	17.6	--	--	--
	°C	17-Jan-07	--	15.6	15.6	15.8	14.5	15.0	16.6	16.0	14.9	--	--	--
	°C	09-Jul-07	--	17.09	17.81	17.53	18.9	17.00	17.75	17.80	18.61	--	--	--
	°C	14-Jan-08	--	16.26	17.88	15.93	15.44	14.32	16.65	17.53	16.65	16.64	--	--
	°C	30-Apr-08	--	--	--	--	--	--	--	--	--	--	15.09	--
	°C	14-Jul-08	--	17.17	19.03	18.84	20.55	18.13	19.59	18.67	18.44	18.38	16.22	--
	°C	03-Oct-08	--	--	--	--	--	--	--	--	--	--	16.30	--
	°C	19-Jan-09	--	15.32	14.69	15.59	13.80	13.94	16.71	15.22	15.18	13.25	12.81	--
	°C	20-Jul-09	--	17.08	19.47	18.99	19.25	16.87	19.62	18.99	19.18	17.43	18.09	--
	°C	25-Jan-10	--	16.60	16.99	16.89	14.08	14.52	18.16	17.10	16.50	15.94	15.68	--
	°C	06-Jul-10	--	17.58	20.10	18.72	21.41	16.37	19.71	25.56	17.58	17.78	18.99	--
	°C	04-Jan-11	--	16.52	17.09	16.38	14.22	14.69	17.54	16.54	15.50	15.51	15.44	--
	°C	05-Jul-11	--	17.60	19.52	19.02	22.24	17.52	21.14	17.89	19.67	16.82	17.90	--
	°C	09-Jan-12	--	15.41	15.82	14.83	13.69	13.80	15.99	15.81	13.81	16.40	14.89	--
	°C	09-Jul-12	--	17.00	18.30	18.80	19.30	16.20	18.30	19.00	19.30	16.60	18.30	--
	°C	28-Jan-13	--	16.7	16.6	16.5	13.2	14.6	17.3	16.9	14.8	16.6	17.0	--
	°C	17-Jul-13	--	16.4	18.1	17.9	18.1	15.9	18.0	18.6	21.6	19.8	23.3	--

TABLE 5
Summary of Historical Groundwater Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Yorktown Formation										Blanks
				Background	Downgradient									
				GW-2	GW-7	GW-8	GW-9	GW-10	GW-11	GW-13	GW-15	GW-16R	GW-17	
Turbidity (Field)	NTU	28-Oct-98	--	80	65	19	13	17	Dry	--	--	--	--	--
	NTU	07-Apr-99	--	20	1.51	3.13	2.61	2.96	Dry	--	--	--	--	--
	NTU	08-Dec-99	--	20	9.46	5.04	2.24	26	19	--	--	--	--	--
	NTU	27-Apr-00	--	32	18	14	7.07	1.76	Dry	--	--	--	--	--
	NTU	18-Oct-00	--	20.4	38.1	9.2	6.39	1.6	Dry	15.9	--	--	--	--
	NTU	28-Nov-00	--	--	--	--	--	--	--	11.4	--	--	--	--
	NTU	03-Jan-01	--	--	--	--	--	--	--	11	--	--	--	--
	NTU	08-Feb-01	--	--	--	--	--	--	--	18	--	--	--	--
	NTU	19-Apr-01	--	169	31	11	--	11	Dry	16	--	--	--	--
	NTU	24-Dec-01	--	28	60	5.31	33	2.45	61	29	--	--	--	--
	NTU	23-Apr-02	--	27	26	2.08	290	450	11	4.28	--	--	--	--
	NTU	23-Oct-02	--	6.54	5.77	1.84	3.97	1.35	71	6.58	--	--	--	--
	NTU	01-Apr-03	--	44	23	2.63	15	91	44	10	--	--	--	--
	NTU	02-Sep-03	--	--	--	--	--	--	--	--	--	--	--	--
	NTU	28-Oct-03	--	34	25	1.8	25	7.99	20	13	--	--	--	--
	NTU	27-Apr-04	--	32	13	0.85	33	34	20	2.37	--	--	--	--
	NTU	26-Oct-04	--	10	10	0.89	38	5.89	29	44	--	--	--	--
	NTU	15-Mar-05	--	68.6	17.9	15.4	43.5	45.1	50.3	26.3	--	--	--	--
	NTU	12-Jul-05	--	78.0	29.7	30.3	37.3	30.3	45.2	36.3	--	--	--	--
	NTU	19-Jan-06	--	39.2	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--
	NTU	28-Jun-06	--	--	--	--	--	--	--	--	--	--	--	--
	NTU	11-Jul-06	--	33.6	3.4	1.7	25.4	31.0	34.5	15.0	78.2	--	--	--
	NTU	31-Oct-06	--	--	--	--	--	--	--	--	193	--	--	--
	NTU	17-Jan-07	--	13.0	0.0	9.5	23.7	97.20	6.9	8.8	8.3	--	--	--
	NTU	09-Jul-07	--	0.0	0.0	0.0	0.0	65.8	0.0	0.0	0.0	--	--	--
	NTU	14-Jan-08	--	7.31	5.39	1.19	37.5	24.0	1.29	0.68	9.48	4.08	--	--
	NTU	30-Apr-08	--	--	--	--	--	--	--	--	--	--	>1000	--
	NTU	14-Jul-08	--	10.6	1.10	1.46	29.5	50.6	2.61	0.40	2.03	8.77	33.1	--
	NTU	03-Oct-08	--	--	--	--	--	--	--	--	--	--	9.54	--
	NTU	19-Jan-09	--	13.8	1.81	0.41	20.9	5.82	2.99	0.39	1.76	3.04	2.45	--
	NTU	20-Jul-09	--	8.53	1.50	21.0	36.2	7.84	2.22	1.45	1.67	6.42	45.9	--
	NTU	25-Jan-10	--	4.45	3.91	1.46	57.0	29.0	20.9	3.56	2.75	8.83	14.3	--
	NTU	06-Jul-10	--	7.74	2.34	0.87	34.9	40.0	3.37	1.26	7.74	11.3	1.73	--
	NTU	04-Jan-11	--	9.95	14.3	5.51	42.2	29.8	8.01	1.41	0.78	0.67	82.2	--
	NTU	05-Jul-11	--	12.9	74.4	1.22	87.5	41.9	29.4	0.94	2.23	0.77	30.6	--
	NTU	09-Jan-12	--	10.93	9.11	7.20	5.69	10.96	6.21	6.10	28.2	6.07	49.1	--
	NTU	09-Jul-12	--	15.30	18.7	4.74	19.70	42.0	4.16	10.1	14.7	7.8	11.5	--
	NTU	28-Jan-13	--	19.79	20.7	21.09	91.31	11.91	15.29	27.1	20.1	15.26	37.8	--
	NTU	17-Jul-13	--	7.24	9.71	8.43	11.23	8.61	8.09	7.92	20.92	7.42	8.98	--
Oxidation Reduction Potential (Field)	mV	15-Mar-05	--	363	411	236	121	14	270	319	--	--	--	--
	mV	12-Jul-05	--	407	412	234	173	5	279	375	--	--	--	--
	mV	19-Jan-06	--	361	370	222	174	16	283	339	--	--	--	--
	mV	28-Jun-06	--	--	--	--	--	--	--	--	--	--	--	--
	mV	11-Jul-06	--	382	309	312	216	115	317	363	290	--	--	--
	mV	31-Oct-06	--	--	--	--	--	--	--	--	343	--	--	--
	mV	17-Jan-07	--	347	391	306	153	32	290	318	305	--	--	--
	mV	09-Jul-07	--	371	431	309	204	81	290	352	328	--	--	--
	mV	14-Jan-08	--	363	403	342	166	147	317	336	317	308	--	--
	mV	14-Jul-08	--	314	365	248	114	6	247	274	257	243	291	--
	mV	03-Oct-08	--	--	--	--	--	--	--	--	--	--	260	--
	mV	19-Jan-09	--	203.8	260.9	254.4	152.1	193.3	159.2	238.9	213.8	216.4	179.8	--
	mV	20-Jul-09	--	302.4	289.1	245.3	122.3	110.0	238.0	223.1	202.5	253.0	285.4	--
	mV	25-Jan-10	--	255.6	310.6	243.0	185.9	144.4	245.0	264.1	244.5	285.2	300.7	--
	mV	06-Jul-10	--	76.9	101.1	48.2	151.4	-26.2	57.2	93.5	76.9	224.2	94.6	--
	mV	04-Jan-11	--	163.4	274.2	211.4	-5.9	85.4	138.1	160.0	151.7	219.2	243.4	--
	mV	05-Jul-11	--	224.2	273.0	245.9	131.1	151.5	207.3	261.7	231.9	260.7	271.0	--
	mV	09-Jan-12	--	121.5	95.1	104.1	33.7	-4.9	76.8	99.9	94	35.6	63.9	--
	mV	09-Jul-12	--	105.2	177.0	135.5	42.6	-41.2	75.7	116.0	103.8	53.1	127.1	--
	mV	28-Jan-13	--	289.9	385.8	220.1	19.8	150.1	249.1	288.4	269.7	261.4	287.6	--
	mV	17-Jul-13	--	253.1	263.7	100.6	77.3	58.6	214.6	267.1	187.4	196.1	155.3	--
Dissolved Oxygen (Field)	mg/L	15-Mar-05	--	4.65	2.69	1.61	1.23	1.39	2.10	5.55	--	--	--	--
	mg/L	12-Jul-05	--	6.22	3.06	0.53	1.83	1.12	2.48	6.90	--	--	--	--
	mg/L	19-Jan-06	--	3.34	0.00	0.00	0.00	0.00	0.21	3.71	--	--	--	--
	mg/L	28-Jun-06	--	--	--	--	--	--	--	--	--	--	--	--
	mg/L	11-Jul-06	--	9.31	5.50	3.00	3.32	1.60	3.52	7.88	8.05	--	--	--
	mg/L	31-Oct-06	--	--	--	--	--	--	--	--	6.30	--	--	--
	mg/L	17-Jan-07	--	8.80	3.90	1.70	2.70	2.10	4.60	7.80	7.90	--	--	--
	mg/L	09-Jul-07	--	6.30	3.20	0.90	1.60	2.30	2.70	6.80	7.00	--	--	--
	mg/L	14-Jan-08	--	8.12	4.09	4.87	2.56	3.44	3.96	8.25	8.66	6.37	--	--
	mg/L	14-Jul-08	--	7.46	3.42	1.49	2.37	0.86	2.29	6.24	6.53	4.27	4.21	--
	mg/L	03-Oct-08	--	--	--	--	--	--	--	--	--	--	5.07	--
	mg/L	19-Jan-09	--	8.53	3.27	1.79	1.62	1.26	3.01	6.69	7.15	7.23	6.07	--
	mg/L	20-Jul-09	--	7.63	4.89	3.50	2.99	0.99	2.63	6.76	6.81	3.93	4.76	--
	mg/L	25-Jan-10	--	7.95	4.55	3.54	4.67	1.29	4.89	7.10	7.27	4.40	3.95	--
	mg/L	06-Jul-10	--	7.26	4.86	3.50	0.30	4.04	5.37	5.72	7.26	2.66	3.33	--
	mg/L	04-Jan-11	--	8.43	4.15	4.46	2.30	1.84	6.24	7.95	7.07	1.00	4.04	--
	mg/L	05-Jul-11	--	6.37	3.11	1.25	3.58	0.64	1.84	7.27	7.08	2.37	5.20	--
	mg/L	09-Jan-12	--	6.04	4.44	1.87	0.60	1.41	2.75	4.91	5.5	0.36	2.64	--
	mg/L	09-Jul-12	--	0.45	4.99	3.12	0.52	0.32	1.10	2.62	1.03	0.40	3.18	--
	mg/L	28-Jan-13	--	5.43	5.81	5.79	8.63	0.69	4.09	7.15	7.26	1.90	4.51	--
	mg/L	17-Jul-13	--	5.27	1.64	2.31	0.40	0.18	1.79	5.91	4.95	1.06	3.49	--

Notes:
1. mg/L = milligrams per liter
2. µg/L = micrograms per liter
3. S.U. = Standard Units
4. NTU = Nephelometric Turbidity Units
5. ND = Not detected at the stated reporting limit
6. µS/cm = microsiemens per centimeter
7. mV = Millivolts
8. J = Estimated Value
9. B = Blank-Qualified Value
10. '-- = no data
11. Blanks = field, trip and method blanks
12. Shaded = Quantified Concentrations above the NC 2L or Groundwater Protection Standards (GWPS) have been shaded
13. Standards = NC 2L Groundwater Standards or North Carolina Solid Waste Section Groundwater Protection Standards
14. SWS Reporting Limit = NCPQL prior to 2007 and NCSWSL starting in 01/18/07
15. All data prior to 2012 taken from previous report by Golder Associates NC, Inc.

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream	Downstream			Blanks
				SW-1	SW-2	SW-3	SW-4	
Antimony	µg/L	12-Jul-05	30	ND	ND	ND	ND	ND
No NC 2B Standard	µg/L	19-Jan-06	30	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	30	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	6	ND	ND	ND	ND	ND
	µg/L	15-Jan-08	6	ND	ND	dry	ND	ND
	µg/L	14-Jul-08	6	ND	dry	ND	dry	ND
	µg/L	19-Jan-09	6	ND	dry	ND	ND	ND
	µg/L	20-Jul-09	6	dry	dry	ND	ND	ND
	µg/L	26-Jan-10	6	ND	0.440 J	0.0790 J	ND	ND
	µg/L	06-Jul-10	6	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	6	ND	dry	ND	ND	ND
	µg/L	05-Jul-11	6	ND	dry	dry	dry	ND
	µg/L	10-Jan-12	6	ND	1.19 J	ND	ND	ND
	µg/L	09-Jul-12	6	dry	dry	ND	dry	ND
	µg/L	28-Jan-13	6	ND	1.60 J	ND	ND	ND
	µg/L	17-Jul-13	6	ND	dry	ND	dry	0.39 J
Arsenic	µg/L	12-Jul-05	10	ND	ND	ND	ND	ND
NC 2B = 50 µg/L	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	10	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	10	ND	ND	ND	ND	3.4 J
	µg/L	09-Jul-07	--	dry	dry	dry	dry	--
	µg/L	15-Jan-08	10	ND	ND	dry	2.6 J	ND
	µg/L	14-Jul-08	10	ND	dry	ND	dry	ND
	µg/L	19-Jan-09	10	7.9 B	dry	ND	ND	3.6 J
	µg/L	20-Jul-09	10	dry	dry	ND	6.32 J	ND
	µg/L	26-Jan-10	10	ND	6.48 J	ND	7.95 J	ND
	µg/L	06-Jul-10	10	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	10	5.15 J	dry	ND	ND	ND
	µg/L	05-Jul-11	10	ND	dry	dry	dry	ND
	µg/L	10-Jan-12	10	ND	ND	ND	ND	ND
	µg/L	09-Jul-12	10	dry	dry	1.31 J	dry	ND
	µg/L	28-Jan-13	10	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	10	1.24 J	dry	1.01 J	dry	ND
Barium	µg/L	16-Sep-93	--	100	60	90	dry	--
No NC 2B Standard	µg/L	20-Sep-93	--	80	50	120	dry	--
	µg/L	22-Sep-93	--	50	60	140	dry	--
	µg/L	24-Sep-93	--	210	50	230	dry	--
	µg/L	04-Oct-93	--	40	70	70	dry	--
	µg/L	20-Jan-94	--	50	130	60	40	--
	µg/L	28-Jul-94	--	40	dry	60	50	--
	µg/L	26-Jan-95	--	80	80	100	10	--
	µg/L	26-Jul-95	--	ND	ND	ND	dry	--
	µg/L	23-Jan-96	--	ND	ND	ND	dry	--
	µg/L	10-Oct-96	--	ND	ND	ND	dry	--
	µg/L	15-Apr-97	--	ND	ND	ND	dry	--
	µg/L	23-Oct-97	--	ND	ND	ND	dry	--
	µg/L	28-Apr-98	--	ND	ND	ND	ND	--
	µg/L	15-Mar-05	500	ND	ND	ND	ND	--
	µg/L	12-Jul-05	500	ND	ND	ND	ND	ND
	µg/L	19-Jan-06	500	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	500	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	100	35.5	44.8	51.9	34.9	0.3 J
	µg/L	09-Jul-07	--	dry	dry	dry	dry	--
	µg/L	15-Jan-08	100	81.3 J	92.1 J	dry	24.1 J	0.3 J
	µg/L	14-Jul-08	100	60.5 J	dry	78.8 J	dry	ND
	µg/L	19-Jan-09	100	82.3 J	dry	65.2 J	72.2 J	ND
	µg/L	20-Jul-09	100	dry	dry	112	159	ND
	µg/L	26-Jan-10	100	63.1 J	79.7 J	58.8 J	63.4 J	0.434 J
	µg/L	06-Jul-10	100	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	100	56.9 J	dry	59.6 J	87.6 J	1.11 J
	µg/L	05-Jul-11	100	110	dry	dry	dry	ND
	µg/L	10-Jan-12	100	47.4 J	82.1 J	65.0 J	112	0.24 J
	µg/L	09-Jul-12	100	dry	dry	105.0	dry	0.75 J
	µg/L	28-Jan-13	100	124	49.6 J	72.6 J	92.7 J	ND
	µg/L	17-Jul-13	100	64.8 J	dry	69.1 J	dry	0.37 J

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream		Downstream						Blanks	
				SW-1		SW-2		SW-3		SW-4			
Beryllium	µg/L	12-Jul-05	2	ND		ND		ND		ND		ND	
NC 2B = 6.5 µg/L	µg/L	19-Jan-06	2	ND		ND		ND		ND		ND	
	µg/L	12-Jul-06	2	ND		ND		ND		ND		ND	
	µg/L	17-Jan-07	1	ND		ND		ND		ND		ND	
	µg/L	15-Jan-08	1	ND		ND		dry		ND		ND	
	µg/L	14-Jul-08	1	ND		dry		ND		dry		ND	
	µg/L	19-Jan-09	1	0.1	J	dry		ND		ND		ND	
	µg/L	20-Jul-09	1	dry		dry		ND		0.950		0.0779	J
	µg/L	26-Jan-10	1	0.260	J	0.332	J	0.206	J	0.389	J	ND	
	µg/L	06-Jul-10	1	dry		dry		dry		dry		ND	
	µg/L	04-Jan-11	1	0.212	J	dry		0.178	J	0.174	J	ND	
	µg/L	05-Jul-11	1	0.272	J	dry		dry		dry		ND	
	µg/L	10-Jan-12	1	0.15	J	ND		0.70	J	0.35	J	ND	
	µg/L	09-Jul-12	1	dry		dry		ND		dry		ND	
	µg/L	28-Jan-13	1	0.25	J	ND		ND		0.16	J	ND	
	µg/L	17-Jul-13	1	0.30	J	dry		0.32	J	dry		ND	
Cadmium	µg/L	16-Sep-93	--	ND		ND		1		dry		--	
NC 2B = 2 µg/L	µg/L	20-Sep-93	--	1		ND		ND		dry		--	
	µg/L	22-Sep-93	--	ND		ND		ND		dry		--	
	µg/L	24-Sep-93	--	ND		ND		ND		dry		--	
	µg/L	04-Oct-93	--	ND		ND		ND		dry		--	
	µg/L	20-Jan-94	--	ND		ND		ND		ND		--	
	µg/L	28-Jul-94	--	5		dry		ND		ND		--	
	µg/L	26-Jan-95	--	ND		--		ND		ND		--	
	µg/L	26-Jul-95	--	ND		ND		ND		dry		--	
	µg/L	23-Jan-96	--	ND		ND		ND		dry		--	
	µg/L	10-Oct-96	--	ND		ND		ND		dry		--	
	µg/L	15-Apr-97	--	ND		ND		ND		dry		--	
	µg/L	23-Oct-97	--	ND		ND		ND		dry		--	
	µg/L	28-Apr-98	--	1.3		ND		ND		ND		--	
	µg/L	15-Mar-05	1	ND		ND		ND		ND		--	
	µg/L	12-Jul-05	1	ND		ND		ND		ND		ND	
	µg/L	19-Jan-06	1	ND		ND		ND		ND		ND	
	µg/L	12-Jul-06	1	ND		ND		ND		ND		ND	
	µg/L	17-Jan-07	1	ND		ND		ND		ND		ND	
	µg/L	09-Jul-07	--	dry		dry		dry		dry		--	
	µg/L	15-Jan-08	1	ND		ND		dry		ND		ND	
	µg/L	14-Jul-08	1	ND		dry		ND		dry		ND	
	µg/L	19-Jan-09	1	0.40	J	dry		ND		ND		ND	
	µg/L	20-Jul-09	1	dry		dry		ND		0.266	B	0.112	J
	µg/L	26-Jan-10	1	0.347	B	0.411	B	0.243	B	0.690	B	0.277	J
	µg/L	06-Jul-10	1	dry		dry		dry		dry		ND	
	µg/L	04-Jan-11	1	ND		dry		ND		ND		ND	
	µg/L	05-Jul-11	1	ND		dry		dry		dry		ND	
	µg/L	10-Jan-12	1	ND		ND		ND		ND		ND	
	µg/L	09-Jul-12	1	dry		dry		ND		dry		ND	
	µg/L	28-Jan-13	1	ND		ND		ND		ND		ND	
	µg/L	17-Jul-13	1	ND		dry		0.56	J	dry		ND	

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream	Downstream			Blanks
				SW-1	SW-2	SW-3	SW-4	
Chromium	µg/L	16-Sep-93	--	ND	ND	10	dry	--
NC 2B = 50 µg/L	µg/L	20-Sep-93	--	ND	ND	ND	dry	--
	µg/L	22-Sep-93	--	ND	ND	10	dry	--
	µg/L	24-Sep-93	--	70	ND	70	dry	--
	µg/L	04-Oct-93	--	1	ND	ND	dry	--
	µg/L	20-Jan-94	--	ND	ND	ND	ND	--
	µg/L	28-Jul-94	--	ND	dry	ND	ND	--
	µg/L	26-Jan-95	--	ND	ND	ND	ND	--
	µg/L	26-Jul-95	--	ND	ND	ND	dry	--
	µg/L	23-Jan-96	--	ND	ND	ND	dry	--
	µg/L	10-Oct-96	--	ND	ND	ND	dry	--
	µg/L	15-Apr-97	--	ND	ND	ND	dry	--
	µg/L	23-Oct-97	--	ND	ND	ND	dry	--
	µg/L	28-Apr-98	--	ND	ND	ND	ND	--
	µg/L	28-Oct-98	10	ND	ND	dry	dry	--
	µg/L	07-Apr-99	10	ND	ND	ND	ND	--
	µg/L	08-Dec-99	10	ND	dry	ND	ND	--
	µg/L	27-Apr-00	10	ND	ND	ND	ND	--
	µg/L	18-Oct-00	10	ND	dry	ND	dry	--
	µg/L	18-Apr-01	10	ND	ND	ND	ND	--
	µg/L	24-Oct-01	10	ND	ND	ND	ND	--
	µg/L	23-Apr-02	10	ND	ND	ND	ND	--
	µg/L	23-Oct-02	10	ND	ND	ND	ND	--
	µg/L	01-Apr-03	10	ND	ND	ND	ND	--
	µg/L	27-Oct-03	10	ND	40	ND	dry	--
	µg/L	27-Apr-04	10	ND	40	ND	ND	--
	µg/L	26-Oct-04	10	ND	ND	ND	ND	--
	µg/L	15-Mar-05	10	ND	ND	ND	ND	ND
	µg/L	12-Jul-05	10	ND	ND	ND	ND	ND
	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	10	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	10	ND	3.3 J	ND	ND	ND
	µg/L	09-Jul-07	--	dry	dry	dry	dry	--
	µg/L	15-Jan-08	10	ND	ND	dry	ND	ND
	µg/L	14-Jul-08	10	1.6 J	dry	ND	dry	ND
	µg/L	19-Jan-09	10	2.9 J	dry	ND	3.4 J	ND
	µg/L	20-Jul-09	10	dry	dry	ND	38.3	ND
	µg/L	26-Jan-10	10	ND	12.1	2.12 J	13.1	ND
	µg/L	06-Jul-10	10	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	10	1.10 J	dry	1.40 J	5.21 J	ND
	µg/L	05-Jul-11	10	5.03 J	dry	dry	dry	ND
	µg/L	10-Jan-12	10	2.60 J	1.63 J	0.63 J	8.60 J	ND
	µg/L	09-Jul-12	10	dry	dry	ND	dry	ND
	µg/L	28-Jan-13	10	1.82 B	3.22 B	2.92 B	7.65 B	1.38 J
	µg/L	17-Jul-13	10	2.99 J	dry	4.30 J	dry	ND

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream		Downstream						Blanks	
				SW-1		SW-2		SW-3		SW-4			
Cobalt	µg/L	16-Sep-93	--	ND		ND		ND		dry		--	
No NC 2B Standard	µg/L	20-Sep-93	--	ND		ND		ND		dry		--	
	µg/L	22-Sep-93	--	ND		ND		ND		dry		--	
	µg/L	24-Sep-93	--	ND		ND		ND		dry		--	
	µg/L	04-Oct-93	--	ND		ND		ND		dry		--	
	µg/L	20-Jan-94	--	ND		ND		ND		ND		--	
	µg/L	28-Jul-94	--	ND		dry		ND		ND		--	
	µg/L	26-Jan-95	--	ND		10		ND		ND		--	
	µg/L	26-Jul-95	--	ND		ND		ND		dry		--	
	µg/L	23-Jan-96	--	ND		ND		ND		dry		--	
	µg/L	10-Oct-96	--	ND		ND		ND		dry		--	
	µg/L	15-Apr-97	--	ND		ND		ND		dry		--	
	µg/L	23-Oct-97	--	ND		ND		ND		dry		--	
	µg/L	28-Apr-98	--	ND		ND		ND		ND		--	
	µg/L	28-Oct-98	10	ND		ND		dry		dry		--	
	µg/L	07-Apr-99	10	ND		ND		ND		ND		--	
	µg/L	08-Dec-99	10	ND		dry		ND		ND		--	
	µg/L	27-Apr-00	10	ND		ND		ND		ND		--	
	µg/L	18-Oct-00	10	ND		dry		ND		dry		--	
	µg/L	18-Apr-01	10	ND		ND		ND		ND		--	
	µg/L	24-Oct-01	10	ND		ND		ND		ND		--	
	µg/L	23-Apr-02	10	ND		ND		ND		ND		--	
	µg/L	23-Oct-02	10	ND		ND		ND		ND		--	
	µg/L	01-Apr-03	10	ND		ND		ND		ND		--	
	µg/L	27-Oct-03	10	ND		10		ND		dry		--	
	µg/L	27-Apr-04	10	ND		ND		ND		ND		--	
	µg/L	26-Oct-04	10	ND		ND		ND		ND		--	
	µg/L	15-Mar-05	10	ND		ND		ND		ND		ND	
	µg/L	12-Jul-05	10	ND		ND		ND		ND		ND	
	µg/L	19-Jan-06	10	ND		ND		ND		ND		ND	
	µg/L	12-Jul-06	10	ND		ND		ND		ND		ND	
	µg/L	17-Jan-07	10	ND		ND		ND		ND		ND	
	µg/L	09-Jul-07	--	dry		dry		dry		dry		--	
	µg/L	15-Jan-08	10	ND		2.9	J	dry		ND		ND	
	µg/L	14-Jul-08	10	ND		dry		ND		dry		ND	
	µg/L	19-Jan-09	10	4.4	J	dry		ND		1.5	J	ND	
	µg/L	20-Jul-09	10	dry		dry		0.968	J	5.81	J	ND	
	µg/L	26-Jan-10	10	2.14	B	2.85	J	1.29	B	2.70	J	0.485	J
	µg/L	06-Jul-10	10	dry		dry		dry		dry		ND	
	µg/L	04-Jan-11	10	1.51	J	dry		ND		3.01	J	ND	
	µg/L	05-Jul-11	10	ND		dry		dry		dry		ND	
	µg/L	10-Jan-12	10	1.50	J	0.69	J	0.86	J	5.03	J	ND	
	µg/L	09-Jul-12	10	dry		dry		1.63	J	dry		ND	
	µg/L	28-Jan-13	10	2.30	J	1.03	J	1.32	J	3.34	J	ND	
	µg/L	17-Jul-13	10	2.40	J	dry		1.73	J	dry		ND	

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream		Downstream						Blanks	
				SW-1		SW-2		SW-3		SW-4			
Copper	µg/L	16-Sep-93	--	ND		ND		ND		dry		--	
NC 2B = 7 µg/L	µg/L	20-Sep-93	--	ND		ND		30		dry		--	
	µg/L	22-Sep-93	--	ND		ND		30		dry		--	
	µg/L	24-Sep-93	--	20		ND		30		dry		--	
	µg/L	04-Oct-93	--	ND		ND		ND		dry		--	
	µg/L	20-Jan-94	--	ND		ND		ND		ND		--	
	µg/L	28-Jul-94	--	ND		dry		ND		ND		--	
	µg/L	26-Jan-95	--	ND		ND		ND		ND		--	
	µg/L	26-Jul-95	--	ND		ND		ND		dry		--	
	µg/L	23-Jan-96	--	ND		ND		ND		dry		--	
	µg/L	10-Oct-96	--	ND		ND		ND		dry		--	
	µg/L	15-Apr-97	--	ND		ND		ND		dry		--	
	µg/L	23-Oct-97	--	ND		50		ND		dry		--	
	µg/L	28-Apr-98	--	ND		ND		ND		ND		--	
	µg/L	15-Mar-05	200	ND		ND		ND		ND		ND	
	µg/L	12-Jul-05	200	ND		ND		ND		ND		ND	
	µg/L	19-Jan-06	200	ND		ND		ND		ND		ND	
	µg/L	12-Jul-06	200	ND		ND		ND		ND		ND	
	µg/L	17-Jan-07	10	ND		4.5	J	ND		ND		ND	
	µg/L	09-Jul-07	--	dry		dry		dry		dry		--	
	µg/L	15-Jan-08	10	ND		ND		dry		ND		0.7	J
	µg/L	14-Jul-08	10	ND		dry		ND		dry		ND	
	µg/L	19-Jan-09	10	3.20	J	dry		ND		ND		ND	
	µg/L	20-Jul-09	10	dry		dry		ND		6.67	J	1.25	J
	µg/L	26-Jan-10	10	ND		3.19	J	ND		4.25	J	ND	
	µg/L	06-Jul-10	10	dry		dry		dry		dry		ND	
	µg/L	04-Jan-11	10	ND		dry		1.67	J	2.02	J	ND	
	µg/L	05-Jul-11	10	1.83	J	dry		dry		dry		ND	
	µg/L	10-Jan-12	10	1.74	B	2.04	B	0.98	B	4.10	J	0.66	J
	µg/L	09-Jul-12	10	dry		dry		ND		dry		ND	
	µg/L	28-Jan-13	10	1.27	B	6.90	J	1.30	B	3.79	J	0.26	J
	µg/L	17-Jul-13	10	2.44	J	dry		3.70	J	dry		ND	

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream	Downstream			Blanks
				SW-1	SW-2	SW-3	SW-4	
Lead	µg/L	16-Sep-93	--	ND	ND	31	dry	--
NC 2B = 25 µg/L	µg/L	20-Sep-93	--	16	9	19	dry	--
	µg/L	22-Sep-93	--	7	ND	33	dry	--
	µg/L	24-Sep-93	--	36	ND	44	dry	--
	µg/L	04-Oct-93	--	9	ND	ND	dry	--
	µg/L	20-Jan-94	--	ND	ND	ND	ND	--
	µg/L	28-Jul-94	--	ND	dry	ND	ND	--
	µg/L	26-Jan-95	--	ND	ND	ND	ND	--
	µg/L	26-Jul-95	--	ND	ND	ND	dry	--
	µg/L	23-Jan-96	--	ND	ND	ND	dry	--
	µg/L	10-Oct-96	--	ND	ND	ND	dry	--
	µg/L	15-Apr-97	--	ND	ND	ND	dry	--
	µg/L	23-Oct-97	--	ND	ND	ND	dry	--
	µg/L	28-Apr-98	--	ND	ND	ND	ND	--
	µg/L	28-Oct-98	10	ND	ND	dry	dry	--
	µg/L	07-Apr-99	10	ND	ND	ND	ND	--
	µg/L	08-Dec-99	10	ND	dry	ND	ND	--
	µg/L	27-Apr-00	10	ND	ND	ND	ND	--
	µg/L	18-Oct-00	10	ND	dry	ND	dry	--
	µg/L	18-Apr-01	10	ND	ND	ND	ND	--
	µg/L	24-Oct-01	10	ND	ND	ND	ND	--
	µg/L	23-Apr-02	10	ND	ND	ND	ND	--
	µg/L	23-Oct-02	10	ND	ND	ND	ND	--
	µg/L	01-Apr-03	10	ND	ND	ND	ND	--
	µg/L	27-Oct-03	10	ND	30	ND	dry	--
	µg/L	27-Apr-04	10	ND	20	ND	ND	--
	µg/L	26-Oct-04	10	ND	ND	ND	ND	--
	µg/L	15-Mar-05	10	ND	ND	ND	ND	ND
	µg/L	12-Jul-05	10	ND	ND	ND	ND	ND
	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	10	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	10	ND	ND	2.7 J	ND	ND
	µg/L	09-Jul-07	--	dry	dry	dry	dry	--
	µg/L	15-Jan-08	10	ND	ND	dry	ND	ND
	µg/L	14-Jul-08	10	2.4 J	dry	ND	dry	ND
	µg/L	19-Jan-09	10	ND	dry	ND	ND	ND
	µg/L	20-Jul-09	10	dry	dry	1.65 B	18.4	2.16 J
	µg/L	26-Jan-10	10	ND	7.63 J	1.42 J	9.38 J	ND
	µg/L	06-Jul-10	10	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	10	ND	dry	ND	ND	ND
	µg/L	05-Jul-11	10	10.3	dry	dry	dry	ND
	µg/L	10-Jan-12	10	2.59 B	3.04 B	1.40 B	4.39 B	0.94 J
	µg/L	09-Jul-12	10	dry	dry	0.41 J	dry	ND
	µg/L	28-Jan-13	10	0.94 J	1.26 J	0.65 J	4.32 J	ND
	µg/L	17-Jul-13	10	3.02 J	dry	2.60 J	dry	ND

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream		Downstream						Blanks	
				SW-1		SW-2		SW-3		SW-4			
Nickel	µg/L	16-Sep-93	--	ND		ND		ND		dry		--	
NC 2B = 25 µg/L	µg/L	20-Sep-93	--	ND		ND		ND		dry		--	
	µg/L	22-Sep-93	--	ND		ND		ND		dry		--	
	µg/L	24-Sep-93	--	ND		ND		ND		dry		--	
	µg/L	04-Oct-93	--	30		ND		ND		dry		--	
	µg/L	20-Jan-94	--	ND		ND		ND		ND		--	
	µg/L	28-Jul-94	--	ND		dry		ND		ND		--	
	µg/L	26-Jan-95	--	ND		ND		ND		ND		--	
	µg/L	26-Jul-95	--	ND		ND		ND		dry		--	
	µg/L	23-Jan-96	--	ND		ND		ND		dry		--	
	µg/L	10-Oct-96	--	ND		ND		ND		dry		--	
	µg/L	15-Apr-97	--	ND		ND		ND		dry		--	
	µg/L	23-Oct-97	--	ND		ND		ND		dry		--	
	µg/L	28-Apr-98	--	ND		ND		ND		ND		--	
	µg/L	28-Oct-98	50	ND		ND		dry		dry		--	
	µg/L	07-Apr-99	50	ND		ND		ND		ND		--	
	µg/L	08-Dec-99	50	50		dry		ND		ND		--	
	µg/L	27-Apr-00	50	ND		ND		ND		ND		--	
	µg/L	18-Oct-00	50	ND		dry		ND		dry		--	
	µg/L	18-Apr-01	50	ND		ND		ND		ND		--	
	µg/L	24-Oct-01	50	ND		ND		ND		ND		--	
	µg/L	23-Apr-02	50	ND		ND		ND		ND		--	
	µg/L	23-Oct-02	50	ND		ND		ND		ND		--	
	µg/L	01-Apr-03	50	ND		ND		ND		ND		--	
	µg/L	27-Oct-03	50	ND		ND		ND		dry		--	
	µg/L	27-Apr-04	50	ND		ND		ND		ND		--	
	µg/L	26-Oct-04	50	ND		ND		ND		ND		--	
	µg/L	15-Mar-05	50	ND		ND		ND		ND		ND	
	µg/L	12-Jul-05	50	ND		ND		ND		ND		ND	
	µg/L	19-Jan-06	50	ND		ND		ND		ND		ND	
	µg/L	12-Jul-06	50	ND		ND		ND		ND		ND	
	µg/L	17-Jan-07	50	ND		3.8	J	2.8	J	3.0	J	ND	
	µg/L	09-Jul-07	--	dry		dry		dry		dry		--	
	µg/L	15-Jan-08	50	ND		2.4	J	dry		ND		ND	
	µg/L	14-Jul-08	50	ND		dry		ND		dry		ND	
	µg/L	19-Jan-09	50	ND		dry		2.1	B	4.0	B	2.2	J
	µg/L	20-Jul-09	50	dry		dry		1.72	J	11.4	J	ND	
	µg/L	26-Jan-10	50	ND		2.83	J	ND		2.43	J	ND	
	µg/L	06-Jul-10	50	dry		dry		dry		dry		ND	
	µg/L	04-Jan-11	50	ND		dry		ND		3.41	J	ND	
	µg/L	05-Jul-11	50	2.76	J	dry		dry		dry		ND	
	µg/L	10-Jan-12	50	2.09	J	3.92	J	1.67	J	7.58	J	ND	
	µg/L	09-Jul-12	50	dry		dry		1.10	J	dry		ND	
	µg/L	28-Jan-13	50	2.08	J	5.04	J	1.90	J	4.94	J	ND	
	µg/L	17-Jul-13	50	3.23	J	dry		3.40	J	dry		ND	

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream	Downstream			Blanks
				SW-1	SW-2	SW-3	SW-4	
Selenium	µg/L	12-Jul-05	20	ND	ND	ND	ND	ND
NC 2B = 5 µg/L	µg/L	19-Jan-06	20	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	20	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	10	ND	ND	3.4 J	ND	ND
	µg/L	09-Jul-07	--	dry	dry	dry	dry	--
	µg/L	15-Jan-08	10	ND	ND	dry	ND	ND
	µg/L	14-Jul-08	10	ND	dry	ND	dry	ND
	µg/L	19-Jan-09	10	ND	dry	ND	ND	ND
	µg/L	20-Jul-09	10	dry	dry	ND	6.20 B	3.58 J
	µg/L	26-Jan-10	10	ND	1.74 J	0.937 J	ND	ND
	µg/L	06-Jul-10	10	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	10	ND	dry	ND	ND	ND
	µg/L	05-Jul-11	10	ND	dry	dry	dry	ND
	µg/L	10-Jan-12	10	ND	ND	ND	ND	ND
	µg/L	09-Jul-12	10	dry	dry	ND	dry	ND
	µg/L	28-Jan-13	10	ND	0.99 J	ND	ND	ND
	µg/L	17-Jul-13	10	ND	dry	ND	dry	ND
Silver	µg/L	16-Sep-93	--	ND	ND	ND	dry	--
NC 2B = 0.06 µg/L	µg/L	20-Sep-93	--	ND	ND	ND	dry	--
	µg/L	22-Sep-93	--	ND	10	ND	dry	--
	µg/L	24-Sep-93	--	ND	ND	ND	dry	--
	µg/L	04-Oct-93	--	ND	ND	ND	dry	--
	µg/L	20-Jan-94	--	ND	ND	ND	ND	--
	µg/L	28-Jul-94	--	ND	dry	ND	ND	--
	µg/L	26-Jan-95	--	ND	ND	ND	ND	--
	µg/L	26-Jul-95	--	ND	ND	ND	dry	--
	µg/L	23-Jan-96	--	ND	ND	ND	dry	--
	µg/L	10-Oct-96	--	ND	ND	ND	dry	--
	µg/L	15-Mar-05	10	ND	ND	ND	ND	ND
	µg/L	12-Jul-05	10	ND	ND	ND	ND	ND
	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	10	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	10	ND	ND	ND	ND	ND
	µg/L	09-Jul-07	--	dry	dry	dry	dry	--
	µg/L	15-Jan-08	10	ND	ND	dry	ND	ND
	µg/L	14-Jul-08	10	ND	dry	ND	dry	ND
	µg/L	19-Jan-09	10	2.4 J	dry	ND	ND	ND
	µg/L	20-Jul-09	10	dry	dry	ND	ND	ND
	µg/L	26-Jan-10	10	1.93 B	2.43 B	1.68 B	2.19 B	1.25 J
	µg/L	06-Jul-10	10	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	10	ND	dry	ND	ND	ND
	µg/L	05-Jul-11	10	ND	dry	dry	dry	ND
	µg/L	10-Jan-12	10	ND	ND	ND	ND	ND
	µg/L	09-Jul-12	10	dry	dry	ND	dry	ND
	µg/L	28-Jan-13	10	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	10	ND	dry	ND	dry	ND
Thallium	µg/L	12-Jul-05	10	ND	ND	ND	ND	ND
No NC 2B Standard	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	10	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	5.5	ND	ND	ND	ND	ND
	µg/L	15-Jan-08	5.5	0.039 J	0.056 J	dry	ND	ND
	µg/L	14-Jul-08	5.5	ND	dry	ND	dry	ND
	µg/L	19-Jan-09	5.5	ND	dry	ND	ND	ND
	µg/L	20-Jul-09	5.5	dry	dry	ND	0.0510 J	ND
	µg/L	26-Jan-10	5.5	ND	ND	ND	ND	ND
	µg/L	06-Jul-10	5.5	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	5.5	ND	dry	ND	ND	ND
	µg/L	05-Jul-11	5.5	ND	dry	dry	dry	ND
	µg/L	10-Jan-12	5.5	ND	ND	ND	0.08 J	ND
	µg/L	09-Jul-12	5.5	dry	dry	ND	dry	ND
	µg/L	28-Jan-13	5.5	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	5.5	ND	dry	ND	dry	ND

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream		Downstream						Blanks	
				SW-1		SW-2		SW-3		SW-4			
Vanadium	µg/L	16-Sep-93	--	ND		ND		40		dry		--	
No NC 2B Standard	µg/L	20-Sep-93	--	ND		ND		70		dry		--	
	µg/L	22-Sep-93	--	30		ND		100		dry		--	
	µg/L	24-Sep-93	--	280		ND		200		dry		--	
	µg/L	04-Oct-93	--	ND		ND		ND		dry		--	
	µg/L	20-Jan-94	--	ND		ND		ND		ND		--	
	µg/L	28-Jul-94	--	ND		dry		ND		ND		--	
	µg/L	26-Jan-95	--	ND		ND		ND		ND		--	
	µg/L	26-Jul-95	--	ND		ND		ND		dry		--	
	µg/L	23-Jan-96	--	ND		ND		ND		dry		--	
	µg/L	10-Oct-96	--	ND		ND		ND		dry		--	
	µg/L	15-Apr-97	--	ND		ND		ND		dry		--	
	µg/L	23-Oct-97	--	ND		ND		ND		dry		--	
	µg/L	28-Apr-98	--	ND		ND		ND		ND		--	
	µg/L	28-Oct-98	40	ND		ND		dry		dry		--	
	µg/L	07-Apr-99	40	ND		ND		ND		ND		--	
	µg/L	08-Dec-99	40	ND		dry		ND		ND		--	
	µg/L	27-Apr-00	40	ND		ND		ND		ND		--	
	µg/L	18-Oct-00	40	ND		dry		ND		dry		--	
	µg/L	18-Apr-01	40	ND		ND		ND		ND		--	
	µg/L	24-Oct-01	40	ND		ND		ND		ND		--	
	µg/L	23-Apr-02	40	ND		ND		ND		ND		--	
	µg/L	23-Oct-02	40	ND		ND		ND		ND		--	
	µg/L	01-Apr-03	40	ND		ND		ND		ND		--	
	µg/L	27-Oct-03	40	ND		60		ND		dry		--	
	µg/L	27-Apr-04	40	ND		60		ND		ND		--	
	µg/L	26-Oct-04	40	ND		ND		ND		ND		--	
	µg/L	15-Mar-05	40	ND		ND		ND		ND		ND	
	µg/L	12-Jul-05	40	ND		ND		ND		ND		ND	
	µg/L	19-Jan-06	40	ND		ND		ND		ND		ND	
	µg/L	12-Jul-06	40	ND		ND		ND		ND		ND	
	µg/L	17-Jan-07	25	2.2	J	2.8	J	2.3	J	2.2	J	ND	
	µg/L	09-Jul-07	--	dry		dry		dry		dry		--	
	µg/L	15-Jan-08	25	4.1	J	ND		dry		1	B	1	J
	µg/L	14-Jul-08	25	6.3	J	dry		ND		dry		ND	
	µg/L	19-Jan-09	25	2.3	J	dry		ND		5.7	J	ND	
	µg/L	20-Jul-09	25	dry		dry		2.11	B	69.0		0.803	J
	µg/L	26-Jan-10	25	1.01	J	23.8	J	4.21	J	23.8	J	ND	
	µg/L	06-Jul-10	25	dry		dry		dry		dry		ND	
	µg/L	04-Jan-11	25	1.51	J	dry		2.02	J	10.0	J	ND	
	µg/L	05-Jul-11	25	17.2	J	dry		dry		dry		ND	
	µg/L	10-Jan-12	25	7.62	J	3.93	J	ND		13.2	J	ND	
	µg/L	09-Jul-12	25	dry		dry		ND		dry		ND	
	µg/L	28-Jan-13	25	3.62	B	9.56	B	3.68	B	10.6	B	2.68	J
	µg/L	17-Jul-13	25	5.65	J	dry		8.30	J	dry		ND	

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream		Downstream						Blanks	
				SW-1		SW-2		SW-3		SW-4			
Zinc	µg/L	16-Sep-93	--	30		20		60		dry		--	
NC 2B = 50 µg/L	µg/L	20-Sep-93	--	130		40		120		dry		--	
	µg/L	22-Sep-93	--	100		60		340		dry		--	
	µg/L	24-Sep-93	--	240		70		420		dry		--	
	µg/L	04-Oct-93	--	1000		190		70		dry		--	
	µg/L	20-Jan-94	--	60		200		70		70		--	
	µg/L	28-Jul-94	--	120		dry		ND		30		--	
	µg/L	26-Jan-95	--	ND		30		60		60		--	
	µg/L	26-Jul-95	--	ND		ND		ND		dry		--	
	µg/L	23-Jan-96	--	ND		ND		ND		dry		--	
	µg/L	10-Oct-96	--	ND		ND		ND		dry		--	
	µg/L	15-Apr-97	--	80		60		60		dry		--	
	µg/L	23-Oct-97	--	100		60		30		dry		--	
	µg/L	28-Apr-98	--	50		ND		ND		ND		--	
	µg/L	28-Oct-98	50	ND		ND		dry		dry		--	
	µg/L	07-Apr-99	50	30		40		30		40		--	
	µg/L	08-Dec-99	50	60		dry		50		60		--	
	µg/L	27-Apr-00	50	ND		70		60		ND		--	
	µg/L	18-Oct-00	50	50		dry		70		dry		--	
	µg/L	18-Apr-01	50	ND		ND		ND		ND		--	
	µg/L	24-Oct-01	50	ND		ND		ND		ND		--	
	µg/L	23-Apr-02	50	ND		50		ND		ND		--	
	µg/L	23-Oct-02	50	ND		60		ND		ND		--	
	µg/L	01-Apr-03	50	60		30		50		70		--	
	µg/L	27-Oct-03	50	ND		130		70		dry		--	
	µg/L	27-Apr-04	50	ND		60		ND		ND		--	
	µg/L	26-Oct-04	50	ND		ND		ND		ND		--	
	µg/L	15-Mar-05	50	ND		ND		ND		ND		ND	
	µg/L	12-Jul-05	50	100		ND		ND		ND		ND	
	µg/L	19-Jan-06	50	ND		ND		79		ND		ND	
	µg/L	12-Jul-06	50	ND		ND		ND		ND		ND	
	µg/L	17-Jan-07	10	15.8	B	9.2	B	16.9	B	11.6	B	5.5	J
	µg/L	09-Jul-07	--	dry		dry		dry		dry		--	
	µg/L	15-Jan-08	10	8.7	J	13.6		dry		5.7	B	1.3	J
	µg/L	14-Jul-08	10	17.3	B	dry		7.8	B	dry		5	J
	µg/L	19-Jan-09	10	17.0		dry		14.0		33.2		ND	
	µg/L	20-Jul-09	10	dry		dry		6.05	J	55.6		ND	
	µg/L	26-Jan-10	10	8.13	J	17.4		9.78	J	35.2		ND	
	µg/L	06-Jul-10	10	dry		dry		dry		dry		ND	
	µg/L	04-Jan-11	10	5.84	J	dry		8.05	J	64.0		ND	
	µg/L	05-Jul-11	10	10.5		dry		dry		dry		ND	
	µg/L	10-Jan-12	10	10.2	B	57.3	B	5.39	B	132		15.9	
	µg/L	09-Jul-12	10	dry		dry		1.37	J	dry		0.3	J
	µg/L	28-Jan-13	10	10.9		5.11	B	4.93	B	86.5		0.57	J
	µg/L	17-Jul-13	10	17.8		dry		11.8		dry		ND	

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream	Downstream			Blanks
				SW-1	SW-2	SW-3	SW-4	
Acetone	µg/L	12-Jul-05	100	ND	ND	ND	ND	ND
No NC 2B Standard	µg/L	19-Jan-06	100	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	100	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	100	ND	ND	ND	ND	ND
	µg/L	15-Jan-08	100	ND	ND	dry	ND	ND
	µg/L	14-Jul-08	100	ND	dry	8.9 J	dry	ND
	µg/L	19-Jan-09	100	ND	dry	ND	ND	ND
	µg/L	20-Jul-09	100	dry	dry	5.7 J	ND	ND
	µg/L	26-Jan-10	100	ND	ND	ND	ND	ND
	µg/L	06-Jul-10	100	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	100	ND	dry	ND	ND	ND
	µg/L	05-Jul-11	100	7.4 J	dry	dry	dry	ND
	µg/L	10-Jan-12	100	ND	ND	ND	ND	ND
	µg/L	09-Jul-12	100	dry	dry	ND	dry	ND
	µg/L	28-Jan-13	100	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	100	ND	dry	ND	dry	ND
4-Methyl-2-pentanone	µg/L	24-Sep-93	--	150	ND	ND	dry	--
NC 2B = 26 µg/L	µg/L	15-Mar-05	100	ND	ND	ND	ND	--
	µg/L	12-Jul-05	100	ND	ND	ND	ND	ND
	µg/L	19-Jan-06	10	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	100	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	100	ND	ND	ND	ND	ND
	µg/L	09-Jul-07	--	dry	dry	dry	dry	--
	µg/L	15-Jan-08	100	ND	ND	dry	ND	ND
	µg/L	14-Jul-08	100	ND	dry	ND	dry	ND
	µg/L	19-Jan-09	100	ND	dry	ND	ND	ND
	µg/L	20-Jul-09	100	dry	dry	ND	ND	ND
	µg/L	26-Jan-10	100	ND	ND	ND	ND	ND
	µg/L	06-Jul-10	100	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	100	ND	dry	ND	ND	ND
	µg/L	05-Jul-11	100	ND	dry	dry	dry	ND
	µg/L	10-Jan-12	100	ND	ND	ND	ND	ND
	µg/L	09-Jul-12	100	dry	dry	ND	dry	ND
	µg/L	28-Jan-13	100	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	100	ND	dry	ND	dry	ND
Toluene	µg/L	23-Oct-97	--	ND	ND	20	dry	--
NC 2B = 11 µg/L	µg/L	28-Oct-98	5	ND	ND	dry	dry	--
	µg/L	07-Apr-99	5	ND	ND	ND	ND	--
	µg/L	08-Dec-99	5	ND	dry	ND	ND	--
	µg/L	27-Apr-00	5	ND	ND	ND	ND	--
	µg/L	18-Oct-00	5	ND	dry	ND	dry	--
	µg/L	18-Apr-01	5	ND	ND	ND	ND	--
	µg/L	24-Oct-01	5	ND	ND	ND	ND	--
	µg/L	23-Apr-02	5	ND	ND	ND	ND	--
	µg/L	23-Oct-02	5	ND	ND	ND	ND	--
	µg/L	01-Apr-03	5	ND	ND	ND	ND	--
	µg/L	27-Oct-03	5	ND	ND	ND	dry	--
	µg/L	27-Apr-04	5	ND	ND	ND	ND	--
	µg/L	26-Oct-04	5	ND	ND	ND	ND	--
	µg/L	15-Mar-05	5	ND	ND	ND	ND	ND
	µg/L	12-Jul-05	5	ND	ND	ND	ND	ND
	µg/L	19-Jan-06	5	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	5	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	5	ND	ND	ND	ND	ND
	µg/L	09-Jul-07	--	dry	dry	dry	dry	--
	µg/L	15-Jan-08	1	ND	ND	dry	ND	ND
	µg/L	14-Jul-08	1	ND	dry	ND	dry	ND
	µg/L	19-Jan-09	1	ND	dry	ND	ND	ND
	µg/L	20-Jul-09	1	dry	dry	ND	ND	0.44 J
	µg/L	26-Jan-10	1	ND	ND	ND	ND	ND
	µg/L	06-Jul-10	1	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	1	ND	dry	ND	ND	ND
	µg/L	05-Jul-11	1	ND	dry	dry	dry	ND
	µg/L	10-Jan-12	1	ND	ND	0.5 J	ND	ND
	µg/L	09-Jul-12	1	dry	dry	ND	dry	ND
	µg/L	28-Jan-13	1	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	1	ND	dry	0.4 J	dry	ND

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream	Downstream			Blanks
				SW-1	SW-2	SW-3	SW-4	
Xylenes (total)	µg/L	23-Oct-97	--	ND	ND	10	dry	--
NC 2B = 670 µg/L	µg/L	28-Oct-98	5	ND	ND	dry	dry	--
	µg/L	07-Apr-99	5	ND	ND	ND	ND	--
	µg/L	08-Dec-99	5	ND	dry	ND	ND	--
	µg/L	27-Apr-00	5	ND	ND	ND	ND	--
	µg/L	18-Oct-00	5	ND	dry	ND	dry	--
	µg/L	18-Apr-01	5	ND	ND	ND	ND	--
	µg/L	24-Oct-01	5	ND	ND	ND	ND	--
	µg/L	23-Apr-02	5	ND	ND	ND	ND	--
	µg/L	23-Oct-02	5	ND	ND	ND	ND	--
	µg/L	01-Apr-03	5	ND	ND	ND	ND	--
	µg/L	27-Oct-03	5	ND	ND	ND	dry	--
	µg/L	27-Apr-04	5	ND	ND	ND	ND	--
	µg/L	26-Oct-04	5	ND	ND	ND	ND	--
	µg/L	15-Mar-05	5	ND	ND	ND	ND	ND
	µg/L	12-Jul-05	5	ND	ND	ND	ND	ND
	µg/L	19-Jan-06	5	ND	ND	ND	ND	ND
	µg/L	12-Jul-06	5	ND	ND	ND	ND	ND
	µg/L	17-Jan-07	5	ND	ND	ND	ND	ND
	µg/L	09-Jul-07	--	dry	dry	dry	dry	--
	µg/L	15-Jan-08	5	ND	ND	dry	ND	ND
	µg/L	14-Jul-08	5	ND	dry	ND	dry	ND
	µg/L	19-Jan-09	5	ND	dry	ND	ND	ND
	µg/L	20-Jul-09	5	dry	dry	ND	ND	ND
	µg/L	26-Jan-10	5	ND	ND	ND	ND	ND
	µg/L	06-Jul-10	5	dry	dry	dry	dry	ND
	µg/L	04-Jan-11	5	ND	dry	ND	ND	ND
	µg/L	05-Jul-11	5	ND	dry	dry	dry	ND
	µg/L	10-Jan-12	5	ND	ND	ND	ND	ND
	µg/L	09-Jul-12	5	dry	dry	ND	dry	ND
	µg/L	28-Jan-13	5	ND	ND	ND	ND	ND
	µg/L	17-Jul-13	5	ND	dry	ND	dry	ND
pH (Field)	S.U.	28-Oct-98	--	7.05	5.47	dry	dry	--
	S.U.	07-Apr-99	--	5.26	7.18	6.22	6.74	--
	S.U.	08-Dec-99	--	5.04	dry	5.56	5.24	--
	S.U.	27-Apr-00	--	5.15	6.47	6.02	5.8	--
	S.U.	18-Oct-00	--	8.28	dry	6.07	dry	--
	S.U.	18-Apr-01	--	5.67	7.75	5.96	6.29	--
	S.U.	24-Oct-01	--	6.64	6.27	6.39	6.02	--
	S.U.	23-Apr-02	--	5.7	6.07	8.16	7.71	--
	S.U.	23-Oct-02	--	4.03	6.31	4.78	5.19	--
	S.U.	01-Apr-03	--	4.67	8.23	5.8	5.73	--
	S.U.	27-Oct-03	--	4.57	5.2	5.55	dry	--
	S.U.	27-Apr-04	--	4.88	6.12	5.77	6.62	--
	S.U.	26-Oct-04	--	5.82	6.04	5.62	5.57	--
	S.U.	15-Mar-05	--	4.51	5.96	5.63	5.67	--
	S.U.	13-Jul-05	--	5.55	6.18	5.83	5.38	--
	S.U.	19-Jan-06	--	3.54	7.25	5.49	4.51	--
	S.U.	12-Jul-06	--	7.1	6.07	5.88	5.65	--
	S.U.	17-Jan-07	--	4.57	4.2	5.36	5.26	--
	S.U.	09-Jul-07	--	dry	dry	dry	dry	--
	S.U.	15-Jan-08	--	5.63	5.42	dry	5.56	--
	S.U.	14-Jul-08	--	6.17	dry	6.05	dry	--
	S.U.	19-Jan-09	--	5.46	dry	4.38	4.42	--
	S.U.	20-Jul-09	--	dry	dry	5.92	5.31	--
	S.U.	26-Jan-10	--	3.67	6.56	6.49	7.01	--
	S.U.	06-Jul-10	--	dry	dry	dry	dry	--
	S.U.	04-Jan-11	--	4.24	dry	5.51	4.30	--
	S.U.	05-Jul-11	--	7.26	dry	dry	dry	--
	S.U.	10-Jan-12	--	7.30	6.96	7.30	6.72	--
	S.U.	09-Jul-12	--	dry	dry	6.74	dry	--
	S.U.	28-Jan-13	--	5.82	8.63	8.98	7.81	--
	S.U.	17-Jul-13	--	4.71	dry	5.7	dry	--

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream	Downstream			Blanks
				SW-1	SW-2	SW-3	SW-4	
Conductivity (Field)	µS/cm	28-Oct-98	--	50	109	dry	dry	--
	µS/cm	07-Apr-99	--	31.89	88.29	67	55.32	--
	µS/cm	08-Dec-99	--	29	dry	32	24	--
	µS/cm	27-Apr-00	--	26	143	48	31	--
	µS/cm	18-Oct-00	--	72	dry	136	dry	--
	µS/cm	18-Apr-01	--	21	75	48	28	--
	µS/cm	24-Oct-01	--	41	99	72	51	--
	µS/cm	23-Apr-02	--	64	79	80	43	--
	µS/cm	23-Oct-02	--	39	87	50	26	--
	µS/cm	01-Apr-03	--	35	121	42	45	--
	µS/cm	27-Oct-03	--	31	48	50	dry	--
	µS/cm	27-Apr-04	--	58	399	74	72	--
	µS/cm	26-Oct-04	--	62	190	88	40	--
	µS/cm	15-Mar-05	--	32	46	51	38	--
	µS/cm	13-Jul-05	--	64	155	141	76	--
	µS/cm	19-Jan-06	--	31	50	52	43	--
	µS/cm	12-Jul-06	--	50	200	97	101	--
	µS/cm	17-Jan-07	--	14	103	81	51	--
	µS/cm	09-Jul-07	--	dry	dry	dry	dry	--
	µS/cm	15-Jan-08	--	108	353	dry	65	--
	µS/cm	19-Jan-09	--	49	dry	121	72	--
	µS/cm	20-Jul-09	--	dry	dry	149	85	--
	µS/cm	26-Jan-10	--	40	427	87	45	--
	µS/cm	06-Jul-10	--	dry	dry	dry	dry	--
	µS/cm	04-Jan-11	--	34	dry	126	87	--
	µS/cm	05-Jul-11	--	140	dry	dry	dry	--
	µS/cm	10-Jan-12	--	80.7	510	153.0	97.8	--
	µS/cm	09-Jul-12	--	dry	dry	245.3	dry	--
	µS/cm	28-Jan-13	--	136.3	567.4	191.5	85.8	--
	µS/cm	17-Jul-13	--	57.6	dry	97.4	dry	--
Temperature (Field)	°C	28-Oct-98	--	13	20.3	dry	dry	--
	°C	07-Apr-99	--	18.1	25.1	29.3	23.9	--
	°C	08-Dec-99	--	8.5	dry	11.5	10.6	--
	°C	27-Apr-00	--	13.1	14	13.6	12.6	--
	°C	18-Oct-00	--	18.1	dry	20.1	dry	--
	°C	18-Apr-01	--	9.2	7.3	8	9.1	--
	°C	24-Oct-01	--	19.3	23.8	25.9	24.9	--
	°C	23-Apr-02	--	18.7	16.3	26.2	25.4	--
	°C	23-Oct-02	--	13.5	12.2	12	12	--
	°C	01-Apr-03	--	15.4	21.6	26	24.2	--
	°C	27-Oct-03	--	18.6	20.1	20.8	dry	--
	°C	27-Apr-04	--	16.7	21.9	20.6	22.9	--
	°C	26-Oct-04	--	15.6	17.4	18.1	17.6	--
	°C	15-Mar-05	--	12.09	14.65	15.57	10.8	--
	°C	13-Jul-05	--	25.58	25.31	26.4	24.82	--
	°C	19-Jan-06	--	8.41	6.76	9.79	9.97	--
	°C	12-Jul-06	--	24.5	29.7	27.4	25.5	--
	°C	17-Jan-07	--	11.7	11.8	11.7	11.7	--
	°C	09-Jul-07	--	dry	dry	dry	dry	--
	°C	17-Jul-08	--	23.97	dry	27.12	dry	--
	°C	19-Jan-09	--	5.40	dry	2.95	3.76	--
	°C	20-Jul-09	--	dry	dry	24.00	21.65	--
	°C	26-Jan-10	--	8.51	8.97	11.07	8.78	--
	°C	06-Jul-10	--	dry	dry	dry	dry	--
	°C	04-Jan-11	--	4.82	dry	6.06	6.16	--
	°C	05-Jul-11	--	24.60	dry	dry	dry	--
	°C	10-Jan-12	--	8.9	9.2	8.0	8.7	--
	°C	09-Jul-12	--	dry	dry	29.1	dry	--
	°C	28-Jan-13	--	5.4	5.0	2.0	4.7	--
	°C	17-Jul-13	--	24.7	dry	27.7	dry	--

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream	Downstream			Blanks
				SW-1	SW-2	SW-3	SW-4	
Turbidity (Field)	NTU	28-Oct-98	--	93	99	dry	dry	--
	NTU	07-Apr-99	--	4.37	16	58	20	--
	NTU	08-Dec-99	--	13	dry	50	143	--
	NTU	27-Apr-00	--	25	202	148	80	--
	NTU	18-Oct-00	--	20	dry	58	dry	--
	NTU	18-Apr-01	--	16.1	183	23	192	--
	NTU	24-Oct-01	--	38	44	78	94	--
	NTU	23-Apr-02	--	20	38	34	9.28	--
	NTU	23-Oct-02	--	23	292	75	179	--
	NTU	01-Apr-03	--	3.01	75	16	153	--
	NTU	27-Oct-03	--	37	780	2.33	dry	--
	NTU	27-Apr-04	--	18	750	16	11	--
	NTU	26-Oct-04	--	73	74	37	79	--
	NTU	15-Mar-05	--	24.8	64.3	41.7	274	--
	NTU	13-Jul-05	--	141	401	150	546	--
	NTU	19-Jan-06	--	62.5	33.2	0	242	--
	NTU	12-Jul-06	--	16.1	116	17.8	71.3	--
	NTU	17-Jan-07	--	1.5	32.8	28	121	--
	NTU	15-Jan-08	--	177	182	dry	205	--
	NTU	17-Jul-08	--	264	dry	13.3	dry	--
	NTU	19-Jan-09	--	2.89	dry	24.7	111	--
	NTU	20-Jul-09	--	dry	dry	25.4	465	--
	NTU	26-Jan-10	--	7.07	297	65.1	308	--
	NTU	06-Jul-10	--	dry	dry	dry	dry	--
	NTU	04-Jan-11	--	1.53	dry	12.9	40.4	--
	NTU	05-Jul-11	--	185	dry	dry	dry	--
	NTU	10-Jan-12	--	13.21	28.7	10.23	53.3	--
	NTU	09-Jul-12	--	dry	dry	8.07	dry	--
	NTU	28-Jan-13	--	27.9	32.4	21.2	116	--
	NTU	17-Jul-13	--	42.6	dry	47.6	dry	--
Oxidation Reduction Potential (Field)	mV	15-Mar-05	--	345	139	160	152	--
	mV	13-Jul-05	--	148	22	73	32	--
	mV	19-Jan-06	--	338	107	122	186	--
	mV	12-Jul-06	--	196	203	193	196	--
	mV	09-Jul-07	--	dry	dry	dry	dry	--
	mV	15-Jan-08	--	186	163	dry	218	--
	mV	17-Jul-08	--	160	dry	79	dry	--
	mV	19-Jan-09	--	360.3	dry	196.3	131.0	--
	mV	20-Jul-09	--	dry	dry	129.9	234.3	--
	mV	26-Jan-10	--	322.8	203.4	203.6	205.7	--
	mV	06-Jul-10	--	dry	dry	dry	dry	--
	mV	04-Jan-11	--	211.1	dry	288.5	281.2	--
	mV	05-Jul-11	--	63.8	dry	dry	dry	--
	mV	10-Jan-12	--	--	--	--	--	--
	mV	09-Jul-12	--	dry	dry	108.5	dry	--
	mV	28-Jan-13	--	141.8	46.2	59.6	136.8	--
	mV	17-Jul-13	--	323.9	dry	69.5	dry	--

TABLE 6
Summary of Historical Surface Water Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Upstream	Downstream			Blanks
				SW-1	SW-2	SW-3	SW-4	
Dissolved Oxygen	mg/L	15-Mar-05	--	6.86	6.92	6.11	7.4	--
(Field)	mg/L	13-Jul-05	--	5.04	7.5	8.08	5.75	--
	mg/L	19-Jan-06	--	5.14	5.86	5.15	6.32	--
	mg/L	17-Jan-07	--	5.4	5.4	4.7	6.2	--
	mg/L	09-Jul-07	--	dry	dry	dry	dry	--
	mg/L	15-Jan-08	--	11.27	5.95	dry	13.53	--
	mg/L	17-Jul-08	--	8.0	dry	5.79	dry	--
	mg/L	19-Jan-09	--	10.01	dry	13.13	12.74	--
	mg/L	20-Jul-09	--	dry	dry	6.44	7.11	--
	mg/L	26-Jan-10	--	8.74	10.77	9.52	10.49	--
	mg/L	06-Jul-10	--	dry	dry	dry	dry	--
	mg/L	04-Jan-11	--	8.08	dry	10.95	10.59	--
	mg/L	05-Jul-11	--	3.16	dry	dry	dry	--
	mg/L	10-Jan-12	--	--	--	--	--	--
	mg/L	09-Jul-12	--	dry	dry	6.69	dry	--
	mg/L	28-Jan-13	--	7.35	10.23	11.89	9.52	--
	mg/L	17-Jul-13	--	3.22	dry	69.5	dry	--

Notes:
1. mg/L = milligrams per liter
2. µg/L = micrograms per liter
3. S.U. = Standard Units
4. NTU = Nephelometric Turbidity Units
5. ND = Not detected at the stated reporting limit
6. µS/cm = microsiemens per centimeter
7. mV = Millivolts
8. J = Estimated Value
9. B = Blank-Qualified Value
10. -- = no data
11. Blanks = field, trip and method blanks
12. Shaded = Concentrations above the SW Standards have been shaded
13. NC 2B = NC Freshwater Aquatic Life Standards as defined in 15A NCAC 2B.
14. SWS Reporting Limit = NCPQL prior to 2007 and NCSWSL starting in 01/18/07
15. * = EPA National Criteria Standard
16. All data prior to 2012 taken from previous report by Golder Associates NC, Inc.

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks	
Antimony	µg/L	13-Jul-05	30	ND		ND	
	µg/L	20-Jan-06	30	ND		ND	
	µg/L	12-Jul-06	30	ND		ND	
	µg/L	18-Jan-07	6	5.08		ND	
	µg/L	10-Jul-07	6	3.07	J	ND	
	µg/L	15-Jan-08	6	9.02		ND	
	µg/L	15-Jul-08	6	4.20	J	ND	
	µg/L	20-Jan-09	6	4.21	J	ND	
	µg/L	21-Jul-09	6	4.05	J	ND	
	µg/L	26-Jan-10	6	5.00	J	ND	
	µg/L	07-Jul-10	6	12.4	J	ND	
	µg/L	05-Jan-11	6	20.0		ND	
	µg/L	06-Jul-11	6	14.1	J	ND	
	µg/L	10-Jan-12	6	16.0		ND	
	µg/L	09-Jul-12	6	12.0		ND	
	µg/L	29-Jan-13	6	31.1		ND	
	µg/L	17-Jul-13	6	29.7	B	0.39	J

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks	
Arsenic	µg/L	07-Apr-99	10	ND		--	
	µg/L	08-Dec-99	10	10.0		--	
	µg/L	27-Apr-00	10	10.0		--	
	µg/L	18-Oct-00	10	--		--	
	µg/L	28-Nov-00	10	--		--	
	µg/L	03-Jan-01	10	--		--	
	µg/L	08-Feb-01	10	--		--	
	µg/L	19-Apr-01	10	--		--	
	µg/L	24-Dec-01	10	--		--	
	µg/L	23-Apr-02	10	--		--	
	µg/L	23-Oct-02	10	--		--	
	µg/L	01-Apr-03	10	--		--	
	µg/L	02-Sep-03	10	--		--	
	µg/L	28-Oct-03	10	--		--	
	µg/L	27-Apr-04	10	--		--	
	µg/L	26-Oct-04	10	--		--	
	µg/L	15-Mar-05	10	21.0		ND	
	µg/L	13-Jul-05	10	34		ND	
	µg/L	20-Jan-06	10	24.0		ND	
	µg/L	12-Jul-06	10	18.4		ND	
	µg/L	18-Jan-07	10	ND		ND	
	µg/L	10-Jul-07	10	ND		ND	
	µg/L	15-Jan-08	10	21.8		ND	
	µg/L	15-Jul-08	10	26.2		ND	
	µg/L	20-Jan-09	10	5.7	B	3.6	J
	µg/L	21-Jul-09	10	43.4		ND	
	µg/L	26-Jan-10	10	38.6		--	
	µg/L	07-Jul-10	10	92.6		ND	
	µg/L	05-Jan-11	10	72.7		ND	
	µg/L	06-Jul-11	10	146		ND	
	µg/L	10-Jan-12	10	107		ND	
	µg/L	09-Jul-12	10	109		ND	
	µg/L	29-Jan-13	10	192		ND	
	µg/L	17-Jul-13	10	175		ND	

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Barium	µg/L	07-Apr-99	500	ND	--
	µg/L	08-Dec-99	500	ND	--
	µg/L	27-Apr-00	500	ND	--
	µg/L	18-Oct-00	500	--	--
	µg/L	28-Nov-00	500	--	--
	µg/L	03-Jan-01	500	--	--
	µg/L	08-Feb-01	500	--	--
	µg/L	19-Apr-01	500	--	--
	µg/L	24-Dec-01	500	--	--
	µg/L	23-Apr-02	500	--	--
	µg/L	23-Oct-02	500	--	--
	µg/L	01-Apr-03	500	--	--
	µg/L	02-Sep-03	500	--	--
	µg/L	28-Oct-03	500	--	--
	µg/L	27-Apr-04	500	--	--
	µg/L	26-Oct-04	500	--	--
	µg/L	15-Mar-05	500	630	ND
	µg/L	13-Jul-05	500	510	ND
	µg/L	20-Jan-06	500	883	ND
	µg/L	12-Jul-06	500	678	ND
	µg/L	18-Jan-07	100	624	ND
	µg/L	10-Jul-07	100	547	ND
	µg/L	15-Jan-08	100	645	0.3 J
	µg/L	15-Jul-08	100	303	ND
	µg/L	20-Jan-09	100	347	ND
	µg/L	21-Jul-09	100	100	ND
	µg/L	26-Jan-10	100	273	ND
	µg/L	07-Jul-10	100	392	ND
	µg/L	05-Jan-11	100	426	ND
	µg/L	06-Jul-11	100	496	ND
	µg/L	10-Jan-12	100	374	0.24 J
	µg/L	09-Jul-12	100	449	0.75 J
	µg/L	29-Jan-13	100	394	ND
	µg/L	17-Jul-13	100	391	ND
Beryllium	µg/L	10-Jan-12	1	0.10 J	ND
	µg/L	09-Jul-12	1	0.60 J	ND
	µg/L	29-Jan-13	1	ND	ND
	µg/L	17-Jul-13	1	ND	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks	
Cadmium	µg/L	13-Jul-05	1	ND		ND	
	µg/L	20-Jan-06	1	ND		ND	
	µg/L	12-Jul-06	1	ND		ND	
	µg/L	18-Jan-07	1	ND		ND	
	µg/L	10-Jul-07	1	ND		ND	
	µg/L	15-Jan-08	1	ND		ND	
	µg/L	15-Jul-08	1	ND		ND	
	µg/L	20-Jan-09	1	ND		ND	
	µg/L	21-Jul-09	1	0.126	J	ND	
	µg/L	26-Jan-10	1	0.347	B	0.226	J
	µg/L	07-Jul-10	1	ND		ND	
	µg/L	05-Jan-11	1	ND		ND	
	µg/L	06-Jul-11	1	ND		ND	
	µg/L	10-Jan-12	1	ND		ND	
	µg/L	09-Jul-12	1	0.34	J	ND	
	µg/L	29-Jan-13	1	0.17	J	ND	
	µg/L	17-Jul-13	1	ND		ND	
Chromium	µg/L	13-Jul-05	10	ND		ND	
	µg/L	20-Jan-06	10	ND		ND	
	µg/L	12-Jul-06	10	ND		ND	
	µg/L	18-Jan-07	10	ND		ND	
	µg/L	10-Jul-07	10	ND		ND	
	µg/L	15-Jan-08	10	ND		ND	
	µg/L	15-Jul-08	10	ND		ND	
	µg/L	20-Jan-09	10	ND		ND	
	µg/L	21-Jul-09	10	57.7		ND	
	µg/L	26-Jan-10	10	40.8		ND	
	µg/L	07-Jul-10	10	70.5		ND	
	µg/L	05-Jan-11	10	59.7		ND	
	µg/L	06-Jul-11	10	108		ND	
	µg/L	10-Jan-12	10	92.7		ND	
	µg/L	09-Jul-12	10	168.0		ND	
	µg/L	29-Jan-13	10	121.0		1.38	J
	µg/L	17-Jul-13	50	132		ND	

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks	
Cobalt	µg/L	07-Apr-99	10	10.0	--	
	µg/L	08-Dec-99	10	60.0	--	
	µg/L	27-Apr-00	10	10.0	--	
	µg/L	18-Oct-00	10	--	--	
	µg/L	28-Nov-00	10	--	--	
	µg/L	03-Jan-01	10	--	--	
	µg/L	08-Feb-01	10	--	--	
	µg/L	19-Apr-01	10	--	--	
	µg/L	24-Dec-01	10	--	--	
	µg/L	23-Apr-02	10	--	--	
	µg/L	23-Oct-02	10	--	--	
	µg/L	01-Apr-03	10	--	--	
	µg/L	02-Sep-03	10	--	--	
	µg/L	28-Oct-03	10	--	--	
	µg/L	27-Apr-04	10	--	--	
	µg/L	26-Oct-04	10	--	--	
	µg/L	15-Mar-05	10	43.0	ND	
	µg/L	13-Jul-05	10	40	ND	
	µg/L	20-Jan-06	10	60.0	ND	
	µg/L	12-Jul-06	10	63.5	ND	
	µg/L	18-Jan-07	10	16.1	ND	
	µg/L	10-Jul-07	10	18.3	ND	
	µg/L	15-Jan-08	10	23.0	ND	
	µg/L	15-Jul-08	10	17.1	ND	
	µg/L	20-Jan-09	10	13.3	1.1	J
	µg/L	21-Jul-09	10	19.9	ND	
	µg/L	26-Jan-10	10	14.8	0.468	J
	µg/L	07-Jul-10	10	20.2	ND	
	µg/L	05-Jan-11	10	19.8	ND	
	µg/L	06-Jul-11	10	24.7	ND	
	µg/L	10-Jan-12	10	23.0	ND	
	µg/L	09-Jul-12	10	24.6	ND	
	µg/L	29-Jan-13	10	21.0	ND	
	µg/L	17-Jul-13	20	26.5	ND	

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks	
Copper	µg/L	13-Jul-05	200	ND		ND	
	µg/L	20-Jan-06	200	ND		ND	
	µg/L	12-Jul-06	200	ND		ND	
	µg/L	18-Jan-07	10	ND		ND	
	µg/L	10-Jul-07	10	ND		ND	
	µg/L	15-Jan-08	10	ND		ND	
	µg/L	15-Jul-08	10	8.20	J	ND	
	µg/L	20-Jan-09	10	ND		ND	
	µg/L	21-Jul-09	10	ND		1.25	J
	µg/L	26-Jan-10	10	ND		ND	
	µg/L	07-Jul-10	10	ND		ND	
	µg/L	05-Jan-11	10	2.57	J	ND	
	µg/L	06-Jul-11	10	ND		ND	
	µg/L	10-Jan-12	10	11.6		0.66	J
	µg/L	09-Jul-12	10	53.7		ND	
	µg/L	29-Jan-13	10	17.3		0.26	J
	µg/L	17-Jul-13	10	16.4		ND	

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks	
Lead	µg/L	18-Oct-00	10	--		--	
	µg/L	28-Nov-00	10	--		--	
	µg/L	03-Jan-01	10	--		--	
	µg/L	08-Feb-01	10	--		--	
	µg/L	19-Apr-01	10	--		--	
	µg/L	24-Dec-01	10	--		--	
	µg/L	23-Apr-02	10	--		--	
	µg/L	23-Oct-02	10	--		--	
	µg/L	01-Apr-03	10	--		--	
	µg/L	02-Sep-03	10	--		--	
	µg/L	28-Oct-03	10	--		--	
	µg/L	27-Apr-04	10	--		--	
	µg/L	13-Jul-05	10	ND		ND	
	µg/L	20-Jan-06	10	ND		ND	
	µg/L	15-Mar-06	10	ND		ND	
	µg/L	12-Jul-06	10	13.0		ND	
	µg/L	26-Oct-06	10	--		--	
	µg/L	18-Jan-07	10	ND		ND	
	µg/L	10-Jul-07	10	ND		ND	
	µg/L	15-Jan-08	10	ND		ND	
	µg/L	15-Jul-08	10	2.3	J	ND	
	µg/L	20-Jan-09	10	ND		2.0	J
	µg/L	21-Jul-09	10	5.28	B	2.16	J
	µg/L	26-Jan-10	10	5.68	B	1.84	J
	µg/L	07-Jul-10	10	3.84	J	ND	
	µg/L	05-Jan-11	10	ND		ND	
	µg/L	06-Jul-11	10	ND		ND	
	µg/L	10-Jan-12	10	2.75	B	0.94	J
	µg/L	09-Jul-12	10	45.2		ND	
	µg/L	29-Jan-13	10	3.38	J	ND	
	µg/L	17-Jul-13	10	0.51	J	ND	

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Nickel	µg/L	07-Apr-99	50	ND	--
	µg/L	08-Dec-99	50	30.0	--
	µg/L	27-Apr-00	50	50.0	--
	µg/L	18-Oct-00	50	--	--
	µg/L	28-Nov-00	50	--	--
	µg/L	03-Jan-01	50	--	--
	µg/L	08-Feb-01	50	--	--
	µg/L	19-Apr-01	50	--	--
	µg/L	24-Dec-01	50	--	--
	µg/L	23-Apr-02	50	--	--
	µg/L	23-Oct-02	50	--	--
	µg/L	01-Apr-03	50	--	--
	µg/L	02-Sep-03	50	--	--
	µg/L	28-Oct-03	50	--	--
	µg/L	27-Apr-04	50	--	--
	µg/L	26-Oct-04	50	--	--
	µg/L	15-Mar-05	50	85.0	ND
	µg/L	13-Jul-05	50	86	ND
	µg/L	20-Jan-06	50	74.0	ND
	µg/L	12-Jul-06	50	ND	ND
	µg/L	18-Jan-07	50	72.2	ND
	µg/L	10-Jul-07	50	75.8	ND
	µg/L	15-Jan-08	50	91.6	ND
	µg/L	15-Jul-08	50	55.6	ND
	µg/L	20-Jan-09	50	41.1 J	ND
	µg/L	21-Jul-09	50	84.2	ND
	µg/L	26-Jan-10	50	61.1	ND
	µg/L	07-Jul-10	50	89.0	ND
	µg/L	05-Jan-11	50	86.3	ND
	µg/L	06-Jul-11	50	95.0	ND
	µg/L	10-Jan-12	50	92.0	ND
	µg/L	09-Jul-12	50	114.0	ND
	µg/L	29-Jan-13	50	95.0	ND
	µg/L	17-Jul-13	100	108	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks	
Selenium	µg/L	13-Jul-05	20	ND		ND	
	µg/L	20-Jan-06	20	ND		ND	
	µg/L	12-Jul-06	20	ND		ND	
	µg/L	18-Jan-07	10	ND		ND	
	µg/L	10-Jul-07	10	ND		ND	
	µg/L	15-Jan-08	10	3.2	J	ND	
	µg/L	15-Jul-08	10	ND		ND	
	µg/L	20-Jan-09	10	ND		ND	
	µg/L	21-Jul-09	10	5.82	B	3.58	J
	µg/L	26-Jan-10	10	ND		ND	
	µg/L	07-Jul-10	10	ND		ND	
	µg/L	05-Jan-11	10	ND		ND	
	µg/L	06-Jul-11	10	ND		ND	
	µg/L	10-Jan-12	10	ND		ND	
	µg/L	09-Jul-12	10	4.32		ND	
	µg/L	29-Jan-13	10	1.41	J	ND	
	µg/L	17-Jul-13	10	2.74		ND	
Silver	µg/L	13-Jul-05	10	ND		ND	
	µg/L	20-Jan-06	10	ND		ND	
	µg/L	12-Jul-06	10	ND		ND	
	µg/L	18-Jan-07	10	ND		ND	
	µg/L	10-Jul-07	10	ND		ND	
	µg/L	15-Jan-08	10	ND		ND	
	µg/L	15-Jul-08	10	ND		ND	
	µg/L	20-Jan-09	10	ND		ND	
	µg/L	21-Jul-09	10	1.69	J	ND	
	µg/L	26-Jan-10	10	2.33	B	1.36	J
	µg/L	07-Jul-10	10	ND		ND	
	µg/L	05-Jan-11	10	ND		ND	
	µg/L	05-Jan-11	10	ND		ND	
	µg/L	06-Jul-11	10	ND		ND	
	µg/L	10-Jan-12	10	0.20	J	ND	
	µg/L	09-Jul-12	10	0.47		ND	
	µg/L	29-Jan-13	10	0.29	J	ND	
	µg/L	17-Jul-13	10	0.37	J	ND	

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks
Thallium	µg/L	18-Oct-00	10	--		--
	µg/L	28-Nov-00	10	--		--
	µg/L	03-Jan-01	10	--		--
	µg/L	08-Feb-01	10	--		--
	µg/L	19-Apr-01	10	--		--
	µg/L	24-Dec-01	10	--		--
	µg/L	23-Apr-02	10	--		--
	µg/L	23-Oct-02	10	--		--
	µg/L	01-Apr-03	10	--		--
	µg/L	02-Sep-03	10	--		--
	µg/L	28-Oct-03	10	--		--
	µg/L	27-Apr-04	10	--		--
	µg/L	13-Jul-05	10	ND		ND
	µg/L	20-Jan-06	10	16.0		ND
	µg/L	15-Mar-06	10	ND		ND
	µg/L	12-Jul-06	10	22.0		ND
	µg/L	26-Oct-06	10	--		--
	µg/L	18-Jan-07	5.5	0.046	J	ND
	µg/L	10-Jul-07	5.5	ND		ND
	µg/L	15-Jan-08	5.5	ND		ND
	µg/L	15-Jul-08	5.5	ND		ND
	µg/L	20-Jan-09	5.5	ND		ND
	µg/L	21-Jul-09	5.5	ND		ND
	µg/L	26-Jan-10	5.5	ND		ND
	µg/L	07-Jul-10	5.5	ND		ND
	µg/L	05-Jan-11	5.5	ND		ND
	µg/L	05-Jan-11	6	ND		ND
	µg/L	06-Jul-11	6	6.28	J	ND
	µg/L	10-Jan-12	5.5	ND		ND
	µg/L	09-Jul-12	5.5	ND		ND
	µg/L	29-Jan-13	5.5	ND		ND
	µg/L	17-Jul-13	5.5	ND		ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks	
Vanadium	µg/L	13-Jul-05	40	ND		ND	
	µg/L	20-Jan-06	40	ND		ND	
	µg/L	12-Jul-06	40	ND		ND	
	µg/L	18-Jan-07	25	24.6		ND	
	µg/L	10-Jul-07	25	39.7		ND	
	µg/L	15-Jan-08	25	55.4		ND	
	µg/L	15-Jul-08	25	23.7	J	ND	
	µg/L	20-Jan-09	25	ND		ND	
	µg/L	21-Jul-09	25	638		0.803	J
	µg/L	26-Jan-10	25	102		ND	
	µg/L	07-Jul-10	25	189		ND	
	µg/L	05-Jan-11	25	110		ND	
	µg/L	06-Jul-11	25	87.5		ND	
	µg/L	10-Jan-12	25	127		ND	
	µg/L	09-Jul-12	25	199		ND	
	µg/L	29-Jan-13	125	130		2.68	J
	µg/L	17-Jul-13	25	123		ND	

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Zinc	µg/L	07-Apr-99	50	50	--
	µg/L	08-Dec-99	50	160	--
	µg/L	27-Apr-00	50	30	--
	µg/L	18-Oct-00	50	--	--
	µg/L	28-Nov-00	50	--	--
	µg/L	03-Jan-01	50	--	--
	µg/L	08-Feb-01	50	--	--
	µg/L	19-Apr-01	50	--	--
	µg/L	24-Dec-01	50	--	--
	µg/L	23-Apr-02	50	--	--
	µg/L	23-Oct-02	50	--	--
	µg/L	01-Apr-03	50	--	--
	µg/L	02-Sep-03	50	--	--
	µg/L	28-Oct-03	50	--	--
	µg/L	27-Apr-04	50	--	--
	µg/L	26-Oct-04	50	--	--
	µg/L	15-Mar-05	50	120	ND
	µg/L	13-Jul-05	50	100	ND
	µg/L	20-Jan-06	50	63.0	ND
	µg/L	12-Jul-06	50	99.6	ND
	µg/L	18-Jan-07	10	22.1	4.8 J
	µg/L	10-Jul-07	10	37.5	ND
	µg/L	15-Jan-08	10	15.2	1.3 J
	µg/L	15-Jul-08	10	80.9	5.0 J
	µg/L	20-Jan-09	10	17.7	ND
	µg/L	21-Jul-09	10	21.0	ND
	µg/L	26-Jan-10	10	14.5	ND
	µg/L	07-Jul-10	10	64.2	ND
	µg/L	05-Jan-11	10	34.9	ND
	µg/L	06-Jul-11	10	41.6	ND
	µg/L	10-Jan-12	10	62.4 B	ND
	µg/L	09-Jul-12	10	183.0	0.3 J
	µg/L	29-Jan-13	10	39.9	0.57 J
	µg/L	17-Jul-13	10	14.2	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks
Acetone	µg/L	07-Apr-99	100	830		--
	µg/L	08-Dec-99	100	4,300		--
	µg/L	27-Apr-00	100	2,000		--
	µg/L	18-Oct-00	100	--		--
	µg/L	28-Nov-00	100	--		--
	µg/L	03-Jan-01	100	--		--
	µg/L	08-Feb-01	100	--		--
	µg/L	19-Apr-01	100	--		--
	µg/L	24-Dec-01	100	--		--
	µg/L	23-Apr-02	100	--		--
	µg/L	23-Oct-02	100	--		--
	µg/L	01-Apr-03	100	--		--
	µg/L	02-Sep-03	100	--		--
	µg/L	28-Oct-03	100	--		--
	µg/L	27-Apr-04	100	--		--
	µg/L	26-Oct-04	100	--		--
	µg/L	15-Mar-05	100	28,000		ND
	µg/L	13-Jul-05	100	2000		ND
	µg/L	20-Jan-06	11,000	11,200		ND
	µg/L	12-Jul-06	100	4,810		ND
	µg/L	18-Jan-07	100	13,000		ND
	µg/L	10-Jul-07	100	27	J	ND
	µg/L	15-Jan-08	100	6,700		ND
	µg/L	15-Jul-08	100	980		ND
	µg/L	20-Jan-09	100	4,900		ND
	µg/L	21-Jul-09	100	580		ND
	µg/L	26-Jan-10	100	3,300		ND
	µg/L	07-Jul-10	100	2,800		ND
	µg/L	05-Jan-11	100	3,600		ND
	µg/L	06-Jul-11	100	12,000		ND
	µg/L	10-Jan-12	10,000	16,000	D	ND
	µg/L	09-Jul-12	5,000	11,000		ND
	µg/L	29-Jan-13	10,000	21,000		ND
	µg/L	17-Jul-13	2,500	5,800		ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Benzene	µg/L	07-Apr-99	5	ND	--
	µg/L	08-Dec-99	5	5.0	--
	µg/L	27-Apr-00	5	ND	--
	µg/L	18-Oct-00	5	--	--
	µg/L	28-Nov-00	5	--	--
	µg/L	03-Jan-01	5	--	--
	µg/L	08-Feb-01	5	--	--
	µg/L	19-Apr-01	5	--	--
	µg/L	24-Dec-01	5	--	--
	µg/L	23-Apr-02	5	--	--
	µg/L	23-Oct-02	5	--	--
	µg/L	01-Apr-03	5	--	--
	µg/L	02-Sep-03	5	--	--
	µg/L	28-Oct-03	5	--	--
	µg/L	27-Apr-04	5	--	--
	µg/L	26-Oct-04	5	--	--
	µg/L	15-Mar-05	500	ND	ND
	µg/L	13-Jul-05	5	ND	ND
	µg/L	20-Jan-06	550	ND	ND
	µg/L	12-Jul-06	5	ND	ND
	µg/L	18-Jan-07	3	ND	ND
	µg/L	10-Jul-07	1	2.0 J	ND
	µg/L	15-Jan-08	1	ND	ND
	µg/L	15-Jul-08	1	ND	ND
	µg/L	20-Jan-09	1	ND	ND
	µg/L	21-Jul-09	1	ND	ND
	µg/L	26-Jan-10	1	ND	ND
	µg/L	07-Jul-10	1	ND	ND
	µg/L	05-Jan-11	1	ND	ND
	µg/L	06-Jul-11	1	ND	ND
	µg/L	10-Jan-12	1	2.9	ND
	µg/L	09-Jul-12	1	1.0	ND
	µg/L	29-Jan-13	1	2.4	ND
	µg/L	17-Jul-13	1	0.8 J	ND
Carbon Disulfide	µg/L	17-Jul-13	100	3.3 J	ND
Chlorobenzene	µg/L	10-Jan-12	3	0.8 J	ND
	µg/L	09-Jul-12	3	3.0	ND
	µg/L	29-Jan-13	3	0.8 J	ND
	µg/L	17-Jul-13	3		0.8 J
1,2-Dichlorobenzene	µg/L	29-Jan-13	5	0.4 J	ND
	µg/L	17-Jul-13	5	ND	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks
1,4-Dichlorobenzene	µg/L	07-Apr-99	5	ND		--
	µg/L	08-Dec-99	5	5.0		--
	µg/L	27-Apr-00	5	7.0		--
	µg/L	18-Oct-00	5	--		--
	µg/L	28-Nov-00	5	--		--
	µg/L	03-Jan-01	5	--		--
	µg/L	08-Feb-01	5	--		--
	µg/L	19-Apr-01	5	--		--
	µg/L	24-Dec-01	5	--		--
	µg/L	23-Apr-02	5	--		--
	µg/L	23-Oct-02	5	--		--
	µg/L	01-Apr-03	5	--		--
	µg/L	02-Sep-03	5	--		--
	µg/L	28-Oct-03	5	--		--
	µg/L	27-Apr-04	5	--		--
	µg/L	26-Oct-04	5	--		--
	µg/L	15-Mar-05	500	ND		ND
	µg/L	13-Jul-05	5	ND		ND
	µg/L	20-Jan-06	550	ND		ND
	µg/L	12-Jul-06	5	ND		ND
	µg/L	18-Jan-07	3	ND		ND
	µg/L	10-Jul-07	1	6.6		ND
	µg/L	15-Jan-08	1	ND		ND
	µg/L	15-Jul-08	1	7.2	J	ND
	µg/L	20-Jan-09	1	ND		ND
	µg/L	21-Jul-09	1	ND		ND
	µg/L	26-Jan-10	1	9.4	J	ND
	µg/L	07-Jul-10	1	9.0	J	ND
	µg/L	05-Jan-11	1	ND		ND
	µg/L	06-Jul-11	1	ND		ND
	µg/L	10-Jan-12	1	11		ND
	µg/L	09-Jul-12	1	1.8		ND
	µg/L	29-Jan-13	1	9.6		ND
	µg/L	17-Jul-13	1	4.4		ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
1,1-Dichloroethane	µg/L	07-Apr-99	5	9.0	--
	µg/L	08-Dec-99	5	9.0	--
	µg/L	27-Apr-00	5	ND	--
	µg/L	18-Oct-00	5	--	--
	µg/L	28-Nov-00	5	--	--
	µg/L	03-Jan-01	5	--	--
	µg/L	08-Feb-01	5	--	--
	µg/L	19-Apr-01	5	--	--
	µg/L	24-Dec-01	5	--	--
	µg/L	23-Apr-02	5	--	--
	µg/L	23-Oct-02	5	--	--
	µg/L	01-Apr-03	5	--	--
	µg/L	02-Sep-03	5	--	--
	µg/L	28-Oct-03	5	--	--
	µg/L	27-Apr-04	5	--	--
	µg/L	26-Oct-04	5	--	--
	µg/L	15-Mar-05	500	ND	ND
	µg/L	13-Jul-05	5	ND	ND
	µg/L	20-Jan-06	550	ND	ND
	µg/L	12-Jul-06	5	ND	ND
	µg/L	18-Jan-07	5	ND	ND
	µg/L	10-Jul-07	5	ND	ND
	µg/L	15-Jan-08	5	ND	ND
	µg/L	15-Jul-08	5	ND	ND
	µg/L	20-Jan-09	5	ND	ND
	µg/L	21-Jul-09	5	ND	ND
	µg/L	26-Jan-10	5	ND	ND
	µg/L	07-Jul-10	5	ND	ND
	µg/L	05-Jan-11	5	ND	ND
	µg/L	06-Jul-11	5	ND	ND
	µg/L	10-Jan-12	5	ND	ND
	µg/L	09-Jul-12	5	ND	ND
	µg/L	29-Jan-13	5	ND	ND
	µg/L	17-Jul-13	5	ND	ND
1,2-Dichloroethane	µg/L	10-Jan-12	1	1.3	ND
	µg/L	09-Jul-12	1	0.6	ND
	µg/L	29-Jan-13	1	1.7	ND
	µg/L	17-Jul-13	1	ND	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks
cis-1,2-Dichloroethene	µg/L	10-Jan-12	5	1.3	J	ND
	µg/L	09-Jul-12	5	0.3		ND
	µg/L	29-Jan-13	5	1.4	J	ND
	µg/L	17-Jul-13	5	0.5	J	ND
Ethylbenzene	µg/L	07-Apr-99	5	26.0		--
	µg/L	08-Dec-99	5	49.0		--
	µg/L	27-Apr-00	5	35.0		--
	µg/L	18-Oct-00	5	--		--
	µg/L	28-Nov-00	5	--		--
	µg/L	03-Jan-01	5	--		--
	µg/L	08-Feb-01	5	--		--
	µg/L	19-Apr-01	5	--		--
	µg/L	24-Dec-01	5	--		--
	µg/L	23-Apr-02	5	--		--
	µg/L	23-Oct-02	5	--		--
	µg/L	01-Apr-03	5	--		--
	µg/L	02-Sep-03	5	--		--
	µg/L	28-Oct-03	5	--		--
	µg/L	27-Apr-04	5	--		--
	µg/L	26-Oct-04	5	--		--
	µg/L	15-Mar-05	500	ND		ND
	µg/L	13-Jul-05	5	ND		ND
	µg/L	20-Jan-06	550	ND		ND
	µg/L	12-Jul-06	5	ND		ND
	µg/L	18-Jan-07	5	35.0	J	ND
	µg/L	10-Jul-07	1	15.0		ND
	µg/L	15-Jan-08	1	29.0	J	ND
	µg/L	15-Jul-08	1	24.0		ND
	µg/L	20-Jan-09	1	71.0		ND
	µg/L	21-Jul-09	1	4.0	J	ND
	µg/L	26-Jan-10	1	16.0	J	ND
	µg/L	07-Jul-10	1	12.0	J	ND
	µg/L	05-Jan-11	1	31.0	J	ND
	µg/L	06-Jul-11	1	ND		ND
	µg/L	10-Jan-12	1	25.0		ND
	µg/L	09-Jul-12	1	4.1		ND
	µg/L	29-Jan-13	1	31		ND
	µg/L	17-Jul-13	1	6.4		ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks
2-Hexanone	µg/L	13-Jul-05	50	ND		ND
	µg/L	20-Jan-06	5500	ND		ND
	µg/L	12-Jul-06	50	ND		ND
	µg/L	18-Jan-07	50	17.0	J	ND
	µg/L	10-Jul-07	50	ND		ND
	µg/L	15-Jan-08	50	ND		ND
	µg/L	15-Jul-08	50	ND		ND
	µg/L	20-Jan-09	50	ND		ND
	µg/L	21-Jul-09	50	ND		ND
	µg/L	26-Jan-10	50	ND		ND
	µg/L	07-Jul-10	50	ND		ND
	µg/L	05-Jan-11	50	ND		ND
	µg/L	06-Jul-11	50	ND		ND
	µg/L	10-Jan-12	50	27.0	J	ND
	µg/L	09-Jul-12	50	21.0		ND
	µg/L	29-Jan-13	50	41	J	ND
	µg/L	17-Jul-13	50	8.5	J	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Methylene chloride	µg/L	07-Apr-99	10	68.0	--
	µg/L	08-Dec-99	10	21.0	--
	µg/L	27-Apr-00	10	ND	--
	µg/L	18-Oct-00	10	--	--
	µg/L	28-Nov-00	10	--	--
	µg/L	03-Jan-01	10	--	--
	µg/L	08-Feb-01	10	--	--
	µg/L	19-Apr-01	10	--	--
	µg/L	24-Dec-01	10	--	--
	µg/L	23-Apr-02	10	--	--
	µg/L	23-Oct-02	10	--	--
	µg/L	01-Apr-03	10	--	--
	µg/L	02-Sep-03	10	--	--
	µg/L	28-Oct-03	10	--	--
	µg/L	27-Apr-04	10	--	--
	µg/L	26-Oct-04	10	--	--
	µg/L	15-Mar-05	1000	ND	ND
	µg/L	13-Jul-05	10	ND	ND
	µg/L	20-Jan-06	1100	ND	ND
	µg/L	12-Jul-06	10	ND	ND
	µg/L	18-Jan-07	5.5	ND	ND
	µg/L	10-Jul-07	1	ND	ND
	µg/L	15-Jan-08	1	ND	ND
	µg/L	15-Jul-08	1	ND	ND
	µg/L	20-Jan-09	1	30.0 J	ND
	µg/L	21-Jul-09	1	ND	ND
	µg/L	26-Jan-10	1	ND	ND
	µg/L	07-Jul-10	1	ND	ND
	µg/L	05-Jan-11	1	ND	ND
	µg/L	06-Jul-11	1	ND	ND
	µg/L	10-Jan-12	1	1.4 B	0.8 J
	µg/L	09-Jul-12	1	0.2	ND
	µg/L	29-Jan-13	1	0.2 J	ND
	µg/L	17-Jul-13	1	ND	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
2-Butanone	µg/L	07-Apr-99	100	660	--
(Methyl Ethyl Ketone)	µg/L	08-Dec-99	100	12,000	--
	µg/L	27-Apr-00	100	4,400	--
	µg/L	18-Oct-00	100	--	--
	µg/L	28-Nov-00	100	--	--
	µg/L	03-Jan-01	100	--	--
	µg/L	08-Feb-01	100	--	--
	µg/L	19-Apr-01	100	--	--
	µg/L	24-Dec-01	100	--	--
	µg/L	23-Apr-02	100	--	--
	µg/L	23-Oct-02	100	--	--
	µg/L	01-Apr-03	100	--	--
	µg/L	02-Sep-03	100	--	--
	µg/L	28-Oct-03	100	--	--
	µg/L	27-Apr-04	100	--	--
	µg/L	26-Oct-04	100	--	--
	µg/L	15-Mar-05	100	34,000	ND
	µg/L	13-Jul-05	100	1800	ND
	µg/L	20-Jan-06	11000	16,600	ND
	µg/L	12-Jul-06	100	7,870	ND
	µg/L	18-Jan-07	100	7,300	ND
	µg/L	10-Jul-07	100	ND	ND
	µg/L	15-Jan-08	100	7,800	ND
	µg/L	15-Jul-08	100	960	ND
	µg/L	20-Jan-09	100	6,500	ND
	µg/L	21-Jul-09	100	660	ND
	µg/L	26-Jan-10	100	3,800	ND
	µg/L	07-Jul-10	100	3,800	ND
	µg/L	05-Jan-11	100	3,900	ND
	µg/L	06-Jul-11	100	12,000	ND
	µg/L	10-Jan-12	20,000	26,000	ND
	µg/L	09-Jul-12	5,000	8,100	ND
	µg/L	29-Jan-13	20,000	47,000	ND
	µg/L	17-Jul-13	100	3,800	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks
4-Methyl-2-pentanone	µg/L	07-Apr-99	100	ND		--
	µg/L	08-Dec-99	100	ND		--
	µg/L	27-Apr-00	100	110		--
	µg/L	18-Oct-00	100	--		--
	µg/L	28-Nov-00	100	--		--
	µg/L	03-Jan-01	100	--		--
	µg/L	08-Feb-01	100	--		--
	µg/L	19-Apr-01	100	--		--
	µg/L	24-Dec-01	100	--		--
	µg/L	23-Apr-02	100	--		--
	µg/L	23-Oct-02	100	--		--
	µg/L	01-Apr-03	100	--		--
	µg/L	02-Sep-03	100	--		--
	µg/L	28-Oct-03	100	--		--
	µg/L	27-Apr-04	100	--		--
	µg/L	26-Oct-04	100	--		--
	µg/L	15-Mar-05	10000	ND		ND
	µg/L	13-Jul-05	100	ND		ND
	µg/L	20-Jan-06	11000	ND		ND
	µg/L	12-Jul-06	100	ND		ND
	µg/L	18-Jan-07	100	95	J	ND
	µg/L	10-Jul-07	100	7.4	J	ND
	µg/L	15-Jan-08	100	ND		ND
	µg/L	15-Jul-08	100	ND		ND
	µg/L	20-Jan-09	100	110	J	ND
	µg/L	21-Jul-09	100	27.0	J	ND
	µg/L	26-Jan-10	100	180		ND
	µg/L	07-Jul-10	100	42.0	J	ND
	µg/L	05-Jan-11	100	66.0	J	ND
	µg/L	06-Jul-11	100	160	J	ND
	µg/L	10-Jan-12	100	220		ND
	µg/L	09-Jul-12	100	140		ND
	µg/L	29-Jan-13	500	680		ND
	µg/L	17-Jul-13	100	98		ND
Styrene	µg/L	29-Jan-13	1	2.4		ND
	µg/L	17-Jul-13	1	ND		ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Toluene	µg/L	07-Apr-99	5	100	--
	µg/L	08-Dec-99	5	150	--
	µg/L	27-Apr-00	5	120	--
	µg/L	18-Oct-00	5	--	--
	µg/L	28-Nov-00	5	--	--
	µg/L	03-Jan-01	5	--	--
	µg/L	08-Feb-01	5	--	--
	µg/L	19-Apr-01	5	--	--
	µg/L	24-Dec-01	5	--	--
	µg/L	23-Apr-02	5	--	--
	µg/L	23-Oct-02	5	--	--
	µg/L	01-Apr-03	5	--	--
	µg/L	02-Sep-03	5	--	--
	µg/L	28-Oct-03	5	--	--
	µg/L	27-Apr-04	5	--	--
	µg/L	26-Oct-04	5	--	--
	µg/L	15-Mar-05	500	ND	ND
	µg/L	13-Jul-05	5	ND	ND
	µg/L	20-Jan-06	550	ND	ND
	µg/L	12-Jul-06	5	255	ND
	µg/L	18-Jan-07	5	36.0 J	ND
	µg/L	10-Jul-07	1	9.0	ND
	µg/L	15-Jan-08	1	35.0 J	ND
	µg/L	15-Jul-08	1	23.0	ND
	µg/L	20-Jan-09	1	120	ND
	µg/L	21-Jul-09	1	ND	0.44 J
	µg/L	26-Jan-10	1	24.0	ND
	µg/L	07-Jul-10	1	14.0 J	ND
	µg/L	05-Jan-11	1	26.0 J	ND
	µg/L	06-Jul-11	1	ND	ND
	µg/L	10-Jan-12	1	33.0	ND
	µg/L	09-Jul-12	1	7.1	ND
	µg/L	29-Jan-13	1	33	ND
	µg/L	17-Jul-13	1	8.7	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Trichloroethene	µg/L	29-Jan-13	1	0.2 J	ND
	µg/L	17-Jul-13	1		0.4 J
1,1,2-Trichloroethane	µg/L	10-Jan-12	1	2.0	ND
	µg/L	09-Jul-12	1	ND	ND
	µg/L	29-Jan-13	1	ND	ND
	µg/L	17-Jul-13	1	ND	ND
Vinyl Chloride	µg/L	29-Jan-13	1	0.2 J	ND
	µg/L	17-Jul-13	1	ND	ND
Xylenes (total)	µg/L	07-Apr-99	5	30.0	--
	µg/L	08-Dec-99	5	62.0	--
	µg/L	27-Apr-00	5	56.0	--
	µg/L	18-Oct-00	5	--	--
	µg/L	28-Nov-00	5	--	--
	µg/L	03-Jan-01	5	--	--
	µg/L	08-Feb-01	5	--	--
	µg/L	19-Apr-01	5	--	--
	µg/L	24-Dec-01	5	--	--
	µg/L	23-Apr-02	5	--	--
	µg/L	23-Oct-02	5	--	--
	µg/L	01-Apr-03	5	--	--
	µg/L	02-Sep-03	5	--	--
	µg/L	28-Oct-03	5	--	--
	µg/L	27-Apr-04	5	--	--
	µg/L	26-Oct-04	5	--	--
	µg/L	15-Mar-05	500	ND	ND
	µg/L	13-Jul-05	5	ND	ND
	µg/L	20-Jan-06	550	ND	ND
	µg/L	12-Jul-06	5	ND	ND
	µg/L	18-Jan-07	--	60.0 J	ND
	µg/L	10-Jul-07	4	22.0	ND
	µg/L	15-Jan-08	5	42.0 J	ND
	µg/L	15-Jul-08	5	39.0	ND
	µg/L	20-Jan-09	5	100	ND
	µg/L	21-Jul-09	5	ND	ND
	µg/L	26-Jan-10	5	31.0	ND
	µg/L	07-Jul-10	5	29.0	ND
	µg/L	05-Jan-11	5	39.0 J	ND
	µg/L	06-Jul-11	5	ND	ND
	µg/L	10-Jan-12	5	51.0	ND
	µg/L	09-Jul-12	5	10.0	ND
	µg/L	29-Jan-13	5	57.0	ND
	µg/L	17-Jul-13	5	16	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks
Cyanide (total)	mg/L	20-Jan-06	0.01	ND		ND
	mg/L	12-Jul-06	0.05	ND		ND
	mg/L	18-Jan-07	10	ND		ND
	mg/L	10-Jul-07	10	ND		ND
	mg/L	15-Jan-08	10	ND		ND
	mg/L	15-Jul-08	10	ND		ND
	mg/L	20-Jan-09	10	0.0041	J	ND
	mg/L	21-Jul-09	10	ND		ND
	mg/L	26-Jan-10	10	0.0054	J	ND
	mg/L	07-Jul-10	0.01	ND		ND
	mg/L	05-Jan-11	0.01	0.0059	J	ND
	mg/L	06-Jul-11	0.01	ND		ND
	µg/L	10-Jan-12	20	ND		ND
	µg/L	09-Jul-12	10	ND		ND
	µg/L	29-Jan-13	10	14.0		ND
	µg/L	17-Jul-13	10	ND		ND
Oil & Grease	mg/L	20-Jan-06	2	5		ND
	mg/L	12-Jul-06	2	19		ND
	mg/L	18-Jan-07	--	5		ND
	mg/L	10-Jul-07	--	ND		ND
	mg/L	15-Jan-08	--	9.15		ND
	mg/L	15-Jul-08	--	3.00	J	ND
	mg/L	20-Jan-09	--	5.11		ND
	mg/L	21-Jul-09	--	5.29		ND
	mg/L	26-Jan-10	--	ND		ND
	mg/L	07-Jul-10	--	ND		ND
	mg/L	05-Jan-11	--	7.34		ND
	mg/L	06-Jul-11	--	4.82	J	ND
	µg/L	10-Jan-12	5,200	10,000		ND
	µg/L	09-Jul-12	5,700	13,000		ND
	µg/L	29-Jan-13	5,400	6,600		ND
	µg/L	17-Jul-13	5,300	9,800		ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Phenols	mg/L	15-Mar-05	0.05	0.84	ND
	mg/L	20-Jan-06	0.2	1	ND
	mg/L	12-Jul-06	0.1	1	ND
	mg/L	18-Jan-07	--	0.92	ND
	mg/L	10-Jul-07	--	0.03 J	ND
	mg/L	15-Jan-08	--	1.1	ND
	mg/L	15-Jul-08	--	0.20	ND
	mg/L	20-Jan-09	--	0.53	ND
	mg/L	21-Jul-09	--	0.23	ND
	mg/L	26-Jan-10	--	0.43	ND
	mg/L	07-Jul-10	--	0.56	ND
	mg/L	05-Jan-11	--	0.95	ND
	mg/L	06-Jul-11	--	2.60	ND
	µg/L	10-Jan-12	1,000	5,380	ND
	µg/L	09-Jul-12	50.0	1,480	ND
	µg/L	29-Jan-13	100	3,260	ND
	µg/L	17-Jul-13	50.0	448	ND
Total Kjeldahl Nitrogen	mg/L	15-Mar-05	0.05	480	ND
	mg/L	20-Jan-06	1	495	ND
	mg/L	12-Jul-06	0.05	396	ND
	mg/L	18-Jan-07	--	440	ND
	mg/L	10-Jul-07	--	570	ND
	mg/L	15-Jan-08	--	560	0.088
	mg/L	15-Jul-08	--	320	ND
	mg/L	20-Jan-09	--	340	ND
	mg/L	21-Jul-09	--	550	ND
	mg/L	26-Jan-10	--	460	ND
	mg/L	07-Jul-10	--	720	ND
	mg/L	05-Jan-11	--	720	ND
	mg/L	06-Jul-11	--	1,000 B	250 J
	µg/L	10-Jan-12	40,000	593,000	ND
	µg/L	09-Jul-12	40.0	519,000	ND
	µg/L	29-Jan-13	80.0	840,000	ND
	µg/L	17-Jul-13	50.0	884,000	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks	
Nitrate as N	mg/L	13-Jul-05	0.1	ND		ND	
	mg/L	20-Jan-06	0.05	ND		ND	
	mg/L	12-Jul-06	0.05	ND		ND	
	mg/L	10-Jul-07	--	ND		ND	
	mg/L	15-Jan-08	10	0.025	B	0.014	J
	mg/L	15-Jul-08	10	ND		ND	
	mg/L	20-Jan-09	10	0.084	J	ND	
	mg/L	21-Jul-09	10	ND		ND	
	mg/L	26-Jan-10	10	0.052	J	ND	
	mg/L	07-Jul-10	10	0.025	J	ND	
	mg/L	05-Jan-11	10	0.072	J	ND	
	mg/L	06-Jul-11	10	ND		ND	
	µg/L	10-Jan-12	50.0	280		ND	
	µg/L	09-Jul-12	50.0	ND		ND	
	µg/L	29-Jan-13	500.0	ND		ND	
	µg/L	17-Jul-13	100	120		ND	
Sulfate	mg/L	13-Jul-05	2	ND		ND	
	mg/L	20-Jan-06	2	ND		ND	
	mg/L	12-Jul-06	2	6.23		ND	
	mg/L	18-Jan-07	--	29.3		2.25	J
	mg/L	10-Jul-07	--	34.0		1.1	
	mg/L	15-Jan-08	250	5.6	J	ND	
	mg/L	15-Jul-08	250	3.8	J	ND	
	mg/L	20-Jan-09	250	2.5	J	ND	
	mg/L	21-Jul-09	250	3.1	J	ND	
	mg/L	26-Jan-10	250	1.6	B	1.1	J
	mg/L	07-Jul-10	250	5.4	J	ND	
	mg/L	05-Jan-11	250	10.0	J	ND	
	mg/L	06-Jul-11	250	4.00	B	1.90	J
	µg/L	10-Jan-12	5,000	2,900	J	ND	
	µg/L	09-Jul-12	5,000	ND		ND	
	µg/L	29-Jan-13	10,000	ND		ND	
	µg/L	17-Jul-13	10,000	ND		ND	

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Biochemical Oxygen Demand	mg/L	15-Mar-05	2	1,300	ND
	mg/L	13-Jul-05	2	220 J	ND
	mg/L	20-Jan-06	2	1,910	ND
	mg/L	12-Jul-06	2	1,770	ND
	mg/L	18-Jan-07	--	593	ND
	mg/L	10-Jul-07	--	97	ND
	mg/L	15-Jan-08	--	620	ND
	mg/L	15-Jul-08	--	110	ND
	mg/L	20-Jan-09	--	630	ND
	mg/L	21-Jul-09	--	130	ND
	mg/L	26-Jan-10	--	130	ND
	mg/L	07-Jul-10	--	420	ND
	mg/L	05-Jan-11	--	460	ND
	mg/L	06-Jul-11	--	890	ND
	µg/L	10-Jan-12	45,000	1,380,000	ND
	µg/L	09-Jul-12	32.0	560	ND
	µg/L	29-Jan-13	65.0	1,820	ND
	µg/L	17-Jul-13	25,000	513,000	130

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Chemical Oxygen Demand	mg/L	15-Mar-05	10	2,500.00	ND
	mg/L	13-Jul-05	10	1,120.00	ND
	mg/L	20-Jan-06	--	--	--
	mg/L	27-Feb-06	40	1,710.00	ND
	mg/L	12-Jul-06	10	2,990.00	ND
	mg/L	18-Jan-07	--	1,810.00	ND
	mg/L	10-Jul-07	--	980.00	ND
	mg/L	15-Jan-08	--	1,600.00	ND
	mg/L	15-Jul-08	--	950.00	ND
	mg/L	20-Jan-09	--	1,300.00	ND
	mg/L	21-Jul-09	--	990.00	ND
	mg/L	26-Jan-10	--	920.00	ND
	mg/L	07-Jul-10	--	1,700.00	ND
	mg/L	05-Jan-11	--	1,700.00	ND
	mg/L	06-Jul-11	--	2,500.00	ND
	µg/L	10-Jan-12	200,000	4,050,000	ND
	µg/L	09-Jul-12	200	3,050,000	ND
	µg/L	29-Jan-13	200	4,770,000	5830
	µg/L	17-Jul-13	200	2,590,000	ND
Total Suspended Solids	mg/L	15-Mar-05	2	140	ND
	mg/L	13-Jul-05	--	--	--
	mg/L	20-Jan-06	--	--	--
	mg/L	12-Jul-06	2	264	ND
	mg/L	18-Jan-07	--	45.0	ND
	mg/L	10-Jul-07	--	21.0	ND
	mg/L	15-Jan-08	--	26.0	ND
	mg/L	15-Jul-08	--	59.0	ND
	mg/L	20-Jan-09	--	85.0	ND
	mg/L	21-Jul-09	--	17.0	ND
	mg/L	26-Jan-10	--	23.0	ND
	mg/L	07-Jul-10	--	67.0	ND
	mg/L	05-Jan-11	--	23.0	ND
	mg/L	06-Jul-11	--	36.0	ND
	µg/L	10-Jan-12	10,000	78,000	ND
	µg/L	09-Jul-12	33	780,000	ND
	µg/L	29-Jan-13	5	46,000	ND
	µg/L	17-Jul-13	5,000	20,500	ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate		Blanks
Phosphorus (Total)	mg/L	15-Mar-05	0.03	1.8		ND
	mg/L	13-Jul-05	0.03	2.2		ND
	mg/L	20-Jan-06	0.1	2.0		ND
	mg/L	12-Jul-06	0.03	1.0		ND
	mg/L	18-Jan-07	--	1.7		ND
	mg/L	10-Jul-07	--	2.8		ND
	mg/L	15-Jan-08	--	2.6		ND
	mg/L	15-Jul-08	--	1.2		ND
	mg/L	20-Jan-09	--	0.82		ND
	mg/L	21-Jul-09	--	0.69		ND
	mg/L	26-Jan-10	--	1.7		ND
	mg/L	07-Jul-10	--	2.3		ND
	mg/L	05-Jan-11	--	2.1		ND
	mg/L	06-Jul-11	--	2.2		ND
	µg/L	10-Jan-12	200	2,170	D	ND
	µg/L	09-Jul-12	0.20	1,930	D	ND
	µg/L	29-Jan-13	0.22	2,400		ND
	µg/L	17-Jul-13	0.22	2,420		ND
Nitrate/Nitrite as N	mg/L	15-Jan-08	--	0.044	J	ND
	mg/L	15-Jul-08	--	0.023	J	ND
	mg/L	20-Jan-09	--	0.084	J	ND
	mg/L	21-Jul-09	--	ND		ND
	mg/L	26-Jan-10	--	0.059	B	0.021
	mg/L	07-Jul-10	--	0.034	J	ND
	mg/L	05-Jan-11	--	0.097	J	ND
	mg/L	06-Jul-11	--	0.041	J	ND
	mg/L	10-Jan-12	50	280		ND
	µg/L	09-Jul-12	50	ND		ND
	µg/L	29-Jan-13	500	ND		ND
	µg/L	17-Jul-13	100	120		ND

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

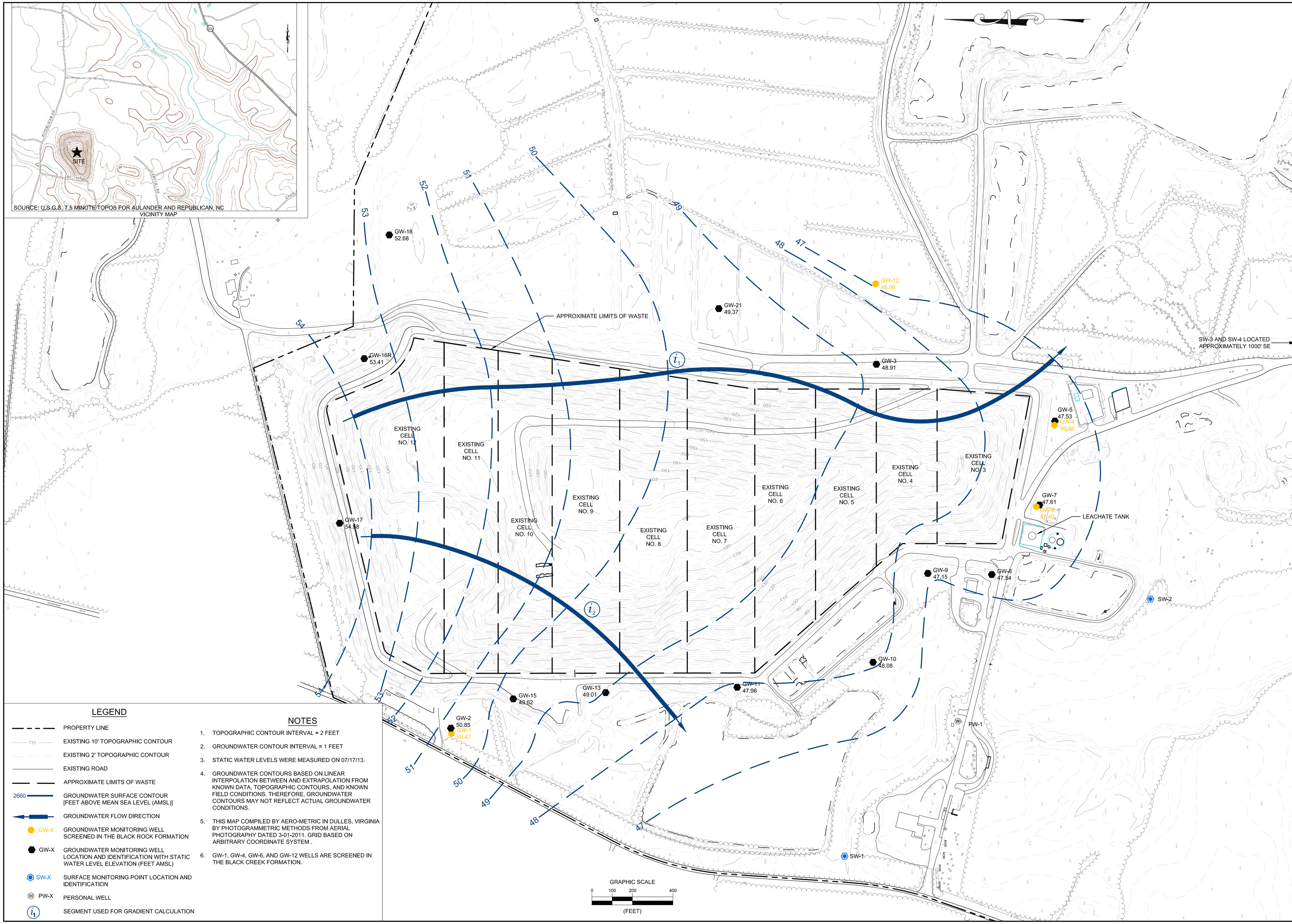
Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
pH (Field)	S.U.	07-Apr-99	--	6.82	--
	S.U.	15-Mar-05	--	6.34	--
	S.U.	13-Jul-05	--	7.36	--
	S.U.	20-Jan-06	--	9.48	--
	S.U.	12-Jul-06	--	7.22	--
	S.U.	18-Jan-07	--	6.00	--
	S.U.	10-Jul-07	--	8.31	--
	S.U.	15-Jan-08	--	7.53	--
	S.U.	15-Jul-08	--	7.39	--
	S.U.	20-Jan-09	--	6.97	--
	S.U.	21-Jul-09	--	7.93	--
	S.U.	26-Jan-10	--	7.03	--
	S.U.	06-Jul-10	--	7.36	--
	S.U.	05-Jan-11	--	7.50	--
	S.U.	06-Jul-11	--	7.42	--
	S.U.	10-Jan-12	--	7.60	--
	S.U.	09-Jul-12	--	8.15	--
	S.U.	29-Jan-13	--	7.67	--
	S.U.	17-Jul-13	--	7.90	--
Conductivity (Field)	µS/cm	07-Apr-99	--	2,061	--
	µS/cm	15-Mar-05	--	6,310	--
	µS/cm	13-Jul-05	--	14,500	--
	µS/cm	20-Jan-06	--	4,940	--
	µS/cm	12-Jul-06	--	7,940	--
	µS/cm	18-Jan-07	--	3,400	--
	µS/cm	10-Jul-07	--	9,800	--
	µS/cm	15-Jan-08	--	13,100	--
	µS/cm	15-Jul-08	--	5,700	--
	µS/cm	20-Jan-09	--	4,816	--
	µS/cm	21-Jul-09	--	10,430	--
	µS/cm	26-Jan-10	--	8,672	--
	µS/cm	06-Jul-10	--	11,900	--
	µS/cm	05-Jan-11	--	11,370	--
	µS/cm	06-Jul-11	--	12,810	--
	µS/cm	10-Jan-12	--	12,470	--
	µS/cm	09-Jul-12	--	13,336	--
	µS/cm	29-Jan-13	--	11,016	--
	µS/cm	17-Jul-13	--	14,908	--

TABLE 7
Summary of Historical Leachate Constituents/Analytes
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Detected Monitoring Constituents/Parameters	Units	Sample Date	SWS Reporting Limit	Leachate	Blanks
Temperature (Field)	°C	15-Mar-05	--	12.8	--
	°C	13-Jul-05	--	28.82	--
	°C	20-Jan-06	--	16.07	--
	°C	12-Jul-06	--	30.0	--
	°C	18-Jan-07	--	7.0	--
	°C	10-Jul-07	--	33.2	--
	°C	15-Jan-08	--	9.95	--
	°C	15-Jul-08	--	29.93	--
	°C	20-Jan-09	--	6.96	--
	°C	21-Jul-09	--	31.07	--
	°C	26-Jan-10	--	13.84	--
	°C	06-Jul-10	--	28.01	--
	°C	05-Jan-11	--	13.21	--
	°C	10-Jan-12	--	15.8	--
	°C	09-Jul-12	--	29.6	--
	°C	29-Jan-13	--	17.4	--
	°C	17-Jul-13	--	37.1	--

Notes:
1. mg/L = milligrams per liter
2. µg/L = micrograms per liter
3. S.U. = Standard Units
4. NTU = Nephelometric Turbidity Units
5. ND = Not detected at the stated reporting limit
6. µS/cm = microsiemens per centimeter
7. mV = Millivolts
8. J = Estimated value/not quantified
9. -- = no data
10. Blanks = method blanks
11. SWS Reporting Limit = NCPQL prior to 2007 and NCSWSL starting in 01/18/07
    For parameters without SWSL's the laboratory RL is shown
12. The following dilutions were noted for the July 2011 event: VOCs (100x), TKN (50x),
13. All data prior to 2012 taken from previous report by Golder Associates NC, Inc.

Drawing



LEGEND

- PROPERTY LINE
- 710 EXISTING 10' TOPOGRAPHIC CONTOUR
- EXISTING 2' TOPOGRAPHIC CONTOUR
- EXISTING ROAD
- APPROXIMATE LIMITS OF WASTE
- 2660 GROUNDWATER SURFACE CONTOUR [FEET ABOVE MEAN SEA LEVEL (AMSL)]
- GROUNDWATER FLOW DIRECTION
- GW-X GROUNDWATER MONITORING WELL SCREENED IN THE BLACK ROCK FORMATION
- GW-X GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION WITH STATIC WATER LEVEL ELEVATION (FEET AMSL)
- SW-X SURFACE MONITORING POINT LOCATION AND IDENTIFICATION
- PW-X PERSONAL WELL
- i_1 SEGMENT USED FOR GRADIENT CALCULATION

NOTES

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET
2. GROUNDWATER CONTOUR INTERVAL = 1 FEET
3. STATIC WATER LEVELS WERE MEASURED ON 07/17/13.
4. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.
5. THIS MAP COMPILED BY AERO-METRIC IN DULLES, VIRGINIA BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY DATED 3-01-2011. GRID BASED ON ARBITRARY COORDINATE SYSTEM .
6. GW-1, GW-4, GW-6, AND GW-12 WELLS ARE SCREENED IN THE BLACK CREEK FORMATION.

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

DESIGNED	ALF
DRAWN	RWH
CHECKED	AE
APPROVED	VB
DATE	07/22/13

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NC CORP LIC: C-0782

EAST CAROLINA REGIONAL LANDFILL
BERTIE COUNTY, NORTH CAROLINA

POTENTIOMETRIC SURFACE CONTOUR MAP
YORKTOWN FORMATION
JULY 17, 2013
PERMIT NO. 08-03

PROJECT NO.
894.1301.12

SCALE
AS SHOWN

DRAWING NO.
1

L:\Republic NC\East Carolina\JULY 2013 East Carolina GW Map.dwg Layout=Layout1

Appendix A

Groundwater and Surface Water Field Data Logs

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-2 **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 15.51 feet
Depth to Bottom: 30.00 feet **Water Column Thickness** 14.49 feet
Well Location: NW corner of landfill, accessed from Republican rd. or landfill access road
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1008	4.36	16.9	106.1	5.63	8.48	248.4	15.80
1009	4.26	16.4	105.0	5.37	6.23	251.9	15.95
1010	4.21	16.4	105.0	5.32	7.36	253.1	16.01
1011	4.16	16.4	104.9	5.29	6.82	251.2	16.09
1012	4.18	16.4	105.0	5.28	7.13	252.6	16.14
1013	4.19	16.4	104.8	5.27	7.24	253.1	16.19

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.

Signature: Amanda Freeman **Date:** 7/17/13
QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-7 **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 11.18 feet
Depth to Bottom: 18.00 feet **Water Column Thickness** 6.82 feet
Well Location: next to leachate tanks
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1257	4.20	18.6	207.5	2.23	11.24	266.8	11.21
1258	4.00	18.1	207.2	1.86	10.02	269.5	11.23
1259	4.01	18.0	207.1	1.65	9.81	267.0	11.24
1300	4.02	18.1	208.4	1.64	9.29	261.4	11.25
1301	4.00	18.1	208.1	1.64	9.71	263.7	11.29

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.

Signature: Amanda Freeman **Date:** 7/17/13
QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-8 **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 12.50 feet
Depth to Bottom: 18.00 feet **Water Column Thickness** 5.44 feet
Well Location: next to maintenance building
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1152	5.25	18.4	110.3	3.95	11.43	77.1	12.91
1153	4.95	17.9	111.9	2.19	13.86	89.9	13.11
1154	4.75	17.9	116.5	2.26	10.48	97.1	13.22
1155	4.71	17.8	119.1	2.29	9.19	99.2	13.30
1156	4.71	17.9	120.2	2.30	9.26	100.1	13.37
1157	4.70	17.9	121.3	2.31	8.43	100.6	13.41

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.

Signature: Amanda Freeman **Date:** 7/17/13
QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-9 **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 4.81 feet
Depth to Bottom: 17.00 feet **Water Column Thickness** 12.19 feet
Well Location: next to wetland near maintenance building
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1136	5.62	18.8	248.3	3.45	18.63	62.4	4.99
1137	5.23	17.9	242.5	1.04	20.2	64.8	5.06
1138	5.17	18.0	240.3	0.55	19.11	71.1	5.10
1139	5.12	18.0	227.3	0.42	21.4	75.0	5.12
1140	5.11	18.1	221.4	0.41	16.14	76.2	5.15
1141	5.10	18.1	220.1	0.40	11.23	77.3	5.21

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.

Signature: [signature] **Date:** 7/17/13
QA/QC Sign Off: [signature] **Date:** 7/15/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-10 **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 5.14 feet
Depth to Bottom: 20.00 feet **Water Column Thickness** 14.86 feet
Well Location: SW of LF behind sed basin
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1120	5.63	16.7	106.9	0.79	10.11	60.0	5.42
1121	5.63	16.0	102.1	0.28	9.81	64.1	5.43
1122	5.34	15.9	101.7	0.19	8.42	61.9	5.47
1123	5.31	15.9	100.9	0.18	8.10	60.4	5.49
1124	5.30	15.9	99.8	0.18	8.43	59.7	5.50
1125	5.29	15.9	98.7	0.18	8.61	58.6	5.51

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.

Signature: [signature] **Date:** 7/17/13
QA/QC Sign Off: [signature] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-11 **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 24.44 feet
Depth to Bottom: 29.30 feet **Water Column Thickness** 4.86 feet
Well Location: West of landfill between perimeter road and constructed wetlands
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1103	5.04	18.7	52.0	4.72	6.21	165.0	24.45
1104	4.81	18.3	51.5	3.25	6.49	184.3	24.49
1105	4.32	18.1	50.7	2.04	7.13	206.4	24.59
1106	4.30	18.1	50.1	1.80	8.12	209.3	24.75
1107	4.31	18.0	49.8	1.80	7.34	211.7	25.01
1108	4.29	18.0	49.7	1.79	8.09	214.6	25.15

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.

Signature: Amanda Freeman **Date:** 7/17/13
QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-13 **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 25.75 feet
Depth to Bottom: 41.60 feet **Water Colnmn Thickness** 15.85 feet
Well Location: W of LF between perimeter road and constructed wetlands
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µs.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1053	4.30	19.2	92.8	6.03	8.15	235.1	25.79
1054	4.27	18.8	92.4	6.09	8.01	249.3	25.80
1055	4.26	18.6	92.2	5.90	8.34	273.7	25.82
1056	4.25	18.6	92.2	5.91	8.43	265.3	25.83
1057	4.25	18.6	92.1	5.91	8.02	268.4	25.84
1058	4.24	18.6	92.0	5.90	8.64	264.3	25.83
1059	4.24	18.6	92.0	5.91	7.92	267.1	25.84

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.

Signature: Amanda Freeman **Date:** 7/17/13
QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-15 **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 28.61 feet
Depth to Bottom: 39.05 feet **Water Column Thickness** 10.44 feet
Well Location: NW of LF behind container storage
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1025	5.31	24.7	91.7	6.24	8.11	167.8	28.68
1026	5.22	22.6	88.0	5.82	7.48	175.3	28.71
1027	5.12	21.7	84.9	5.28	8.09	181.6	28.72
1028	5.00	21.6	84.2	4.96	10.48	183.1	28.75
1029	5.01	21.6	84.0	4.95	12.61	185.2	28.78
1030	5.01	21.6	83.9	4.95	20.92	187.4	28.80

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/2013.

Signature: Amanda Freeman **Date:** 7/17/13
QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-16R **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 12.71 feet
Depth to Bottom: 27.20 feet **Water Column Thickness** 14.49 feet
Well Location: NE corner of LF along perimeter road
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1412	4.51	21.1	33.2	2.45	5.96	201.4	12.80
1413	4.43	19.6	33.1	2.44	6.11	201.9	12.82
1414	4.07	20.0	34.4	1.44	7.12	198.9	12.83
1415	4.06	19.9	33.9	1.07	6.34	197.9	12.85
1416	4.01	19.9	34.1	1.06	8.12	196.2	12.87
1417	4.03	19.8	34.3	1.06	7.42	196.1	12.89

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 90's on 7/17/13.

Signature: Amanda Freeman **Date:** 7/17/13
QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project No. /Task No.:** 894.1301.12.01
Well ID: GW-17 **Sampler(s):** A. Cox/ A. Freeman
Well Diameter: 2.00 inches **Initial Depth to Water:** 31.10 feet
Depth to Bottom: 44.30 feet **Water Column Thickness** 13.20 feet
Well Location: N of LF along perimeter road
Equipment: YSI-Pro, Geo Control Pro Compressor, Water Level Meter, Oakton turbidimeter
Flow rate: 150ml/min
System volume: 150ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1448	4.91	24.6	67.7	3.92	11.38	140.5	31.50
1449	4.86	24.7	68.0	3.69	12.11	152.5	31.57
1450	4.72	23.1	68.8	3.59	9.81	156.5	31.58
1451	4.70	23.2	69.1	3.51	8.72	154.1	31.60
1452	4.71	23.6	69.4	3.50	7.41	156.2	31.61
1453	4.70	23.3	69.9	3.49	8.98	155.3	31.63

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 90's on 7/17/13.

Signature: Amanda Freeman **Date:** 7/17/13
QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

GROUNDWATER SAMPLING LOG

Project Name: Republic- East Carolina **Project No. /Task No.:** 894.1301.12.01
Well ID: PW-1 **Sampler(s):** A. Cox / A. Freeman
Well Diameter: - inches **Initial Depth to Water:** - feet
Depth to Bottom: - feet **Water Column Thickness:** - feet
Well Location: spigot inside pump house back left corner
Equipment: YSI-Pro, Oakton turbidimeter
Flow rate: ml/min
System volume: ml

Time	pH s.u.	Temp. °C	Cond. µ.s.	Dis. O_2 mg/l	Turb. ntu	ORP mv	DTW feet
1208	6.83	22.0	432.9	2.59	8.42	-102.9	-
1213	7.17	19.8	416.6	4.00	6.95	-64.7	-
1218	7.45	19.4	413.0	4.34	6.27	-24.4	-
1223	7.60	19.1	410.1	4.29	6.05	8.6	-

Comments (weather conditions, odor, color, silt, type of sample, etc.):

The weather was partly cloudy with temperatures in the 90's on 7/17/15.

Ran pump for fifteen minutes then sampled @ 1223.

Signature: [signature] **Date:** 7/17/13
QA/QC Sign Off: [signature] **Date:** 7/18/13

Date: 7/17/2013

JOYCE ENGINEERING

LEACHATE SAMPLING LOG

Project Name: Republic- East Carolina LF **Project/Task No.:** 894.1301.12.01

Surface Point ID: Leachate **Sampler(s):** A. Cox / A. Freeman

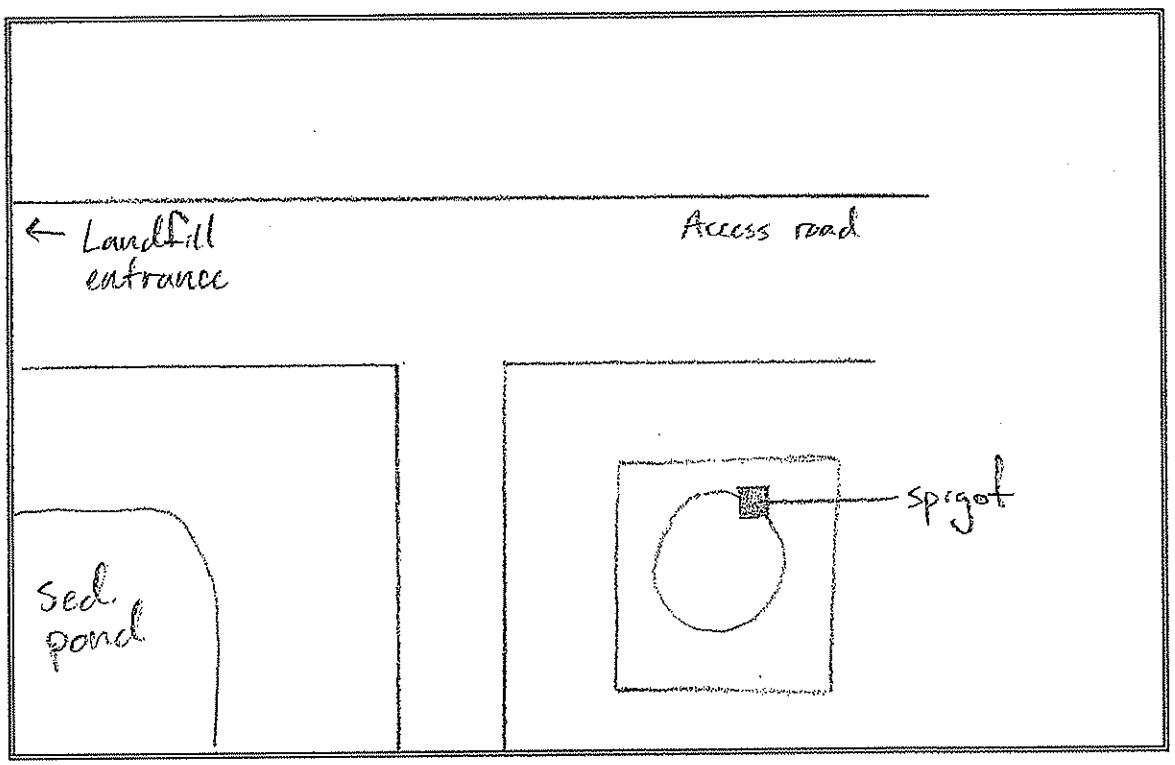
Location: leachate tank located near methane flare

Field Parameters:

Time of Sampling:	1505	
pH:	7.90	
Temperature:	37.1	**(°C)**
Conductivity:	14,908	**(µS)**
Turbidity:	>1000	**(ntu)**
DO:	0.35	**(mg/l)**
ORP:	1.1	**(mV)**

Comments/Sample Description (weather conditions, odor, color, silt, etc.):

The weather was partly cloudy with temperatures in the 90's on 7/17/13.



Signature: Amanda Freeman **Date:** 7/17/13

QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/14/2013

JOYCE ENGINEERING

SURFACE WATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project/Task No.:** 00894.1301.12.01

Surface Point ID: SW-1 **Sampler(s):** A. Cox / A. Freeman

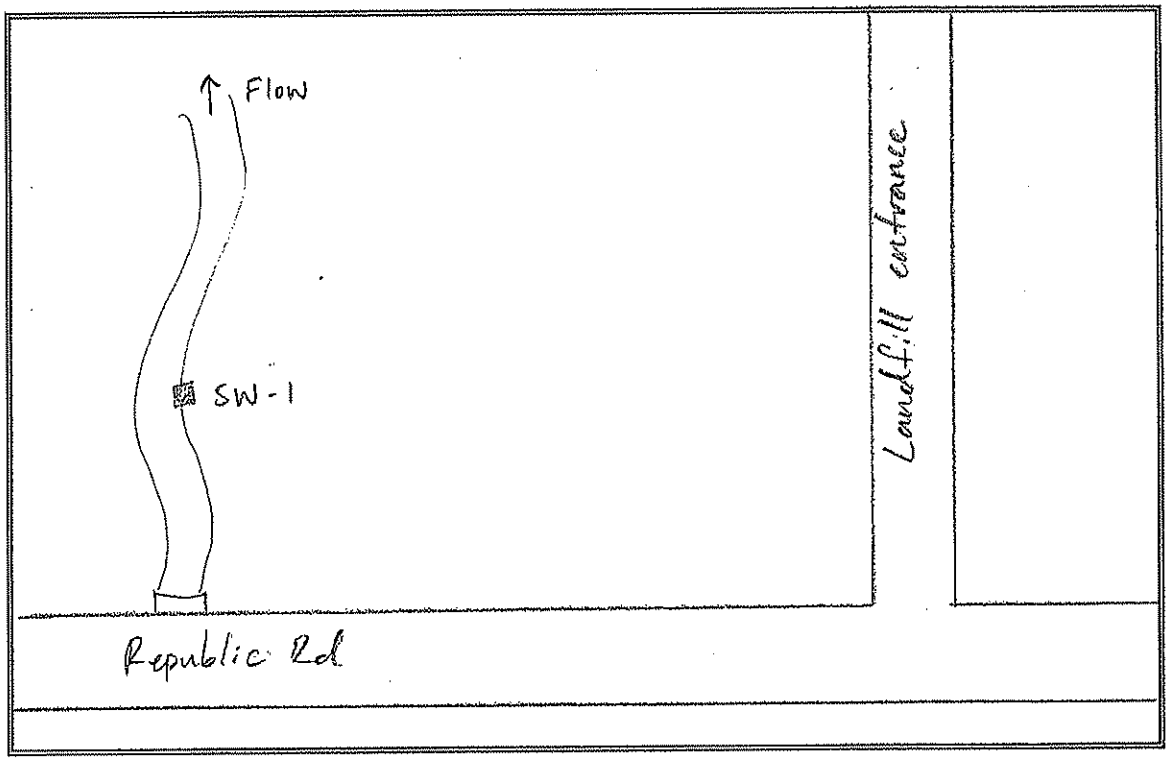
Location: stream along Republican rd. near LF entrance

Field Parameters:

Time of Sampling:	0955	
pH:	4.71	
Temperature:	24.7	(°C)
Conductivity:	57.6	(µS)
Turbidity:	42.6	(ntu)
DO :	3.22	(mg/l)
ORP :	323.9	(mV)

Comments/Sample Description (weather conditions, odor, color, silt, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.



Signature: Amanda Freeman **Date:** 7/17/13

QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

SURFACE WATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project/Task No.:** 894.1301.12.01

Surface Point ID: SW-2 **Sampler(s):** A. Cox/ A. Freeman

Location: behind leachate tanks and sed. pond in trees

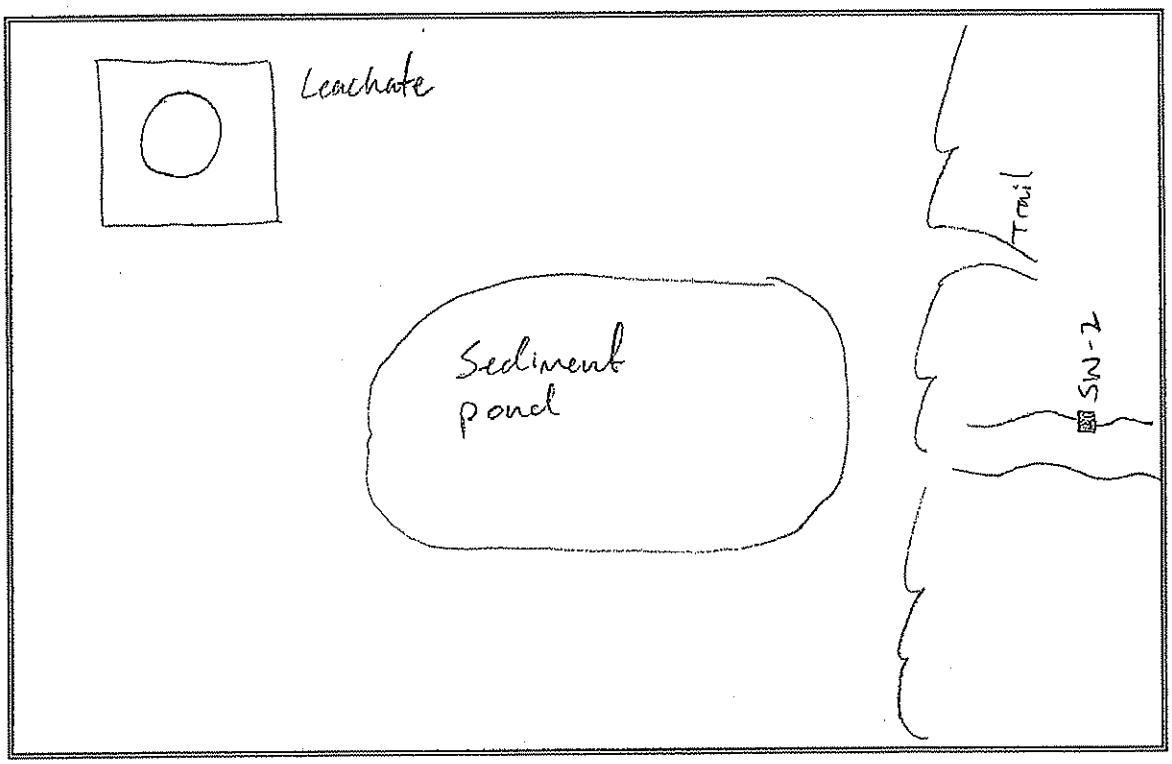
Field Parameters:

Time of Sampling:	-	
pH:	-	
Temperature:	-	(°C)
Conductivity:	-	(µS)
Turbidity:	-	(ntu)
DO :	-	(mg/l)
ORP :	-	(mV)

Comments/Sample Description (weather conditions, odor, color, silt, etc.):

The surface point was dry.

The weather was partly cloudy with temperatures in the 80's on 7/17/13.



Signature: Amanda Freeman **Date:** 7/17/13

QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/17/2013

JOYCE ENGINEERING

SURFACE WATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project/Task No.:** 894.1301.12.01

Surface Point ID: SW-3 **Sampler(s):** A. Cox / A. Freeman

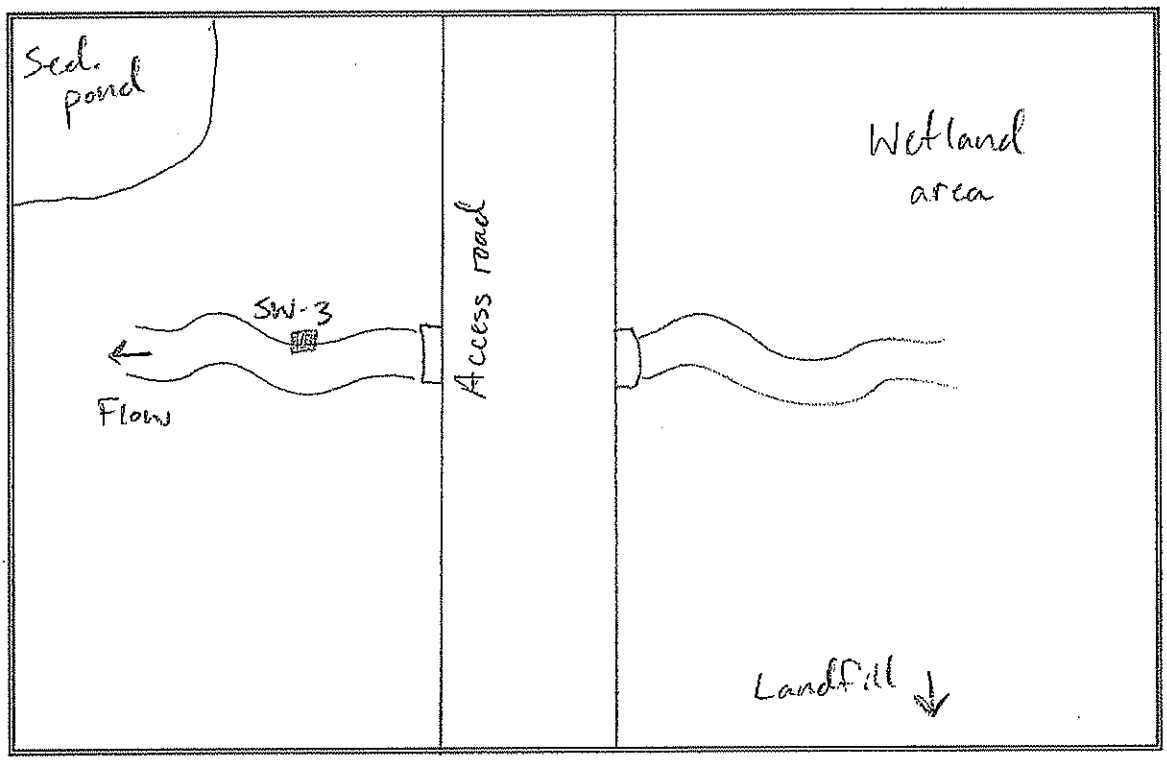
Location: off access road near wetland area

Field Parameters:

Time of Sampling:	1320	
pH:	5.68	
Temperature:	27.7	**(°C)**
Conductivity:	97.4	**(µS)**
Turbidity:	47.6	**(ntu)**
DO :	3.62	**(mg/l)**
ORP :	69.5	**(mV)**

Comments/Sample Description (weather conditions, odor, color, silt, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.



Signature: Amanda Freeman **Date:** 7/17/13

QA/QC Sign Off: [illegible] **Date:** 7/18/13

DATE: 7/172013

JOYCE ENGINEERING

SURFACE WATER SAMPLING LOG

Project Name: Republic- East Carolina LF **Project/Task No.:** 894.1301.12.01

Surface Point ID: SW-4 **Sampler(s):** A. Cox / A. Freeman

Location: returning to LF from SW-3, first right, along right side of road in trees

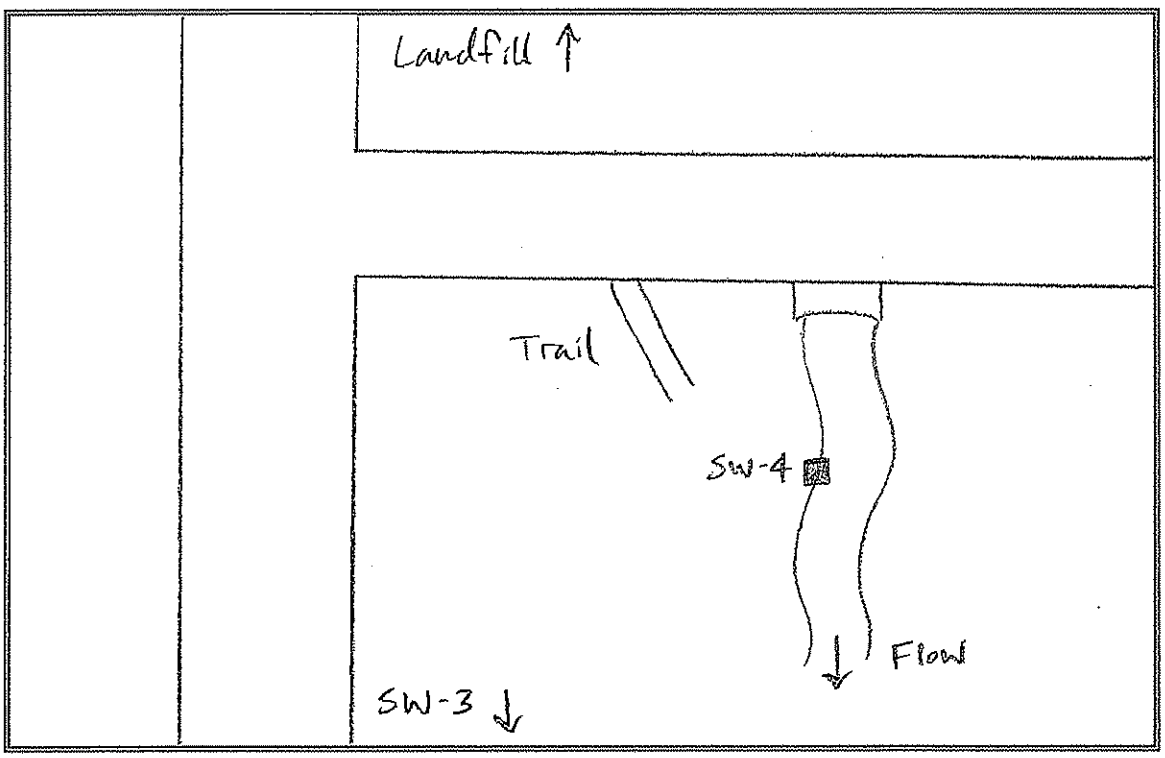
Field Parameters:

Time of Sampling:	-	
pH:	-	
Temperature:	-	(°C)
Conductivity:	-	(µS)
Turbidity:	-	(ntu)
DO :	-	(mg/l)
ORP :	-	(mV)

Comments/Sample Description (weather conditions, odor, color, silt, etc.):

The weather was partly cloudy with temperatures in the 80's on 7/17/13.

No flowing water at sampling point.



Signature: Amanda Freeman **Date:** 7/17/13

QA/QC Sign Off: [illegible] **Date:** 7/18/13

Appendix B

July 2013 Laboratory Analytical Report

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Report Number: AWG0500

Project: East Carolina Regional Landfill

Project #:890-1301-12-01

Prepared For:
Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover, NC 28613

Attention: Mr. Ray Hoffman

July 30, 2013

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call. Analytical Services, Inc. certifies that the following analytical results meet all requirements of the National Environmental Laboratory Accreditation Conference(NELAC).All test results relate only to the samples analyzed.

Approved:

Judy Wagner
Project Manager

This report may not be reproduced, except in full, without written approval from Analytical Services, Inc.

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0803-GW2	AWG0500-01	Ground Water	07/17/13 10:13	07/18/13 09:05
0803-GW7	AWG0500-02	Ground Water	07/17/13 13:01	07/18/13 09:05
0803-GW8	AWG0500-03	Ground Water	07/17/13 11:57	07/18/13 09:05
0803-GW9	AWG0500-04	Ground Water	07/17/13 11:41	07/18/13 09:05
0803-GW10	AWG0500-05	Ground Water	07/17/13 11:25	07/18/13 09:05
0803-GW11	AWG0500-06	Ground Water	07/17/13 11:08	07/18/13 09:05
0803-GW13	AWG0500-07	Ground Water	07/17/13 10:59	07/18/13 09:05
0803-GW15	AWG0500-08	Ground Water	07/17/13 10:30	07/18/13 09:05
0803-GW16R	AWG0500-09	Ground Water	07/17/13 14:17	07/18/13 09:05
0803-GW17	AWG0500-10	Ground Water	07/17/13 14:53	07/18/13 09:05
0803-PW1	AWG0500-11	Ground Water	07/17/13 12:23	07/18/13 09:05
0803-Field Blank	AWG0500-12	Water	07/17/13 15:20	07/18/13 09:05
0803-Trip Blank	AWG0500-13	Water	07/17/13 05:00	07/18/13 09:05
0803-SW1	AWG0500-14	Surface Water	07/17/13 09:55	07/18/13 09:05
0803-SW3	AWG0500-15	Surface Water	07/17/13 13:20	07/18/13 09:05

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW2
Lab No: AWG0500-01
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:13
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	2.85	6.00	1	ug/L	B-01, J	0.22	7440-36-0	07/24/13 08:05	07/24/13 22:40	3070531
Arsenic	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/24/13 22:40	3070531
Barium	EPA 6020A	EPA 3005A	426	100	1	ug/L		0.25	7440-39-3	07/24/13 08:05	07/24/13 22:40	3070531
Beryllium	EPA 6020A	EPA 3005A	1.23	1.00	1	ug/L		0.11	7440-41-7	07/24/13 08:05	07/24/13 22:40	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/24/13 22:40	3070531
Chromium	EPA 6020A	EPA 3005A	3.22	10.0	1	ug/L	J	0.58	7440-47-3	07/24/13 08:05	07/24/13 22:40	3070531
Cobalt	EPA 6020A	EPA 3005A	10.8	10.0	1	ug/L		0.12	7440-48-4	07/24/13 08:05	07/24/13 22:40	3070531
Copper	EPA 6020A	EPA 3005A	1.67	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 22:40	3070531
Lead	EPA 6020A	EPA 3005A	0.68	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 22:40	3070531
Nickel	EPA 6020A	EPA 3005A	7.88	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 22:40	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 22:40	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/24/13 22:40	3070531
Thallium	EPA 6020A	EPA 3005A	0.15	5.50	1	ug/L	J	0.06	7440-28-0	07/24/13 08:05	07/24/13 22:40	3070531
Vanadium	EPA 6020A	EPA 3005A	3.64	25.0	1	ug/L	J	1.97	7440-62-2	07/24/13 08:05	07/24/13 22:40	3070531
Zinc	EPA 6020A	EPA 3005A	11.5	10.0	1	ug/L		0.87	7440-66-6	07/24/13 08:05	07/24/13 22:40	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/18/13 13:00	07/18/13 18:41	3070383
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/18/13 13:00	07/18/13 18:41	3070383
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/18/13 13:00	07/18/13 18:41	3070383
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/18/13 13:00	07/18/13 18:41	3070383
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/18/13 13:00	07/18/13 18:41	3070383

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW2
Lab No: AWG0500-01
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:13
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/18/13 13:00	07/18/13 18:41	3070383
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/18/13 13:00	07/18/13 18:41	3070383
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/18/13 13:00	07/18/13 18:41	3070383
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/18/13 13:00	07/18/13 18:41	3070383
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/18/13 13:00	07/18/13 18:41	3070383
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/18/13 13:00	07/18/13 18:41	3070383
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/18/13 13:00	07/18/13 18:41	3070383
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/18/13 13:00	07/18/13 18:41	3070383
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/18/13 13:00	07/18/13 18:41	3070383
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/18/13 13:00	07/18/13 18:41	3070383
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/18/13 13:00	07/18/13 18:41	3070383
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/18/13 13:00	07/18/13 18:41	3070383
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/18/13 13:00	07/18/13 18:41	3070383
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/18/13 13:00	07/18/13 18:41	3070383
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/18/13 13:00	07/18/13 18:41	3070383
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/18/13 13:00	07/18/13 18:41	3070383
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/18/13 13:00	07/18/13 18:41	3070383
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/18/13 13:00	07/18/13 18:41	3070383
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/18/13 13:00	07/18/13 18:41	3070383
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/18/13 13:00	07/18/13 18:41	3070383
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/18/13 13:00	07/18/13 18:41	3070383
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/18/13 13:00	07/18/13 18:41	3070383

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW2
Lab No: AWG0500-01
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:13
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/18/13 13:00	07/18/13 18:41	3070383
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/18/13 13:00	07/18/13 18:41	3070383
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/18/13 13:00	07/18/13 18:41	3070383
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/18/13 13:00	07/18/13 18:41	3070383
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/18/13 13:00	07/18/13 18:41	3070383
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/18/13 13:00	07/18/13 18:41	3070383
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/18/13 13:00	07/18/13 18:41	3070383
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/18/13 13:00	07/18/13 18:41	3070383
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/18/13 13:00	07/18/13 18:41	3070383
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/18/13 13:00	07/18/13 18:41	3070383
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/18/13 13:00	07/18/13 18:41	3070383
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/18/13 13:00	07/18/13 18:41	3070383
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/18/13 13:00	07/18/13 18:41	3070383
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/18/13 13:00	07/18/13 18:41	3070383
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/18/13 13:00	07/18/13 18:41	3070383
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/18/13 13:00	07/18/13 18:41	3070383
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/18/13 13:00	07/18/13 18:41	3070383
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/18/13 13:00	07/18/13 18:41	3070383
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/18/13 13:00	07/18/13 18:41	3070383
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/18/13 13:00	07/18/13 18:41	3070383
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	07/18/13 13:00	07/18/13 18:41	3070383

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW2
Lab No: AWG0500-01
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:13
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	109 %		78-120				17060-07-0	07/18/13 13:00	07/18/13 18:41	3070383
Surr: Toluene-d8	EPA 8260B	EPA 5030B	99 %		80-120				2037-26-5	07/18/13 13:00	07/18/13 18:41	3070383
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	07/18/13 13:00	07/18/13 18:41	3070383

ASI

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110 Technology Parkway, Norcross, GA 30092

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW7
Lab No: AWG0500-02
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 13:01
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	0.97	6.00	1	ug/L	B-01, J	0.22	7440-36-0	07/24/13 08:05	07/24/13 22:46	3070531
Arsenic	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/24/13 22:46	3070531
Barium	EPA 6020A	EPA 3005A	72.0	100	1	ug/L	J	0.25	7440-39-3	07/24/13 08:05	07/24/13 22:46	3070531
Beryllium	EPA 6020A	EPA 3005A	2.19	1.00	1	ug/L		0.11	7440-41-7	07/24/13 08:05	07/24/13 22:46	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/24/13 22:46	3070531
Chromium	EPA 6020A	EPA 3005A	2.53	10.0	1	ug/L	J	0.58	7440-47-3	07/24/13 08:05	07/24/13 22:46	3070531
Cobalt	EPA 6020A	EPA 3005A	28.0	10.0	1	ug/L		0.12	7440-48-4	07/24/13 08:05	07/24/13 22:46	3070531
Copper	EPA 6020A	EPA 3005A	1.18	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 22:46	3070531
Lead	EPA 6020A	EPA 3005A	1.55	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 22:46	3070531
Nickel	EPA 6020A	EPA 3005A	9.55	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 22:46	3070531
Selenium	EPA 6020A	EPA 3005A	1.44	10.0	1	ug/L	J	0.77	7782-49-2	07/24/13 08:05	07/24/13 22:46	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/24/13 22:46	3070531
Thallium	EPA 6020A	EPA 3005A	0.10	5.50	1	ug/L	J	0.06	7440-28-0	07/24/13 08:05	07/24/13 22:46	3070531
Vanadium	EPA 6020A	EPA 3005A	ND	25.0	1	ug/L		1.97	7440-62-2	07/24/13 08:05	07/24/13 22:46	3070531
Zinc	EPA 6020A	EPA 3005A	5.40	10.0	1	ug/L	J	0.87	7440-66-6	07/24/13 08:05	07/24/13 22:46	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/18/13 13:00	07/18/13 19:09	3070383
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/18/13 13:00	07/18/13 19:09	3070383
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/18/13 13:00	07/18/13 19:09	3070383
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/18/13 13:00	07/18/13 19:09	3070383
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/18/13 13:00	07/18/13 19:09	3070383

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW7
Lab No: AWG0500-02
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 13:01
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/18/13 13:00	07/18/13 19:09	3070383
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/18/13 13:00	07/18/13 19:09	3070383
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/18/13 13:00	07/18/13 19:09	3070383
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/18/13 13:00	07/18/13 19:09	3070383
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/18/13 13:00	07/18/13 19:09	3070383
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/18/13 13:00	07/18/13 19:09	3070383
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/18/13 13:00	07/18/13 19:09	3070383
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/18/13 13:00	07/18/13 19:09	3070383
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/18/13 13:00	07/18/13 19:09	3070383
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/18/13 13:00	07/18/13 19:09	3070383
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/18/13 13:00	07/18/13 19:09	3070383
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/18/13 13:00	07/18/13 19:09	3070383
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/18/13 13:00	07/18/13 19:09	3070383
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/18/13 13:00	07/18/13 19:09	3070383
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/18/13 13:00	07/18/13 19:09	3070383
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/18/13 13:00	07/18/13 19:09	3070383
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/18/13 13:00	07/18/13 19:09	3070383
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/18/13 13:00	07/18/13 19:09	3070383
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/18/13 13:00	07/18/13 19:09	3070383
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/18/13 13:00	07/18/13 19:09	3070383
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/18/13 13:00	07/18/13 19:09	3070383
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/18/13 13:00	07/18/13 19:09	3070383

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110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW7
Lab No: AWG0500-02
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 13:01
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/18/13 13:00	07/18/13 19:09	3070383
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/18/13 13:00	07/18/13 19:09	3070383
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/18/13 13:00	07/18/13 19:09	3070383
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/18/13 13:00	07/18/13 19:09	3070383
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/18/13 13:00	07/18/13 19:09	3070383
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/18/13 13:00	07/18/13 19:09	3070383
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/18/13 13:00	07/18/13 19:09	3070383
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/18/13 13:00	07/18/13 19:09	3070383
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/18/13 13:00	07/18/13 19:09	3070383
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/18/13 13:00	07/18/13 19:09	3070383
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/18/13 13:00	07/18/13 19:09	3070383
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/18/13 13:00	07/18/13 19:09	3070383
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/18/13 13:00	07/18/13 19:09	3070383
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/18/13 13:00	07/18/13 19:09	3070383
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/18/13 13:00	07/18/13 19:09	3070383
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/18/13 13:00	07/18/13 19:09	3070383
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/18/13 13:00	07/18/13 19:09	3070383
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/18/13 13:00	07/18/13 19:09	3070383
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/18/13 13:00	07/18/13 19:09	3070383
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/18/13 13:00	07/18/13 19:09	3070383
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	95 %		80-120				1868-53-7	07/18/13 13:00	07/18/13 19:09	3070383

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Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW7
Lab No: AWG0500-02
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 13:01
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	108 %		78-120				17060-07-0	07/18/13 13:00	07/18/13 19:09	3070383
Surr: Toluene-d8	EPA 8260B	EPA 5030B	99 %		80-120				2037-26-5	07/18/13 13:00	07/18/13 19:09	3070383
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	105 %		80-120				460-00-4	07/18/13 13:00	07/18/13 19:09	3070383

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW8
Lab No: AWG0500-03
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:57
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	0.55	6.00	1	ug/L	B-01, J	0.22	7440-36-0	07/24/13 08:05	07/24/13 22:52	3070531
Arsenic	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/24/13 22:52	3070531
Barium	EPA 6020A	EPA 3005A	86.9	100	1	ug/L	J	0.25	7440-39-3	07/24/13 08:05	07/24/13 22:52	3070531
Beryllium	EPA 6020A	EPA 3005A	0.57	1.00	1	ug/L	J	0.11	7440-41-7	07/24/13 08:05	07/24/13 22:52	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/24/13 22:52	3070531
Chromium	EPA 6020A	EPA 3005A	1.96	10.0	1	ug/L	J	0.58	7440-47-3	07/24/13 08:05	07/24/13 22:52	3070531
Cobalt	EPA 6020A	EPA 3005A	2.50	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/24/13 22:52	3070531
Copper	EPA 6020A	EPA 3005A	1.05	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 22:52	3070531
Lead	EPA 6020A	EPA 3005A	0.42	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 22:52	3070531
Nickel	EPA 6020A	EPA 3005A	2.48	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 22:52	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 22:52	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/24/13 22:52	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 22:52	3070531
Vanadium	EPA 6020A	EPA 3005A	ND	25.0	1	ug/L		1.97	7440-62-2	07/24/13 08:05	07/24/13 22:52	3070531
Zinc	EPA 6020A	EPA 3005A	3.49	10.0	1	ug/L	J	0.87	7440-66-6	07/24/13 08:05	07/24/13 22:52	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/18/13 13:00	07/18/13 19:37	3070383
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/18/13 13:00	07/18/13 19:37	3070383
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/18/13 13:00	07/18/13 19:37	3070383
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/18/13 13:00	07/18/13 19:37	3070383
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/18/13 13:00	07/18/13 19:37	3070383

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW8
Lab No: AWG0500-03
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:57
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/18/13 13:00	07/18/13 19:37	3070383
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/18/13 13:00	07/18/13 19:37	3070383
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/18/13 13:00	07/18/13 19:37	3070383
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/18/13 13:00	07/18/13 19:37	3070383
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/18/13 13:00	07/18/13 19:37	3070383
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/18/13 13:00	07/18/13 19:37	3070383
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/18/13 13:00	07/18/13 19:37	3070383
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/18/13 13:00	07/18/13 19:37	3070383
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/18/13 13:00	07/18/13 19:37	3070383
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/18/13 13:00	07/18/13 19:37	3070383
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/18/13 13:00	07/18/13 19:37	3070383
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/18/13 13:00	07/18/13 19:37	3070383
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/18/13 13:00	07/18/13 19:37	3070383
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/18/13 13:00	07/18/13 19:37	3070383
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/18/13 13:00	07/18/13 19:37	3070383
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/18/13 13:00	07/18/13 19:37	3070383
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/18/13 13:00	07/18/13 19:37	3070383
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/18/13 13:00	07/18/13 19:37	3070383
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/18/13 13:00	07/18/13 19:37	3070383
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/18/13 13:00	07/18/13 19:37	3070383
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/18/13 13:00	07/18/13 19:37	3070383
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/18/13 13:00	07/18/13 19:37	3070383

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW8
Lab No: AWG0500-03
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:57
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/18/13 13:00	07/18/13 19:37	3070383
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/18/13 13:00	07/18/13 19:37	3070383
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/18/13 13:00	07/18/13 19:37	3070383
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/18/13 13:00	07/18/13 19:37	3070383
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/18/13 13:00	07/18/13 19:37	3070383
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/18/13 13:00	07/18/13 19:37	3070383
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/18/13 13:00	07/18/13 19:37	3070383
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/18/13 13:00	07/18/13 19:37	3070383
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/18/13 13:00	07/18/13 19:37	3070383
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/18/13 13:00	07/18/13 19:37	3070383
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/18/13 13:00	07/18/13 19:37	3070383
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/18/13 13:00	07/18/13 19:37	3070383
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/18/13 13:00	07/18/13 19:37	3070383
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/18/13 13:00	07/18/13 19:37	3070383
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/18/13 13:00	07/18/13 19:37	3070383
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/18/13 13:00	07/18/13 19:37	3070383
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/18/13 13:00	07/18/13 19:37	3070383
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/18/13 13:00	07/18/13 19:37	3070383
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/18/13 13:00	07/18/13 19:37	3070383
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/18/13 13:00	07/18/13 19:37	3070383
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	07/18/13 13:00	07/18/13 19:37	3070383

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW8
Lab No: AWG0500-03
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:57
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	108 %		78-120				17060-07-0	07/18/13 13:00	07/18/13 19:37	3070383
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	07/18/13 13:00	07/18/13 19:37	3070383
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	07/18/13 13:00	07/18/13 19:37	3070383

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Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW9
Lab No: AWG0500-04
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:41
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	0.34	6.00	1	ug/L	B-01, J	0.22	7440-36-0	07/24/13 08:05	07/24/13 22:58	3070531
Arsenic	EPA 6020A	EPA 3005A	3.68	10.0	1	ug/L	J	0.78	7440-38-2	07/24/13 08:05	07/24/13 22:58	3070531
Barium	EPA 6020A	EPA 3005A	186	100	1	ug/L		0.25	7440-39-3	07/24/13 08:05	07/24/13 22:58	3070531
Beryllium	EPA 6020A	EPA 3005A	1.34	1.00	1	ug/L		0.11	7440-41-7	07/24/13 08:05	07/24/13 22:58	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/24/13 22:58	3070531
Chromium	EPA 6020A	EPA 3005A	2.55	10.0	1	ug/L	J	0.58	7440-47-3	07/24/13 08:05	07/24/13 22:58	3070531
Cobalt	EPA 6020A	EPA 3005A	2.67	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/24/13 22:58	3070531
Copper	EPA 6020A	EPA 3005A	1.15	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 22:58	3070531
Lead	EPA 6020A	EPA 3005A	0.76	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 22:58	3070531
Nickel	EPA 6020A	EPA 3005A	6.23	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 22:58	3070531
Selenium	EPA 6020A	EPA 3005A	1.09	10.0	1	ug/L	J	0.77	7782-49-2	07/24/13 08:05	07/24/13 22:58	3070531
Silver	EPA 6020A	EPA 3005A	0.27	10.0	1	ug/L	J	0.24	7440-22-4	07/24/13 08:05	07/24/13 22:58	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 22:58	3070531
Vanadium	EPA 6020A	EPA 3005A	11.8	25.0	1	ug/L	J	1.97	7440-62-2	07/24/13 08:05	07/24/13 22:58	3070531
Zinc	EPA 6020A	EPA 3005A	11.2	10.0	1	ug/L		0.87	7440-66-6	07/24/13 08:05	07/24/13 22:58	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/18/13 13:00	07/18/13 20:05	3070383
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/18/13 13:00	07/18/13 20:05	3070383
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/18/13 13:00	07/18/13 20:05	3070383
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/18/13 13:00	07/18/13 20:05	3070383
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/18/13 13:00	07/18/13 20:05	3070383

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW9
Lab No: AWG0500-04
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:41
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/18/13 13:00	07/18/13 20:05	3070383
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/18/13 13:00	07/18/13 20:05	3070383
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/18/13 13:00	07/18/13 20:05	3070383
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/18/13 13:00	07/18/13 20:05	3070383
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/18/13 13:00	07/18/13 20:05	3070383
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/18/13 13:00	07/18/13 20:05	3070383
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/18/13 13:00	07/18/13 20:05	3070383
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/18/13 13:00	07/18/13 20:05	3070383
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/18/13 13:00	07/18/13 20:05	3070383
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/18/13 13:00	07/18/13 20:05	3070383
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/18/13 13:00	07/18/13 20:05	3070383
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/18/13 13:00	07/18/13 20:05	3070383
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/18/13 13:00	07/18/13 20:05	3070383
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/18/13 13:00	07/18/13 20:05	3070383
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/18/13 13:00	07/18/13 20:05	3070383
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/18/13 13:00	07/18/13 20:05	3070383
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/18/13 13:00	07/18/13 20:05	3070383
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/18/13 13:00	07/18/13 20:05	3070383
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/18/13 13:00	07/18/13 20:05	3070383
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/18/13 13:00	07/18/13 20:05	3070383
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/18/13 13:00	07/18/13 20:05	3070383
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/18/13 13:00	07/18/13 20:05	3070383

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW9
Lab No: AWG0500-04
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:41
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/18/13 13:00	07/18/13 20:05	3070383
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/18/13 13:00	07/18/13 20:05	3070383
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/18/13 13:00	07/18/13 20:05	3070383
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/18/13 13:00	07/18/13 20:05	3070383
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/18/13 13:00	07/18/13 20:05	3070383
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/18/13 13:00	07/18/13 20:05	3070383
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/18/13 13:00	07/18/13 20:05	3070383
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/18/13 13:00	07/18/13 20:05	3070383
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/18/13 13:00	07/18/13 20:05	3070383
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/18/13 13:00	07/18/13 20:05	3070383
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/18/13 13:00	07/18/13 20:05	3070383
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/18/13 13:00	07/18/13 20:05	3070383
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/18/13 13:00	07/18/13 20:05	3070383
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/18/13 13:00	07/18/13 20:05	3070383
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/18/13 13:00	07/18/13 20:05	3070383
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/18/13 13:00	07/18/13 20:05	3070383
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/18/13 13:00	07/18/13 20:05	3070383
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/18/13 13:00	07/18/13 20:05	3070383
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/18/13 13:00	07/18/13 20:05	3070383
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/18/13 13:00	07/18/13 20:05	3070383
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	95 %		80-120				1868-53-7	07/18/13 13:00	07/18/13 20:05	3070383

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW9
Lab No: AWG0500-04
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:41
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	108 %		78-120				17060-07-0	07/18/13 13:00	07/18/13 20:05	3070383
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	07/18/13 13:00	07/18/13 20:05	3070383
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	07/18/13 13:00	07/18/13 20:05	3070383

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110 Technology Parkway, Norcross, GA 30092

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW10
Lab No: AWG0500-05
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:25
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	ND	6.00	1	ug/L		0.22	7440-36-0	07/24/13 08:05	07/24/13 23:04	3070531
Arsenic	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/24/13 23:04	3070531
Barium	EPA 6020A	EPA 3005A	91.2	100	1	ug/L	J	0.25	7440-39-3	07/24/13 08:05	07/24/13 23:04	3070531
Beryllium	EPA 6020A	EPA 3005A	0.12	1.00	1	ug/L	J	0.11	7440-41-7	07/24/13 08:05	07/24/13 23:04	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/24/13 23:04	3070531
Chromium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.58	7440-47-3	07/24/13 08:05	07/24/13 23:04	3070531
Cobalt	EPA 6020A	EPA 3005A	1.14	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/24/13 23:04	3070531
Copper	EPA 6020A	EPA 3005A	0.63	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 23:04	3070531
Lead	EPA 6020A	EPA 3005A	0.11	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 23:04	3070531
Nickel	EPA 6020A	EPA 3005A	1.52	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 23:04	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 23:04	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/24/13 23:04	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 23:04	3070531
Vanadium	EPA 6020A	EPA 3005A	ND	25.0	1	ug/L		1.97	7440-62-2	07/24/13 08:05	07/24/13 23:04	3070531
Zinc	EPA 6020A	EPA 3005A	1.66	10.0	1	ug/L	J	0.87	7440-66-6	07/24/13 08:05	07/24/13 23:04	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 13:54	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 13:54	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 13:54	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 13:54	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 13:54	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW10
Lab No: AWG0500-05
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:25
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 13:54	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 13:54	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 13:54	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 13:54	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 13:54	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 13:54	3070415
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 09:46	07/19/13 13:54	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 13:54	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 13:54	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 13:54	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 13:54	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 13:54	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 13:54	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 13:54	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 13:54	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 13:54	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 13:54	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 13:54	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 13:54	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 13:54	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 13:54	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 13:54	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW10
Lab No: AWG0500-05
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:25
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 13:54	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 13:54	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 13:54	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 13:54	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 13:54	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 13:54	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 13:54	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 13:54	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 13:54	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 13:54	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 13:54	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 13:54	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 13:54	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 13:54	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 13:54	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 13:54	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 13:54	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 13:54	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 13:54	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 13:54	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 13:54	3070415

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Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW10
Lab No: AWG0500-05
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:25
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	107 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 13:54	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 13:54	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	07/19/13 09:46	07/19/13 13:54	3070415

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW11
Lab No: AWG0500-06
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:08
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	0.58	6.00	1	ug/L	B-01, J	0.22	7440-36-0	07/24/13 08:05	07/24/13 23:20	3070531
Arsenic	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/24/13 23:20	3070531
Barium	EPA 6020A	EPA 3005A	21.2	100	1	ug/L	J	0.25	7440-39-3	07/24/13 08:05	07/24/13 23:20	3070531
Beryllium	EPA 6020A	EPA 3005A	0.36	1.00	1	ug/L	J	0.11	7440-41-7	07/24/13 08:05	07/24/13 23:20	3070531
Cadmium	EPA 6020A	EPA 3005A	0.19	1.00	1	ug/L	J	0.06	7440-43-9	07/24/13 08:05	07/24/13 23:20	3070531
Chromium	EPA 6020A	EPA 3005A	4.64	10.0	1	ug/L	J	0.58	7440-47-3	07/24/13 08:05	07/24/13 23:20	3070531
Cobalt	EPA 6020A	EPA 3005A	0.95	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/24/13 23:20	3070531
Copper	EPA 6020A	EPA 3005A	1.03	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 23:20	3070531
Lead	EPA 6020A	EPA 3005A	0.15	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 23:20	3070531
Nickel	EPA 6020A	EPA 3005A	1.43	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 23:20	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 23:20	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/24/13 23:20	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 23:20	3070531
Vanadium	EPA 6020A	EPA 3005A	ND	25.0	1	ug/L		1.97	7440-62-2	07/24/13 08:05	07/24/13 23:20	3070531
Zinc	EPA 6020A	EPA 3005A	3.98	10.0	1	ug/L	J	0.87	7440-66-6	07/24/13 08:05	07/24/13 23:20	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 14:22	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 14:22	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 14:22	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 14:22	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 14:22	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW11
Lab No: AWG0500-06
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:08
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 14:22	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 14:22	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 14:22	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 14:22	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 14:22	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 14:22	3070415
Chloroform	EPA 8260B	EPA 5030B	0.5	5.0	1	ug/L	J	0.3	67-66-3	07/19/13 09:46	07/19/13 14:22	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 14:22	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 14:22	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 14:22	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 14:22	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 14:22	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 14:22	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 14:22	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 14:22	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 14:22	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 14:22	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 14:22	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 14:22	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 14:22	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 14:22	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 14:22	3070415

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW11
Lab No: AWG0500-06
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:08
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 14:22	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 14:22	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 14:22	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 14:22	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 14:22	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 14:22	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 14:22	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 14:22	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 14:22	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 14:22	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 14:22	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 14:22	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 14:22	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 14:22	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 14:22	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 14:22	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 14:22	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 14:22	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 14:22	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 14:22	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	99 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 14:22	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW11
Lab No: AWG0500-06
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 11:08
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	117 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 14:22	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 14:22	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	104 %		80-120				460-00-4	07/19/13 09:46	07/19/13 14:22	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW13
Lab No: AWG0500-07
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:59
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	0.28	6.00	1	ug/L	B-01, J	0.22	7440-36-0	07/24/13 08:05	07/24/13 23:26	3070531
Arsenic	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/24/13 23:26	3070531
Barium	EPA 6020A	EPA 3005A	318	100	1	ug/L		0.25	7440-39-3	07/24/13 08:05	07/24/13 23:26	3070531
Beryllium	EPA 6020A	EPA 3005A	0.64	1.00	1	ug/L	J	0.11	7440-41-7	07/24/13 08:05	07/24/13 23:26	3070531
Cadmium	EPA 6020A	EPA 3005A	0.14	1.00	1	ug/L	J	0.06	7440-43-9	07/24/13 08:05	07/24/13 23:26	3070531
Chromium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.58	7440-47-3	07/24/13 08:05	07/24/13 23:26	3070531
Cobalt	EPA 6020A	EPA 3005A	2.89	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/24/13 23:26	3070531
Copper	EPA 6020A	EPA 3005A	0.39	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 23:26	3070531
Lead	EPA 6020A	EPA 3005A	0.18	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 23:26	3070531
Nickel	EPA 6020A	EPA 3005A	2.75	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 23:26	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 23:26	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/24/13 23:26	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 23:26	3070531
Vanadium	EPA 6020A	EPA 3005A	2.29	25.0	1	ug/L	J	1.97	7440-62-2	07/24/13 08:05	07/24/13 23:26	3070531
Zinc	EPA 6020A	EPA 3005A	9.59	10.0	1	ug/L	J	0.87	7440-66-6	07/24/13 08:05	07/24/13 23:26	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 14:50	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 14:50	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 14:50	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 14:50	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 14:50	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW13
Lab No: AWG0500-07
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:59
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 14:50	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 14:50	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 14:50	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 14:50	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 14:50	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 14:50	3070415
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 09:46	07/19/13 14:50	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 14:50	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 14:50	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 14:50	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 14:50	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 14:50	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 14:50	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 14:50	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 14:50	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 14:50	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 14:50	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 14:50	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 14:50	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 14:50	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 14:50	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 14:50	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW13
Lab No: AWG0500-07
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:59
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 14:50	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 14:50	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 14:50	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 14:50	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 14:50	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 14:50	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 14:50	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 14:50	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 14:50	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 14:50	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 14:50	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 14:50	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 14:50	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 14:50	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 14:50	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 14:50	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 14:50	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 14:50	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 14:50	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 14:50	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 14:50	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW13
Lab No: AWG0500-07
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:59
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	106 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 14:50	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	97 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 14:50	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	07/19/13 09:46	07/19/13 14:50	3070415

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110 Technology Parkway, Norcross, GA 30092

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW15
Lab No: AWG0500-08
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:30
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	ND	6.00	1	ug/L		0.22	7440-36-0	07/24/13 08:05	07/24/13 23:32	3070531
Arsenic	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/24/13 23:32	3070531
Barium	EPA 6020A	EPA 3005A	154	100	1	ug/L		0.25	7440-39-3	07/24/13 08:05	07/24/13 23:32	3070531
Beryllium	EPA 6020A	EPA 3005A	1.05	1.00	1	ug/L		0.11	7440-41-7	07/24/13 08:05	07/24/13 23:32	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/24/13 23:32	3070531
Chromium	EPA 6020A	EPA 3005A	9.50	10.0	1	ug/L	J	0.58	7440-47-3	07/24/13 08:05	07/24/13 23:32	3070531
Cobalt	EPA 6020A	EPA 3005A	6.64	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/24/13 23:32	3070531
Copper	EPA 6020A	EPA 3005A	3.59	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 23:32	3070531
Lead	EPA 6020A	EPA 3005A	3.59	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 23:32	3070531
Nickel	EPA 6020A	EPA 3005A	5.84	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 23:32	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 23:32	3070531
Silver	EPA 6020A	EPA 3005A	1.64	10.0	1	ug/L	J	0.24	7440-22-4	07/24/13 08:05	07/24/13 23:32	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 23:32	3070531
Vanadium	EPA 6020A	EPA 3005A	15.3	25.0	1	ug/L	J	1.97	7440-62-2	07/24/13 08:05	07/24/13 23:32	3070531
Zinc	EPA 6020A	EPA 3005A	13.0	10.0	1	ug/L		0.87	7440-66-6	07/24/13 08:05	07/24/13 23:32	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 15:18	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 15:18	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 15:18	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 15:18	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 15:18	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW15
Lab No: AWG0500-08
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:30
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 15:18	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 15:18	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 15:18	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 15:18	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 15:18	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 15:18	3070415
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 09:46	07/19/13 15:18	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 15:18	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 15:18	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 15:18	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 15:18	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 15:18	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 15:18	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 15:18	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 15:18	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 15:18	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 15:18	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 15:18	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 15:18	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 15:18	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 15:18	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 15:18	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW15
Lab No: AWG0500-08
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:30
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 15:18	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 15:18	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 15:18	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 15:18	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 15:18	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 15:18	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 15:18	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 15:18	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 15:18	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 15:18	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 15:18	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 15:18	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 15:18	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 15:18	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 15:18	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 15:18	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 15:18	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 15:18	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 15:18	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 15:18	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 15:18	3070415

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Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW15
Lab No: AWG0500-08
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 10:30
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	108 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 15:18	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	99 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 15:18	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	07/19/13 09:46	07/19/13 15:18	3070415

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW16R
Lab No: AWG0500-09
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 14:17
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	ND	6.00	1	ug/L		0.22	7440-36-0	07/24/13 08:05	07/24/13 23:38	3070531
Arsenic	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/24/13 23:38	3070531
Barium	EPA 6020A	EPA 3005A	55.3	100	1	ug/L	J	0.25	7440-39-3	07/24/13 08:05	07/24/13 23:38	3070531
Beryllium	EPA 6020A	EPA 3005A	0.15	1.00	1	ug/L	J	0.11	7440-41-7	07/24/13 08:05	07/24/13 23:38	3070531
Cadmium	EPA 6020A	EPA 3005A	0.19	1.00	1	ug/L	J	0.06	7440-43-9	07/24/13 08:05	07/24/13 23:38	3070531
Chromium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.58	7440-47-3	07/24/13 08:05	07/24/13 23:38	3070531
Cobalt	EPA 6020A	EPA 3005A	3.91	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/24/13 23:38	3070531
Copper	EPA 6020A	EPA 3005A	0.91	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 23:38	3070531
Lead	EPA 6020A	EPA 3005A	0.57	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 23:38	3070531
Nickel	EPA 6020A	EPA 3005A	1.31	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 23:38	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 23:38	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/24/13 23:38	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 23:38	3070531
Vanadium	EPA 6020A	EPA 3005A	ND	25.0	1	ug/L		1.97	7440-62-2	07/24/13 08:05	07/24/13 23:38	3070531
Zinc	EPA 6020A	EPA 3005A	5.46	10.0	1	ug/L	J	0.87	7440-66-6	07/24/13 08:05	07/24/13 23:38	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 16:19	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 16:19	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 16:19	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 16:19	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 16:19	3070415

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW16R
Lab No: AWG0500-09
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 14:17
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 16:19	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 16:19	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 16:19	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 16:19	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 16:19	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 16:19	3070415
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 09:46	07/19/13 16:19	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 16:19	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 16:19	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 16:19	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 16:19	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 16:19	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 16:19	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 16:19	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 16:19	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 16:19	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 16:19	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 16:19	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 16:19	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 16:19	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 16:19	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 16:19	3070415

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW16R
Lab No: AWG0500-09
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 14:17
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 16:19	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 16:19	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 16:19	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 16:19	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 16:19	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 16:19	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 16:19	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 16:19	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 16:19	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 16:19	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 16:19	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 16:19	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 16:19	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 16:19	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 16:19	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 16:19	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 16:19	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 16:19	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 16:19	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 16:19	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	100 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 16:19	3070415

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Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW16R
Lab No: AWG0500-09
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 14:17
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	108 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 16:19	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 16:19	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	07/19/13 09:46	07/19/13 16:19	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW17
Lab No: AWG0500-10
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 14:53
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	ND	6.00	1	ug/L		0.22	7440-36-0	07/24/13 08:05	07/24/13 23:44	3070531
Arsenic	EPA 6020A	EPA 3005A	0.93	10.0	1	ug/L	J	0.78	7440-38-2	07/24/13 08:05	07/24/13 23:44	3070531
Barium	EPA 6020A	EPA 3005A	150	100	1	ug/L		0.25	7440-39-3	07/24/13 08:05	07/24/13 23:44	3070531
Beryllium	EPA 6020A	EPA 3005A	0.43	1.00	1	ug/L	J	0.11	7440-41-7	07/24/13 08:05	07/24/13 23:44	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/24/13 23:44	3070531
Chromium	EPA 6020A	EPA 3005A	2.20	10.0	1	ug/L	J	0.58	7440-47-3	07/24/13 08:05	07/24/13 23:44	3070531
Cobalt	EPA 6020A	EPA 3005A	3.79	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/24/13 23:44	3070531
Copper	EPA 6020A	EPA 3005A	1.73	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/24/13 23:44	3070531
Lead	EPA 6020A	EPA 3005A	2.43	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 23:44	3070531
Nickel	EPA 6020A	EPA 3005A	2.04	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/24/13 23:44	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 23:44	3070531
Silver	EPA 6020A	EPA 3005A	5.64	10.0	1	ug/L	J	0.24	7440-22-4	07/24/13 08:05	07/24/13 23:44	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 23:44	3070531
Vanadium	EPA 6020A	EPA 3005A	5.57	25.0	1	ug/L	J	1.97	7440-62-2	07/24/13 08:05	07/24/13 23:44	3070531
Zinc	EPA 6020A	EPA 3005A	7.94	10.0	1	ug/L	J	0.87	7440-66-6	07/24/13 08:05	07/24/13 23:44	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 16:47	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 16:47	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 16:47	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 16:47	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 16:47	3070415

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW17
Lab No: AWG0500-10
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 14:53
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 16:47	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 16:47	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 16:47	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 16:47	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 16:47	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 16:47	3070415
Chloroform	EPA 8260B	EPA 5030B	1.8	5.0	1	ug/L	J	0.3	67-66-3	07/19/13 09:46	07/19/13 16:47	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 16:47	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 16:47	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 16:47	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 16:47	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 16:47	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 16:47	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 16:47	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 16:47	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 16:47	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 16:47	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 16:47	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 16:47	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 16:47	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 16:47	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 16:47	3070415

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110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW17
Lab No: AWG0500-10
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 14:53
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 16:47	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 16:47	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 16:47	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 16:47	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 16:47	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 16:47	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 16:47	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 16:47	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 16:47	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 16:47	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 16:47	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 16:47	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 16:47	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 16:47	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 16:47	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 16:47	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 16:47	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 16:47	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 16:47	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 16:47	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	97 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 16:47	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-GW17
Lab No: AWG0500-10
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 14:53
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	110 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 16:47	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	99 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 16:47	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	105 %		80-120				460-00-4	07/19/13 09:46	07/19/13 16:47	3070415

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-PW1
Lab No: AWG0500-11
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 12:23
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	ND	6.00	1	ug/L		0.22	7440-36-0	07/24/13 08:05	07/24/13 23:50	3070531
Arsenic	EPA 6020A	EPA 3005A	0.92	10.0	1	ug/L	J	0.78	7440-38-2	07/24/13 08:05	07/24/13 23:50	3070531
Barium	EPA 6020A	EPA 3005A	57.6	100	1	ug/L	J	0.25	7440-39-3	07/24/13 08:05	07/24/13 23:50	3070531
Beryllium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.11	7440-41-7	07/24/13 08:05	07/24/13 23:50	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/24/13 23:50	3070531
Chromium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.58	7440-47-3	07/24/13 08:05	07/24/13 23:50	3070531
Cobalt	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.12	7440-48-4	07/24/13 08:05	07/24/13 23:50	3070531
Copper	EPA 6020A	EPA 3005A	15.6	10.0	1	ug/L		0.38	7440-50-8	07/24/13 08:05	07/24/13 23:50	3070531
Lead	EPA 6020A	EPA 3005A	0.79	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/24/13 23:50	3070531
Nickel	EPA 6020A	EPA 3005A	ND	50.0	1	ug/L		0.41	7440-02-0	07/24/13 08:05	07/24/13 23:50	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 23:50	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/24/13 23:50	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 23:50	3070531
Vanadium	EPA 6020A	EPA 3005A	ND	25.0	1	ug/L		1.97	7440-62-2	07/24/13 08:05	07/24/13 23:50	3070531
Zinc	EPA 6020A	EPA 3005A	51.4	10.0	1	ug/L		0.87	7440-66-6	07/24/13 08:05	07/24/13 23:50	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 17:15	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 17:15	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 17:15	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 17:15	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 17:15	3070415

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-PW1
Lab No: AWG0500-11
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 12:23
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 17:15	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 17:15	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 17:15	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 17:15	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 17:15	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 17:15	3070415
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 09:46	07/19/13 17:15	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 17:15	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 17:15	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 17:15	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 17:15	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 17:15	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 17:15	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 17:15	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 17:15	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 17:15	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 17:15	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 17:15	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 17:15	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 17:15	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 17:15	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 17:15	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-PW1
Lab No: AWG0500-11
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 12:23
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 17:15	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 17:15	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 17:15	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 17:15	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 17:15	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 17:15	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 17:15	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 17:15	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 17:15	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 17:15	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 17:15	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 17:15	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 17:15	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 17:15	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 17:15	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 17:15	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 17:15	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 17:15	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 17:15	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 17:15	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	95 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 17:15	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-PW1
Lab No: AWG0500-11
Matrix: Ground Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 12:23
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	109 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 17:15	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	99 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 17:15	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	104 %		80-120				460-00-4	07/19/13 09:46	07/19/13 17:15	3070415

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Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-Field Blank
Lab No: AWG0500-12
Matrix: Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 15:20
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	ND	6.00	1	ug/L		0.22	7440-36-0	07/24/13 08:05	07/24/13 23:56	3070531
Arsenic	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/24/13 23:56	3070531
Barium	EPA 6020A	EPA 3005A	0.37	100	1	ug/L	J	0.25	7440-39-3	07/24/13 08:05	07/24/13 23:56	3070531
Beryllium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.11	7440-41-7	07/24/13 08:05	07/24/13 23:56	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/24/13 23:56	3070531
Chromium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.58	7440-47-3	07/24/13 08:05	07/24/13 23:56	3070531
Cobalt	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.12	7440-48-4	07/24/13 08:05	07/24/13 23:56	3070531
Copper	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.38	7440-50-8	07/24/13 08:05	07/24/13 23:56	3070531
Lead	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.05	7439-92-1	07/24/13 08:05	07/24/13 23:56	3070531
Nickel	EPA 6020A	EPA 3005A	ND	50.0	1	ug/L		0.41	7440-02-0	07/24/13 08:05	07/24/13 23:56	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/24/13 23:56	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/24/13 23:56	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/24/13 23:56	3070531
Vanadium	EPA 6020A	EPA 3005A	ND	25.0	1	ug/L		1.97	7440-62-2	07/24/13 08:05	07/24/13 23:56	3070531
Zinc	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.87	7440-66-6	07/24/13 08:05	07/24/13 23:56	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 17:43	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 17:43	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 17:43	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 17:43	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 17:43	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-Field Blank
Lab No: AWG0500-12
Matrix: Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 15:20
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 17:43	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 17:43	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 17:43	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 17:43	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 17:43	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 17:43	3070415
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 09:46	07/19/13 17:43	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 17:43	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 17:43	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 17:43	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 17:43	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 17:43	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 17:43	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 17:43	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 17:43	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 17:43	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 17:43	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 17:43	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 17:43	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 17:43	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 17:43	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 17:43	3070415

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-Field Blank
Lab No: AWG0500-12
Matrix: Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 15:20
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 17:43	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 17:43	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 17:43	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 17:43	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 17:43	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 17:43	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 17:43	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 17:43	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 17:43	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 17:43	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 17:43	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 17:43	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 17:43	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 17:43	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 17:43	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 17:43	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 17:43	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 17:43	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 17:43	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 17:43	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	96 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 17:43	3070415

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-Field Blank
Lab No: AWG0500-12
Matrix: Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 15:20
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	110 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 17:43	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 17:43	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	07/19/13 09:46	07/19/13 17:43	3070415

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110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-Trip Blank
Lab No: AWG0500-13
Matrix: Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 05:00
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 18:11	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 18:11	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 18:11	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 18:11	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 18:11	3070415
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 18:11	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 18:11	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 18:11	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 18:11	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 18:11	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 18:11	3070415
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 09:46	07/19/13 18:11	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 18:11	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 18:11	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 18:11	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 18:11	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 18:11	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 18:11	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 18:11	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 18:11	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 18:11	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 18:11	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-Trip Blank
Lab No: AWG0500-13
Matrix: Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 05:00
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 18:11	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 18:11	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 18:11	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 18:11	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 18:11	3070415
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 18:11	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 18:11	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 18:11	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 18:11	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 18:11	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 18:11	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 18:11	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 18:11	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 18:11	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 18:11	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 18:11	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 18:11	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 18:11	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 18:11	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 18:11	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 18:11	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-Trip Blank
Lab No: AWG0500-13
Matrix: Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 05:00
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 18:11	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 18:11	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 18:11	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 18:11	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 18:11	3070415
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	109 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 18:11	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	97 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 18:11	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	105 %		80-120				460-00-4	07/19/13 09:46	07/19/13 18:11	3070415

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-SW1
Lab No: AWG0500-14
Matrix: Surface Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 09:55
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	ND	6.00	1	ug/L		0.22	7440-36-0	07/24/13 08:05	07/25/13 00:02	3070531
Arsenic	EPA 6020A	EPA 3005A	1.24	10.0	1	ug/L	J	0.78	7440-38-2	07/24/13 08:05	07/25/13 00:02	3070531
Barium	EPA 6020A	EPA 3005A	64.8	100	1	ug/L	J	0.25	7440-39-3	07/24/13 08:05	07/25/13 00:02	3070531
Beryllium	EPA 6020A	EPA 3005A	0.30	1.00	1	ug/L	J	0.11	7440-41-7	07/24/13 08:05	07/25/13 00:02	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/25/13 00:02	3070531
Chromium	EPA 6020A	EPA 3005A	2.99	10.0	1	ug/L	J	0.58	7440-47-3	07/24/13 08:05	07/25/13 00:02	3070531
Cobalt	EPA 6020A	EPA 3005A	2.40	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/25/13 00:02	3070531
Copper	EPA 6020A	EPA 3005A	2.44	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/25/13 00:02	3070531
Lead	EPA 6020A	EPA 3005A	3.02	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/25/13 00:02	3070531
Nickel	EPA 6020A	EPA 3005A	3.23	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/25/13 00:02	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/25/13 00:02	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/25/13 00:02	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/25/13 00:02	3070531
Vanadium	EPA 6020A	EPA 3005A	5.65	25.0	1	ug/L	J	1.97	7440-62-2	07/24/13 08:05	07/25/13 00:02	3070531
Zinc	EPA 6020A	EPA 3005A	17.8	10.0	1	ug/L		0.87	7440-66-6	07/24/13 08:05	07/25/13 00:02	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 18:39	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 18:39	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 18:39	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 18:39	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 18:39	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-SW1
Lab No: AWG0500-14
Matrix: Surface Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 09:55
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 18:39	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 18:39	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 18:39	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 18:39	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 18:39	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 18:39	3070415
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 09:46	07/19/13 18:39	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 18:39	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 18:39	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 18:39	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 18:39	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 18:39	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 18:39	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 18:39	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 18:39	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 18:39	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 18:39	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 18:39	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 18:39	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 18:39	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 18:39	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 18:39	3070415

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Environmental Monitoring & Laboratory Analysis
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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-SW1
Lab No: AWG0500-14
Matrix: Surface Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 09:55
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 18:39	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 18:39	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 18:39	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 18:39	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 18:39	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 18:39	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 18:39	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 18:39	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 18:39	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 18:39	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 18:39	3070415
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	07/19/13 09:46	07/19/13 18:39	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 18:39	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 18:39	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 18:39	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 18:39	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 18:39	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 18:39	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 18:39	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 18:39	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	98 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 18:39	3070415

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-SW1
Lab No: AWG0500-14
Matrix: Surface Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 09:55
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	109 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 18:39	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	99 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 18:39	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	105 %		80-120				460-00-4	07/19/13 09:46	07/19/13 18:39	3070415

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-SW3
Lab No: AWG0500-15
Matrix: Surface Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 13:20
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	ND	6.00	1	ug/L		0.22	7440-36-0	07/24/13 08:05	07/25/13 00:08	3070531
Arsenic	EPA 6020A	EPA 3005A	1.01	10.0	1	ug/L	J	0.78	7440-38-2	07/24/13 08:05	07/25/13 00:08	3070531
Barium	EPA 6020A	EPA 3005A	69.1	100	1	ug/L	J	0.25	7440-39-3	07/24/13 08:05	07/25/13 00:08	3070531
Beryllium	EPA 6020A	EPA 3005A	0.32	1.00	1	ug/L	J	0.11	7440-41-7	07/24/13 08:05	07/25/13 00:08	3070531
Cadmium	EPA 6020A	EPA 3005A	0.56	1.00	1	ug/L	J	0.06	7440-43-9	07/24/13 08:05	07/25/13 00:08	3070531
Chromium	EPA 6020A	EPA 3005A	4.30	10.0	1	ug/L	J	0.58	7440-47-3	07/24/13 08:05	07/25/13 00:08	3070531
Cobalt	EPA 6020A	EPA 3005A	1.73	10.0	1	ug/L	J	0.12	7440-48-4	07/24/13 08:05	07/25/13 00:08	3070531
Copper	EPA 6020A	EPA 3005A	3.70	10.0	1	ug/L	J	0.38	7440-50-8	07/24/13 08:05	07/25/13 00:08	3070531
Lead	EPA 6020A	EPA 3005A	2.60	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/25/13 00:08	3070531
Nickel	EPA 6020A	EPA 3005A	3.40	50.0	1	ug/L	J	0.41	7440-02-0	07/24/13 08:05	07/25/13 00:08	3070531
Selenium	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.77	7782-49-2	07/24/13 08:05	07/25/13 00:08	3070531
Silver	EPA 6020A	EPA 3005A	ND	10.0	1	ug/L		0.24	7440-22-4	07/24/13 08:05	07/25/13 00:08	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/25/13 00:08	3070531
Vanadium	EPA 6020A	EPA 3005A	8.30	25.0	1	ug/L	J	1.97	7440-62-2	07/24/13 08:05	07/25/13 00:08	3070531
Zinc	EPA 6020A	EPA 3005A	11.8	10.0	1	ug/L		0.87	7440-66-6	07/24/13 08:05	07/25/13 00:08	3070531
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.6	67-64-1	07/19/13 09:46	07/19/13 19:07	3070415
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 09:46	07/19/13 19:07	3070415
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	71-43-2	07/19/13 09:46	07/19/13 19:07	3070415
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 09:46	07/19/13 19:07	3070415
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 09:46	07/19/13 19:07	3070415

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110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-SW3
Lab No: AWG0500-15
Matrix: Surface Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 13:20
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 09:46	07/19/13 19:07	3070415
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 09:46	07/19/13 19:07	3070415
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.2	75-15-0	07/19/13 09:46	07/19/13 19:07	3070415
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 09:46	07/19/13 19:07	3070415
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 09:46	07/19/13 19:07	3070415
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 09:46	07/19/13 19:07	3070415
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 09:46	07/19/13 19:07	3070415
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 09:46	07/19/13 19:07	3070415
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 09:46	07/19/13 19:07	3070415
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 09:46	07/19/13 19:07	3070415
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 09:46	07/19/13 19:07	3070415
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 09:46	07/19/13 19:07	3070415
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 09:46	07/19/13 19:07	3070415
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	106-46-7	07/19/13 09:46	07/19/13 19:07	3070415
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 09:46	07/19/13 19:07	3070415
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 09:46	07/19/13 19:07	3070415
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 09:46	07/19/13 19:07	3070415
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 09:46	07/19/13 19:07	3070415
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-59-2	07/19/13 09:46	07/19/13 19:07	3070415
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 09:46	07/19/13 19:07	3070415
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 09:46	07/19/13 19:07	3070415
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 09:46	07/19/13 19:07	3070415

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110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-SW3
Lab No: AWG0500-15
Matrix: Surface Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 13:20
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 09:46	07/19/13 19:07	3070415
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	100-41-4	07/19/13 09:46	07/19/13 19:07	3070415
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 09:46	07/19/13 19:07	3070415
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		1.9	591-78-6	07/19/13 09:46	07/19/13 19:07	3070415
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 09:46	07/19/13 19:07	3070415
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.8	78-93-3	07/19/13 09:46	07/19/13 19:07	3070415
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.8	108-10-1	07/19/13 09:46	07/19/13 19:07	3070415
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	100-42-5	07/19/13 09:46	07/19/13 19:07	3070415
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 09:46	07/19/13 19:07	3070415
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 09:46	07/19/13 19:07	3070415
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 09:46	07/19/13 19:07	3070415
Toluene	EPA 8260B	EPA 5030B	0.4	1.0	1	ug/L	J	0.3	108-88-3	07/19/13 09:46	07/19/13 19:07	3070415
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 09:46	07/19/13 19:07	3070415
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 09:46	07/19/13 19:07	3070415
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 09:46	07/19/13 19:07	3070415
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 09:46	07/19/13 19:07	3070415
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 09:46	07/19/13 19:07	3070415
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 09:46	07/19/13 19:07	3070415
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 09:46	07/19/13 19:07	3070415
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	1330-20-7	07/19/13 09:46	07/19/13 19:07	3070415
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	07/19/13 09:46	07/19/13 19:07	3070415

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110 Technology Parkway, Norcross, GA 30092

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Client ID: 0803-SW3
Lab No: AWG0500-15
Matrix: Surface Water

Project: East Carolina Regional Landfill
Date/Time Sampled: 07/17/13 13:20
Date/Time Received: 07/18/13 09:05

Report No.: AWG0500

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	109 %		78-120				17060-07-0	07/19/13 09:46	07/19/13 19:07	3070415
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	07/19/13 09:46	07/19/13 19:07	3070415
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	07/19/13 09:46	07/19/13 19:07	3070415

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1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070531 - EPA 3005A										
Blank (3070531-BLK1)							Prepared & Analyzed: 07/24/13			
Antimony	0.39	6.00	ug/L							J
Arsenic	ND	10.0	ug/L							
Barium	ND	100	ug/L							
Beryllium	ND	1.00	ug/L							
Cadmium	ND	1.00	ug/L							
Chromium	ND	10.0	ug/L							
Cobalt	ND	10.0	ug/L							
Copper	ND	10.0	ug/L							
Lead	ND	10.0	ug/L							
Nickel	ND	50.0	ug/L							
Selenium	ND	10.0	ug/L							
Silver	ND	10.0	ug/L							
Thallium	ND	5.50	ug/L							
Vanadium	ND	25.0	ug/L							
Zinc	ND	10.0	ug/L							
LCS (3070531-BS1)							Prepared & Analyzed: 07/24/13			
Antimony	107	6.00	ug/L	100.00		107	80-120			
Arsenic	103	10.0	ug/L	100.00		103	80-120			
Barium	96.4	100	ug/L	100.00		96	80-120			J
Beryllium	109	1.00	ug/L	100.00		109	80-120			
Cadmium	98.6	1.00	ug/L	100.00		99	80-120			
Chromium	103	10.0	ug/L	100.00		103	80-120			
Cobalt	104	10.0	ug/L	100.00		104	80-120			
Copper	103	10.0	ug/L	100.00		103	80-120			
Lead	96.0	10.0	ug/L	100.00		96	80-120			
Nickel	102	50.0	ug/L	100.00		102	80-120			

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1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070531 - EPA 3005A										
LCS (3070531-BS1)							Prepared & Analyzed: 07/24/13			
Selenium	102	10.0	ug/L	100.00		102	80-120			
Silver	98.6	10.0	ug/L	100.00		99	80-120			
Thallium	96.2	5.50	ug/L	100.00		96	80-120			
Vanadium	97.7	25.0	ug/L	100.00		98	80-120			
Zinc	103	10.0	ug/L	100.00		103	80-120			
Matrix Spike (3070531-MS1)	**Source: AWG0500-02**						Prepared & Analyzed: 07/24/13			
Antimony	105	6.00	ug/L	100.00	0.97	104	75-125			
Arsenic	98.4	10.0	ug/L	100.00	ND	98	75-125			
Barium	167	100	ug/L	100.00	72.0	95	75-125			
Beryllium	106	1.00	ug/L	100.00	2.19	104	75-125			
Cadmium	95.4	1.00	ug/L	100.00	ND	95	75-125			
Chromium	95.5	10.0	ug/L	100.00	2.53	93	75-125			
Cobalt	124	10.0	ug/L	100.00	28.0	96	75-125			
Copper	97.4	10.0	ug/L	100.00	1.18	96	75-125			
Lead	96.2	10.0	ug/L	100.00	1.55	95	75-125			
Nickel	103	50.0	ug/L	100.00	9.55	94	75-125			
Selenium	98.1	10.0	ug/L	100.00	1.44	97	75-125			
Silver	95.2	10.0	ug/L	100.00	ND	95	75-125			
Thallium	92.6	5.50	ug/L	100.00	0.10	92	75-125			
Vanadium	86.1	25.0	ug/L	100.00	ND	86	75-125			
Zinc	101	10.0	ug/L	100.00	5.40	96	75-125			
Matrix Spike Dup (3070531-MSD1)	**Source: AWG0500-02**						Prepared & Analyzed: 07/24/13			
Antimony	107	6.00	ug/L	100.00	0.97	106	75-125	2	20	
Arsenic	99.8	10.0	ug/L	100.00	ND	100	75-125	1	20	
Barium	169	100	ug/L	100.00	72.0	97	75-125	1	20	

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1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070531 - EPA 3005A										
Matrix Spike Dup (3070531-MSD1)		**Source: AWG0500-02**					Prepared & Analyzed: 07/24/13			
Beryllium	108	1.00	ug/L	100.00	2.19	106	75-125	2	20	
Cadmium	96.5	1.00	ug/L	100.00	ND	97	75-125	1	20	
Chromium	97.2	10.0	ug/L	100.00	2.53	95	75-125	2	20	
Cobalt	126	10.0	ug/L	100.00	28.0	98	75-125	1	20	
Copper	96.4	10.0	ug/L	100.00	1.18	95	75-125	1	20	
Lead	97.9	10.0	ug/L	100.00	1.55	96	75-125	2	20	
Nickel	105	50.0	ug/L	100.00	9.55	95	75-125	1	20	
Selenium	99.2	10.0	ug/L	100.00	1.44	98	75-125	1	20	
Silver	97.2	10.0	ug/L	100.00	ND	97	75-125	2	20	
Thallium	94.9	5.50	ug/L	100.00	0.10	95	75-125	2	20	
Vanadium	96.2	25.0	ug/L	100.00	ND	96	75-125	11	20	
Zinc	101	10.0	ug/L	100.00	5.40	96	75-125	0.2	20	
Post Spike (3070531-PS1)		**Source: AWG0500-02**					Prepared & Analyzed: 07/24/13			
Antimony	85.8		ug/L	100.00	0.97	85	80-120			
Arsenic	96.5		ug/L	100.00	-0.26	97	80-120			
Barium	166		ug/L	100.00	72.0	94	80-120			
Beryllium	106		ug/L	100.00	2.19	104	80-120			
Cadmium	95.0		ug/L	100.00	0.03	95	80-120			
Chromium	96.8		ug/L	100.00	2.53	94	80-120			
Cobalt	124		ug/L	100.00	28.0	96	80-120			
Copper	96.0		ug/L	100.00	1.18	95	80-120			
Lead	94.9		ug/L	100.00	1.55	93	80-120			
Nickel	104		ug/L	100.00	9.55	94	80-120			
Selenium	97.5		ug/L	100.00	1.44	96	80-120			
Silver	95.4		ug/L	100.00	0.15	95	80-120			
Thallium	94.8		ug/L	100.00	0.10	95	80-120			

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ANALYTICAL SERVICES, INC.

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070531 - EPA 3005A										
Post Spike (3070531-PS1)		**Source: AWG0500-02**					Prepared & Analyzed: 07/24/13			
Vanadium	93.4		ug/L	100.00	1.62	92	80-120			
Zinc	100		ug/L	100.00	5.40	95	80-120			

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July 30, 2013

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Blank (3070383-BLK1)							Prepared & Analyzed: 07/18/13			
Acetone	ND	25	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	0.8	3.0	ug/L							J
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	3.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	ug/L							

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Blank (3070383-BLK1)							Prepared & Analyzed: 07/18/13			
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	25	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	100	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	3.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	0.4	1.0	ug/L							J
Trichlorofluoromethane	ND	1.0	ug/L							
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*102*	*78-120*			
Surr: Toluene-d8	*49*		*ug/L*	*50.000*		*98*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Blank (3070383-BLK2)							Prepared & Analyzed: 07/19/13			

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Blank (3070383-BLK2)							Prepared & Analyzed: 07/19/13			
Acetone	ND	100	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	ND	3.0	ug/L							
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	3.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	ug/L							

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Blank (3070383-BLK2)							Prepared & Analyzed: 07/19/13			
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	100	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	3.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	1.0	ug/L							
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*52*		*ug/L*	*50.000*		*104*	*78-120*			
Surr: Toluene-d8	*50*		*ug/L*	*50.000*		*100*	*80-120*			
Surr: 4-Bromofluorobenzene	*52*		*ug/L*	*50.000*		*105*	*80-120*			
LCS (3070383-BS1)							Prepared & Analyzed: 07/18/13			

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
LCS (3070383-BS1)							Prepared & Analyzed: 07/18/13			
Benzene	49		ug/L	50.000		98	67-134			
Chlorobenzene	51		ug/L	50.000		103	69-122			
1,1-Dichloroethene	50		ug/L	50.000		100	58-142			
Toluene	49		ug/L	50.000		97	68-127			
Trichloroethene	50		ug/L	50.000		100	72-132			
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*94*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*52*		*ug/L*	*50.000*		*104*	*78-120*			
Surr: Toluene-d8	*50*		*ug/L*	*50.000*		*99*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Matrix Spike (3070383-MS1)	**Source: AWG0500-02**						Prepared & Analyzed: 07/18/13			
Benzene	50		ug/L	50.000	ND	100	67-134			
Chlorobenzene	52		ug/L	50.000	ND	104	69-122			
1,1-Dichloroethene	49		ug/L	50.000	ND	98	58-142			
Toluene	49		ug/L	50.000	ND	98	68-127			
Trichloroethene	48		ug/L	50.000	ND	97	72-132			
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*54*		*ug/L*	*50.000*		*107*	*78-120*			
Surr: Toluene-d8	*49*		*ug/L*	*50.000*		*99*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Matrix Spike Dup (3070383-MSD1)	**Source: AWG0500-02**						Prepared & Analyzed: 07/19/13			
Benzene	49		ug/L	50.000	ND	98	67-134	1	9	
Chlorobenzene	50		ug/L	50.000	ND	99	69-122	5	13	
1,1-Dichloroethene	48		ug/L	50.000	ND	97	58-142	2	9	

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July 30, 2013

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Matrix Spike Dup (3070383-MSD1)	**Source: AWG0500-02**						Prepared & Analyzed: 07/19/13			
Toluene	48		ug/L	50.000	ND	97	68-127	1	9	
Trichloroethene	49		ug/L	50.000	ND	99	72-132	2	11	
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*91*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*49*		*ug/L*	*50.000*		*99*	*78-120*			
Surr: Toluene-d8	*49*		*ug/L*	*50.000*		*99*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Batch 3070415 - EPA 5030B										
Blank (3070415-BLK1)							Prepared & Analyzed: 07/19/13			
Acetone	ND	100	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	ND	3.0	ug/L							
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	3.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070415 - EPA 5030B										
Blank (3070415-BLK1)							Prepared & Analyzed: 07/19/13			
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	ug/L							
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	100	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	3.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	1.0	ug/L							

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070415 - EPA 5030B										
Blank (3070415-BLK1)							Prepared & Analyzed: 07/19/13			
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*52*		*ug/L*	*50.000*		*104*	*78-120*			
Surr: Toluene-d8	*50*		*ug/L*	*50.000*		*100*	*80-120*			
Surr: 4-Bromofluorobenzene	*52*		*ug/L*	*50.000*		*105*	*80-120*			
Blank (3070415-BLK2)							Prepared & Analyzed: 07/22/13			
Acetone	ND	100	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	ND	3.0	ug/L							
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	3.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070415 - EPA 5030B										
Blank (3070415-BLK2)							Prepared & Analyzed: 07/22/13			
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	ug/L							
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	100	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	3.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	1.0	ug/L							

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070415 - EPA 5030B										
Blank (3070415-BLK2)							Prepared & Analyzed: 07/22/13			
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surr: Dibromofluoromethane	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*101*	*78-120*			
Surr: Toluene-d8	*50*		*ug/L*	*50.000*		*100*	*80-120*			
Surr: 4-Bromofluorobenzene	*50*		*ug/L*	*50.000*		*100*	*80-120*			
LCS (3070415-BS1)							Prepared & Analyzed: 07/19/13			
Benzene	48		ug/L	50.000		95	67-134			
Chlorobenzene	49		ug/L	50.000		98	69-122			
1,1-Dichloroethene	50		ug/L	50.000		101	58-142			
Toluene	47		ug/L	50.000		94	68-127			
Trichloroethene	48		ug/L	50.000		96	72-132			
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*92*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*50*		*ug/L*	*50.000*		*101*	*78-120*			
Surr: Toluene-d8	*48*		*ug/L*	*50.000*		*97*	*80-120*			
Surr: 4-Bromofluorobenzene	*52*		*ug/L*	*50.000*		*104*	*80-120*			
Matrix Spike (3070415-MS1)	**Source: AWG0500-15**						Prepared & Analyzed: 07/19/13			
Benzene	48		ug/L	50.000	ND	96	67-134			
Chlorobenzene	47		ug/L	50.000	ND	93	69-122			
1,1-Dichloroethene	52		ug/L	50.000	ND	103	58-142			
Toluene	48		ug/L	50.000	0.4	96	68-127			

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1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070415 - EPA 5030B										
Matrix Spike (3070415-MS1)		**Source: AWG0500-15**					Prepared & Analyzed: 07/19/13			
Trichloroethene	47		ug/L	50.000	ND	94	72-132			
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*91*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*102*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*102*	*80-120*			
Surr: 4-Bromofluorobenzene	*54*		*ug/L*	*50.000*		*108*	*80-120*			
Matrix Spike Dup (3070415-MSD1)		**Source: AWG0500-15**					Prepared & Analyzed: 07/19/13			
Benzene	48		ug/L	50.000	ND	96	67-134	0.2	9	
Chlorobenzene	49		ug/L	50.000	ND	99	69-122	5	13	
1,1-Dichloroethene	53		ug/L	50.000	ND	107	58-142	3	9	
Toluene	48		ug/L	50.000	0.4	94	68-127	1	9	
Trichloroethene	48		ug/L	50.000	ND	95	72-132	2	11	
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*53*		*ug/L*	*50.000*		*106*	*78-120*			
Surr: Toluene-d8	*48*		*ug/L*	*50.000*		*96*	*80-120*			
Surr: 4-Bromofluorobenzene	*51*		*ug/L*	*50.000*		*103*	*80-120*			

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1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Laboratory Certifications

Code	Description	Number	Expires
LA	Louisiana	02069	06/30/2014
NC	North Carolina	381	12/31/2013
NELAC	FL DOH (Non-Pot. Water, Solids) Eff:: 07/01/2012	E87315	06/30/2014
SC	South Carolina	98011001	06/30/2014
TX	Texas	T104704397-08-TX	03/31/2014
VA	Virginia	1340	12/14/2013

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1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

Legend

Defination of Laboratory Terms

ND - Not Detected at levels greater than or equal to SWSL/RL
SWSL/RL - NC DENR Solid Waste Section LImit/Reporting Limit (Adjusted for DF/Prep Factor)
DF - Dilution Factor
MDL - Method Detection Limit

Qualifiers

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

B-01 Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

220130

CHAIN OF CUSTODY RECORD

ASI ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY NORCROSS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1

CLIENT NAME: Republic Services of NC, LLC
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 1220 Commerce St. SW Conover, NC 28613
REPORT TO: Mr. Ray Hoffman
CC: Rayhoffman@republicservices.com
REQUESTED COMPLETION DATE: Standard
PO #:
PROJECT NAME/STATE: East Carolina Regional Landfill 07-03
PROJECT #: 890 1301.12.01

ANALYSIS REQUESTED: CONTAINER TYPE P; PRESERVATIVE 3; # of CONTAINERS; NC app. I VOCs; NC app. I Metals

DATE	TIME	MATRIX CODE	GRAB	COMP	SAMPLE IDENTIFICATION	# of CONTAINERS	NC app. I VOCs	NC app. I Metals	REMARKS/ADDITIONAL INFORMATION
7/17/13	1013	GW	X		0703-GW12	4	X	X	1
	1301				0703-GW7 MS/MSD	12			2
	1151				0703-GW8	4			3
	1141				0703-GW9				4
	1125				0703-GW10				5
	1108				0703-GW11				6
	1059				0703-GW13				7
	1030				0703-GW15				8
	1417				0703-GW16R				9
	1453				0703-GW17				10
	1223	V		V	0703-PW1	V	V	V	11

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER
PRESERVATION: 1 - HCl, 4°; 2 - H2SO4, 4°; 3 - HNO3, 4°; 4 - NaOH, 4°; 5 - NaOH/ZnAc, 4°; 6 - Na2S2O3, 4°; 7 - 4°
MATRIX CODES: DW - DRINKING WATER; WW - WASTEWATER; GW - GROUNDWATER; SW - SURFACE WATER; ST - STORM WATER; W - WATER; S - SOIL; SL - SLUDGE; SD - SOLID; A - AIR; L - LIQUID; P - PRODUCT

SAMPLED BY AND TITLE: Amanda Graham, Admin Coordinator
DATE/TIME: 7/17/13
RECEIVED BY:
RELINQUISHED BY: Amanda Graham, Admin Coordinator
DATE/TIME: 7/17/13 1945
RECEIVED BY LAB: [signature]
DATE/TIME: 7/18/13 0905
RELINQUISHED BY:
DATE/TIME:
pH: Acceptable Preservation Inc: Y or N
SAMPLES SHIPPED VIA: UPS FED-EX COURIER CLIENT OTHER:
Temp Blank: Custody Seal: Intact Broken Missing
Cooler #: 86 93
6710 2910 7957 9939 2893
FOR LAB USE ONLY
LAB #: AU16-0500
In-house location: V 5
Entered into LIMS: CH

Please use Black Ink to complete form.

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

220145

CHAIN OF CUSTODY RECORD

ASI ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY NORCROSS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1

CLIENT NAME: Republic Services of NC, LLC
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 1220 Commerce St. SW Conover, NC 28613
REPORT TO: Mr. Ray Hoffman
CC: digitalmc@republicservices.com
REQUESTED COMPLETION DATE: Standard
PO #:
PROJECT NAME/STATE: East Carolina Regional Landfill 08-03
PROJECT #: 890.1301.12.01

ANALYSIS REQUESTED

# of containers	NC App. 1 VOCs	NC App. 1 Metals
CONTAINER TYPE	V	P
PRESERVATIVE		3

DATE	TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of containers	NC App. 1 VOCs	NC App. 1 Metals	REMARKS/ADDITIONAL INFORMATION
7/17/13	1520	W		X	0703-FieldBlank	4	X	X	12
7/17/13	0500	W		X	0703-TripBlank	3	X		13

CONTAINER TYPE: P - PLASTIC, A - AMBER GLASS, G - CLEAR GLASS, V - VOA VIAL, S - STERILE, O - OTHER

PRESERVATION: 1 - HCl, 4° ; 2 - H2SO4, 4° ; 3 - HNO3, 4° ; 4 - NaOH, 4° ; 5 - NaOH/ZnAc, 4° ; 6 - Na2S2O3, 4° ; 7 - 4°

*MATRIX CODES: DW - DRINKING WATER, WW - WASTEWATER, GW - GROUNDWATER, SW - SURFACE WATER, ST - STORM WATER, W - WATER, S - SOIL, SL - SLUDGE, SD - SOLID, A - AIR, L - LIQUID, P - PRODUCT

SAMPLED BY AND TITLE: Amanda Gutierrez, Admin Coordinator
DATE/TIME: 7/17/13
RECEIVED BY: DATE/TIME:
RELINQUISHED BY: Amanda Gutierrez, Admin Coordinator DATE/TIME: 7/17/13 1545
RECEIVED BY: DATE/TIME:
RELINQUISHED BY: DATE/TIME:
RECEIVED BY AB: DATE/TIME: 7/18/13 0900
SAMPLE SHIPPED VIA: UPS FEDEX COURIER CLIENT OTHER:
pH: Labeled Preserved Log: Preserved by Lab No
Temperature: Custody Seal: Intact Broken Missing Cooler #
In-house location: V5
Entered into LIMS:
FOR LAB USE ONLY
LAB #: AW60500
Please use Black ink to complete form.

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

July 30, 2013

220113

CHAIN OF CUSTODY RECORD

ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY NORCROSS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1

CLIENT NAME: Republic Services of NC, LLC
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 1220 Commerce St. SW Conover, NC 28613
REPORT TO: Mr. Ray Hoffman
CC: Registered Engineering Company, Inc.
REQUESTED COMPLETION DATE: Standard
PO #:
PROJECT NAME/STATE: East Carolina Regional Landfill 08-03
PROJECT #: 98.130.12.01

CONTAINER TYPE / PRESERVATION / # of CONTAINERS / ANALYSIS REQUESTED: NC app. 1 VOCs; NC app. 1 Metals

DATE	TIME	MATRIX CODE* (COMPOSITE / GRAB)	SAMPLE IDENTIFICATION	NC app. 1 VOCs	NC app. 1 Metals	REMARKS/ADDITIONAL INFORMATION
7/1/13	0955	SW	0803-SW1	4 X	X	14
		SW	0803-SW2			Dry AUF
7/1/13	1320		0803-SW3			15
		V	0803-SW4	V	V	16 Dry AUF

CONTAINER TYPE: A - P - PLASTIC; B - A - AMBER GLASS; G - CLEAR GLASS; I - V - VOA VIAL; D - S - STERILE; N - O - OTHER

PRESERVATION: 1 - HCl, 4°; 2 - H2SO4, 4°; 3 - HNO3, 4°; 4 - NaOH, 4°; 5 - NaOH/ZnAc, 4°; 6 - Na2S2O3, 4°; 7 - 4°

MATRIX CODES: DW - DRINKING WATER; WW - WASTEWATER; GW - GROUNDWATER; SW - SURFACE WATER; ST - STORM WATER; W - WATER; S - SOIL; SL - SLUDGE; SD - SOLID; A - AIR; L - LIQUID; P - PRODUCT

SAMPLED BY AND TITLE: Amanda Fleming Admin Coord. DATE/TIME: 7/1/13
RELINQUISHED BY: Amanda Fleming Admin Coord. DATE/TIME: 7/1/13
RECEIVED BY: DATE/TIME:
RELINQUISHED BY: DATE/TIME: 7/1/13 1945
RECEIVED BY: DATE/TIME:
RELINQUISHED BY: DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX COURIER CLIENT OTHER:
pH: Adjusted Preserved Ice: Yes or No
Temp: Custody Seal: Broken Missing
Cooler #:

FOR LAB USE ONLY
In-house location: V5
Entered into LIMS: DAF
LAB #: AW10-0500

Please use Black Ink to complete form.

M:\Forms\General\Tracking Form-Oct 10

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 7/30/2013 10:59:47AM**

Attn: Mr. Ray Hoffman

Client: Republic Services of North Carolina, LLC
Project: East Carolina Regional Landfill
Date Received: 07/18/13 09:05
Work Order: AWG0500
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 15 **#Containers:** 67

Minimum Temp(C): 2.0 **Maximum Temp(C):** 2.0 **Custody Seal(s) Used:** Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	NO
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

The SW4 sample was listed as being dry. However, there were containers present labeled SW4 taken on 07/17/13 at 1327.
The containers were not logged in per the client's request. CFH

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Report Number: AWG0488

Project: East Carolina Regional Landfill Leachate

Project #:890.1301.12.01

Prepared For:
Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover, NC 28613

Attention: Mr. Ray Hoffman

August 02, 2013

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call. Analytical Services, Inc. certifies that the following analytical results meet all requirements of the National Environmental Laboratory Accreditation Conference(NELAC).All test results relate only to the samples analyzed.

Approved:

Judy Wagner
Project Manager

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Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

August 02, 2013

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0803-Leachate	AWG0488-01	Water	07/17/13 15:05	07/18/13 09:05

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(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

August 02, 2013

Client ID: 0803-Leachate
Lab No: AWG0488-01
Matrix: Water

Project: East Carolina Regional Landfill Leachate
Date/Time Sampled: 07/17/13 15:05
Date/Time Received: 07/18/13 09:05

Report No.: AWG0488

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
General Chemistry												
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	513000	25000	4	ug/L		2.0	E-10106	07/18/13 10:41	07/23/13 08:19	3070376
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	2590000	200	20	ug/L		200	E-10117	07/22/13 12:00	07/22/13 16:30	3070476
Cyanide, Total	EPA 9010/9014	EPA 9010	ND	50.0	5	ug/L	R-01	50.0	57-12-5	07/23/13 14:30	07/24/13 16:15	3070516
Oil & Grease (HEM)	EPA 1664B	EPA 1664	9800	5300	1	ug/L		5300	C-007	07/21/13 08:51	07/21/13 08:51	3070464
Total Phenols as Phenol	EPA 420.1	EPA 420.1	448	50.0	1	ug/L		50.0	E-10253	07/29/13 13:45	07/29/13 17:04	3070670
Phosphorus-Total	SM 4500-P B,E	SM 4500-P B	2420	0.22	1.11	ug/L		0.22	7723-14-0	07/19/13 10:15	07/20/13 09:30	3070408
Total Kjeldahl Nitrogen as N	EPA 351.2	EPA 351.2	884000	80.0	10	ug/L		80.0	E-10264	07/22/13 11:35	07/22/13 19:34	3070477
Total Suspended Solids	SM 2540 D	SM 2540 D	20500	5000	1	ug/L		5000	E-10162	07/18/13 14:00	07/18/13 14:00	3070396
Inorganic Anions												
Nitrate/Nitrite as N	EPA 9056A	EPA 9056A	120	100	2	ug/L		100	E-10128	07/18/13 11:27	07/18/13 11:27	3070397
Nitrate as N	EPA 9056A	EPA 9056A	120	100	2	ug/L		100	14797-55-8	07/18/13 11:27	07/18/13 11:27	3070397
Nitrite as N	EPA 9056A	EPA 9056A	ND	100	2	ug/L	R-01	100	1594-56-5	07/18/13 11:27	07/18/13 11:27	3070397
Sulfate	EPA 9056A	EPA 9056A	ND	10000	2	ug/L	R-01	10000	14808-79-8	07/18/13 11:27	07/18/13 11:27	3070397
Metals, Total												
Antimony	EPA 6020A	EPA 3005A	29.7	6.00	1	ug/L	B-01	0.22	7440-36-0	07/24/13 08:05	07/25/13 02:09	3070531
Arsenic	EPA 6020A	EPA 3005A	175	10.0	1	ug/L		0.78	7440-38-2	07/24/13 08:05	07/29/13 11:47	3070531
Barium	EPA 6020A	EPA 3005A	391	100	1	ug/L		0.25	7440-39-3	07/24/13 08:05	07/25/13 02:09	3070531
Beryllium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.11	7440-41-7	07/24/13 08:05	07/25/13 02:09	3070531
Cadmium	EPA 6020A	EPA 3005A	ND	1.00	1	ug/L		0.06	7440-43-9	07/24/13 08:05	07/25/13 02:09	3070531
Chromium	EPA 6020A	EPA 3005A	132	50.0	5	ug/L		2.91	7440-47-3	07/24/13 08:05	07/31/13 21:58	3070531

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(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

August 02, 2013

Client ID: 0803-Leachate
Lab No: AWG0488-01
Matrix: Water

Project: East Carolina Regional Landfill Leachate
Date/Time Sampled: 07/17/13 15:05
Date/Time Received: 07/18/13 09:05

Report No.: AWG0488

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Cobalt	EPA 6020A	EPA 3005A	26.5	20.0	2	ug/L		0.23	7440-48-4	07/24/13 08:05	07/29/13 15:42	3070531
Copper	EPA 6020A	EPA 3005A	16.4	10.0	2	ug/L		0.77	7440-50-8	07/24/13 08:05	07/29/13 15:42	3070531
Lead	EPA 6020A	EPA 3005A	0.51	10.0	1	ug/L	J	0.05	7439-92-1	07/24/13 08:05	07/25/13 02:09	3070531
Nickel	EPA 6020A	EPA 3005A	108	100	2	ug/L		0.81	7440-02-0	07/24/13 08:05	07/29/13 15:42	3070531
Selenium	EPA 6020A	EPA 3005A	2.74	10.0	1	ug/L	J	0.77	7782-49-2	07/24/13 08:05	07/29/13 11:47	3070531
Silver	EPA 6020A	EPA 3005A	0.37	10.0	1	ug/L	J	0.24	7440-22-4	07/24/13 08:05	07/25/13 02:09	3070531
Thallium	EPA 6020A	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	07/24/13 08:05	07/25/13 02:09	3070531
Vanadium	EPA 6020A	EPA 3005A	123	25.0	1	ug/L		1.97	7440-62-2	07/24/13 08:05	07/25/13 02:09	3070531
Zinc	EPA 6020A	EPA 3005A	14.2	10.0	1	ug/L		0.87	7440-66-6	07/24/13 08:05	07/25/13 02:09	3070531
Mercury	EPA 7470A	EPA 7470A	0.080	0.200	1	ug/L	J	0.061	7439-97-6	07/22/13 11:00	07/23/13 15:11	3070454
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	5800	2500	100	ug/L		160	67-64-1	07/18/13 13:00	07/18/13 18:13	3070383
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		0.8	107-13-1	07/19/13 10:00	07/19/13 10:10	3070383
Benzene	EPA 8260B	EPA 5030B	0.8	1.0	1	ug/L	J	0.3	71-43-2	07/19/13 10:00	07/19/13 10:10	3070383
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	74-97-5	07/19/13 10:00	07/19/13 10:10	3070383
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-27-4	07/19/13 10:00	07/19/13 10:10	3070383
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		1.6	75-25-2	07/19/13 10:00	07/19/13 10:10	3070383
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.9	74-83-9	07/19/13 10:00	07/19/13 10:10	3070383
Carbon Disulfide	EPA 8260B	EPA 5030B	3.3	100	1	ug/L	J	1.2	75-15-0	07/19/13 10:00	07/19/13 10:10	3070383
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	07/19/13 10:00	07/19/13 10:10	3070383
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	108-90-7	07/19/13 10:00	07/19/13 10:10	3070383

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Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

August 02, 2013

Client ID: 0803-Leachate
Lab No: AWG0488-01
Matrix: Water

Project: East Carolina Regional Landfill Leachate
Date/Time Sampled: 07/17/13 15:05
Date/Time Received: 07/18/13 09:05

Report No.: AWG0488

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	75-00-3	07/19/13 10:00	07/19/13 10:10	3070383
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	07/19/13 10:00	07/19/13 10:10	3070383
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	74-87-3	07/19/13 10:00	07/19/13 10:10	3070383
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.5	124-48-1	07/19/13 10:00	07/19/13 10:10	3070383
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		1.0	96-12-8	07/19/13 10:00	07/19/13 10:10	3070383
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-93-4	07/19/13 10:00	07/19/13 10:10	3070383
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	74-95-3	07/19/13 10:00	07/19/13 10:10	3070383
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	95-50-1	07/19/13 10:00	07/19/13 10:10	3070383
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	4.4	1.0	1	ug/L		0.4	106-46-7	07/19/13 10:00	07/19/13 10:10	3070383
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.9	110-57-6	07/19/13 10:00	07/19/13 10:10	3070383
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	07/19/13 10:00	07/19/13 10:10	3070383
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	107-06-2	07/19/13 10:00	07/19/13 10:10	3070383
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-35-4	07/19/13 10:00	07/19/13 10:10	3070383
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	0.5	5.0	1	ug/L	J	0.4	156-59-2	07/19/13 10:00	07/19/13 10:10	3070383
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	07/19/13 10:00	07/19/13 10:10	3070383
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	78-87-5	07/19/13 10:00	07/19/13 10:10	3070383
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	10061-01-5	07/19/13 10:00	07/19/13 10:10	3070383
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	10061-02-6	07/19/13 10:00	07/19/13 10:10	3070383
Ethylbenzene	EPA 8260B	EPA 5030B	6.4	1.0	1	ug/L		0.5	100-41-4	07/19/13 10:00	07/19/13 10:10	3070383
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.0	74-88-4	07/19/13 10:00	07/19/13 10:10	3070383
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	8.5	50	1	ug/L	J	1.9	591-78-6	07/19/13 10:00	07/19/13 10:10	3070383
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	75-09-2	07/19/13 10:00	07/19/13 10:10	3070383

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Attention: Mr. Ray Hoffman

August 02, 2013

Client ID: 0803-Leachate
Lab No: AWG0488-01
Matrix: Water

Project: East Carolina Regional Landfill Leachate
Date/Time Sampled: 07/17/13 15:05
Date/Time Received: 07/18/13 09:05

Report No.: AWG0488

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	3800	2500	100	ug/L		76	78-93-3	07/18/13 13:00	07/18/13 18:13	3070383
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	98	100	1	ug/L	J	1.8	108-10-1	07/19/13 10:00	07/19/13 10:10	3070383
Styrene	EPA 8260B	EPA 5030B	2.0	1.0	1	ug/L		0.3	100-42-5	07/19/13 10:00	07/19/13 10:10	3070383
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	630-20-6	07/19/13 10:00	07/19/13 10:10	3070383
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.3	79-34-5	07/19/13 10:00	07/19/13 10:10	3070383
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	07/19/13 10:00	07/19/13 10:10	3070383
Toluene	EPA 8260B	EPA 5030B	8.7	1.0	1	ug/L		0.3	108-88-3	07/19/13 10:00	07/19/13 10:10	3070383
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	71-55-6	07/19/13 10:00	07/19/13 10:10	3070383
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-00-5	07/19/13 10:00	07/19/13 10:10	3070383
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	79-01-6	07/19/13 10:00	07/19/13 10:10	3070383
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	75-69-4	07/19/13 10:00	07/19/13 10:10	3070383
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	96-18-4	07/19/13 10:00	07/19/13 10:10	3070383
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.6	108-05-4	07/19/13 10:00	07/19/13 10:10	3070383
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	75-01-4	07/19/13 10:00	07/19/13 10:10	3070383
Xylenes, total	EPA 8260B	EPA 5030B	16	5.0	1	ug/L		0.6	1330-20-7	07/19/13 10:00	07/19/13 10:10	3070383
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	07/18/13 13:00	07/18/13 18:13	3070383
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	07/19/13 10:00	07/19/13 10:10	3070383
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	108 %		78-120				17060-07-0	07/18/13 13:00	07/18/13 18:13	3070383
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	101 %		78-120				17060-07-0	07/19/13 10:00	07/19/13 10:10	3070383
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	07/18/13 13:00	07/18/13 18:13	3070383
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	07/19/13 10:00	07/19/13 10:10	3070383

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Attention: Mr. Ray Hoffman

August 02, 2013

Client ID: 0803-Leachate
Lab No: AWG0488-01
Matrix: Water

Project: East Carolina Regional Landfill Leachate
Date/Time Sampled: 07/17/13 15:05
Date/Time Received: 07/18/13 09:05

Report No.: AWG0488

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	105 %		80-120				460-00-4	07/18/13 13:00	07/18/13 18:13	3070383
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	102 %		80-120				460-00-4	07/19/13 10:00	07/19/13 10:10	3070383

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August 02, 2013

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070376 - SM 5210 B										
Blank (3070376-BLK1)							Prepared: 07/18/13 Analyzed: 07/23/13			
Biochemical Oxygen Demand	130	2000	ug/L							J
LCS (3070376-BS1)							Prepared: 07/18/13 Analyzed: 07/23/13			
Biochemical Oxygen Demand	200000	2000	ug/L	198000		101	85-115			
Duplicate (3070376-DUP1)		Source: AWG0470-01					Prepared: 07/18/13 Analyzed: 07/23/13			
Biochemical Oxygen Demand	167000	12000	ug/L		163000			2	20	
Batch 3070396 - SM 2540 D										
Blank (3070396-BLK1)							Prepared & Analyzed: 07/18/13			
Total Suspended Solids	ND	5000	ug/L							
LCS (3070396-BS1)							Prepared & Analyzed: 07/18/13			
Total Suspended Solids	101000	5000	ug/L	100000		101	90-110			
Duplicate (3070396-DUP1)		Source: AWG0511-01					Prepared & Analyzed: 07/18/13			
Total Suspended Solids	17000	5000	ug/L		16500			3	24	
Duplicate (3070396-DUP2)		Source: AWG0514-01					Prepared & Analyzed: 07/18/13			
Total Suspended Solids	ND	5000	ug/L		ND				24	
Batch 3070408 - SM 4500-P B										
Blank (3070408-BLK1)							Prepared: 07/19/13 Analyzed: 07/20/13			
Phosphorus-Total	ND	0.02	ug/L							

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General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070408 - SM 4500-P B										
LCS (3070408-BS1)							Prepared: 07/19/13 Analyzed: 07/20/13			
Phosphorus-Total	516	20.0	ug/L	500.00		103	88-110			
Matrix Spike (3070408-MS1)		**Source: AWG0477-01**					Prepared: 07/19/13 Analyzed: 07/20/13			
Phosphorus-Total	593	20.0	ug/L	500.00	52.0	108	72-123			
Matrix Spike Dup (3070408-MSD1)		**Source: AWG0477-01**					Prepared: 07/19/13 Analyzed: 07/20/13			
Phosphorus-Total	630	20.0	ug/L	500.00	52.0	116	72-123	6	11	
Batch 3070464 - EPA 1664										
Blank (3070464-BLK1)							Prepared & Analyzed: 07/21/13			
Oil & Grease (HEM)	ND	5000	ug/L							
LCS (3070464-BS1)							Prepared & Analyzed: 07/21/13			
Oil & Grease (HEM)	35000	5000	ug/L	40000		88	78-114			
Duplicate (3070464-DUP1)		**Source: AWG0546-01**					Prepared & Analyzed: 07/21/13			
Oil & Grease (HEM)	8300	5700	ug/L		14000			51	75	
Matrix Spike (3070464-MS1)		**Source: AWG0550-02**					Prepared & Analyzed: 07/21/13			
Oil & Grease (HEM)	38000	5200	ug/L	41237	ND	93	78-114			
Batch 3070476 - SM 5220 D										
Blank (3070476-BLK1)							Prepared & Analyzed: 07/22/13			
Chemical Oxygen Demand	ND	10	ug/L							

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General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070476 - SM 5220 D										
LCS (3070476-BS1)							Prepared & Analyzed: 07/22/13			
Chemical Oxygen Demand	185000	10000	ug/L	200000		93	90-110			
Matrix Spike (3070476-MS1)		Source: AWG0496-01					Prepared & Analyzed: 07/22/13			
Chemical Oxygen Demand	204000	10000	ug/L	200000	ND	102	90-110			
Matrix Spike (3070476-MS2)		Source: AWG0513-01					Prepared & Analyzed: 07/22/13			
Chemical Oxygen Demand	282000	10000	ug/L	200000	102000	90	90-110			
Matrix Spike Dup (3070476-MSD1)		Source: AWG0496-01					Prepared & Analyzed: 07/22/13			
Chemical Oxygen Demand	214000	10000	ug/L	200000	ND	107	90-110	5	10	
Batch 3070477 - EPA 351.2										
Blank (3070477-BLK1)							Prepared & Analyzed: 07/22/13			
Total Kjeldahl Nitrogen as N	ND	0.4	ug/L							
LCS (3070477-BS1)							Prepared & Analyzed: 07/22/13			
Total Kjeldahl Nitrogen as N	10000	400	ug/L	10000		100	90-110			
Matrix Spike (3070477-MS1)		Source: AWG0434-03					Prepared & Analyzed: 07/22/13			
Total Kjeldahl Nitrogen as N	10000	400	ug/L	10000	491	95	90-110			
Matrix Spike (3070477-MS2)		Source: AWG0434-04					Prepared & Analyzed: 07/22/13			
Total Kjeldahl Nitrogen as N	9960	400	ug/L	10000	562	94	90-110			
Batch 3070516 - EPA 9010										
Blank (3070516-BLK1)							Prepared: 07/23/13 Analyzed: 07/24/13			
Cyanide, Total	ND	10.0	ug/L							

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General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070516 - EPA 9010										
LCS (3070516-BS1)							Prepared: 07/23/13 Analyzed: 07/24/13			
Cyanide, Total	87.0	10.0	ug/L	80.000		109	85-115			
Matrix Spike (3070516-MS1)		Source: AWG0496-01					Prepared: 07/23/13 Analyzed: 07/24/13			
Cyanide, Total	89.0	10.0	ug/L	80.000	ND	111	85-119			
Matrix Spike Dup (3070516-MSD1)		Source: AWG0496-01					Prepared: 07/23/13 Analyzed: 07/24/13			
Cyanide, Total	88.0	10.0	ug/L	80.000	ND	110	85-119	1	13	
Batch 3070670 - EPA 420.1										
Blank (3070670-BLK1)							Prepared & Analyzed: 07/29/13			
Total Phenols as Phenol	ND	50.0	ug/L							
LCS (3070670-BS1)							Prepared & Analyzed: 07/29/13			
Total Phenols as Phenol	510	50.0	ug/L	500.00		102	80-120			
Duplicate (3070670-DUP1)		Source: AWG0488-01					Prepared & Analyzed: 07/29/13			
Total Phenols as Phenol	422	50.0	ug/L		448			6	20	
Matrix Spike (3070670-MS1)		Source: AWG0693-01					Prepared & Analyzed: 07/29/13			
Total Phenols as Phenol	625	50.0	ug/L	500.00	192	87	80-120			
Matrix Spike Dup (3070670-MSD1)		Source: AWG0693-01					Prepared & Analyzed: 07/29/13			
Total Phenols as Phenol	632	50.0	ug/L	500.00	192	88	80-120	1	20	

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Inorganic Anions - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070397 - EPA 9056A										
Blank (3070397-BLK1)							Prepared & Analyzed: 07/18/13			
Nitrate/Nitrite as N	ND	50	ug/L							
Nitrate as N	ND	50	ug/L							
Nitrite as N	ND	50	ug/L							
Sulfate	ND	5000	ug/L							
LCS (3070397-BS1)							Prepared & Analyzed: 07/18/13			
Nitrate/Nitrite as N	20400	50	ug/L	20000		102	90-110			
Nitrate as N	10100	50	ug/L	10000		101	90-110			
Nitrite as N	10300	50	ug/L	10000		103	90-110			
Sulfate	10000	5000	ug/L	10000		100	90-110			
Matrix Spike (3070397-MS1)		**Source: AWG0367-02**					Prepared & Analyzed: 07/18/13			
Nitrate/Nitrite as N	20000	50	ug/L	20000	ND	100	90-110			
Nitrate as N	10300	50	ug/L	10000	ND	103	90-110			
Nitrite as N	9710	50	ug/L	10000	ND	97	90-110			
Sulfate	33000	5000	ug/L	10000	25000	80	90-110			QM-05
Matrix Spike (3070397-MS2)		**Source: AWG0376-22**					Prepared & Analyzed: 07/18/13			
Nitrate/Nitrite as N	20800	50	ug/L	20000	933	100	90-110			
Nitrate as N	10900	50	ug/L	10000	933	99	90-110			
Nitrite as N	9960	50	ug/L	10000	ND	100	90-110			
Sulfate	10100	5000	ug/L	10000	ND	101	90-110			
Matrix Spike Dup (3070397-MSD1)		**Source: AWG0367-02**					Prepared & Analyzed: 07/18/13			
Nitrate/Nitrite as N	20200	50	ug/L	20000	ND	101	90-110	0.9	15	
Nitrate as N	10300	50	ug/L	10000	ND	103	90-110	0.04	15	
Nitrite as N	9890	50	ug/L	10000	ND	99	90-110	2	15	
Sulfate	33000	5000	ug/L	10000	25000	80	90-110	0.03	15	QM-05

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Inorganic Anions - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070397 - EPA 9056A										
Matrix Spike Dup (3070397-MSD1)		**Source: AWG0367-02**					Prepared & Analyzed: 07/18/13			

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Attention: Mr. Ray Hoffman

August 02, 2013

Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070454 - EPA 7470A										
Blank (3070454-BLK1)							Prepared: 07/22/13 Analyzed: 07/23/13			
Mercury	ND	0.200	ug/L							
LCS (3070454-BS1)							Prepared: 07/22/13 Analyzed: 07/23/13			
Mercury	2.57	0.200	ug/L	2.5000		103	80-120			
Duplicate (3070454-DUP1)		Source: AWG0279-07RE1					Prepared: 07/22/13 Analyzed: 07/23/13			
Mercury	0.178	0.200	ug/L		0.276			43	20	QR-01, J
Matrix Spike (3070454-MS1)		Source: AWG0376-19					Prepared: 07/22/13 Analyzed: 07/23/13			
Mercury	9.93	0.200	ug/L	2.5000	7.89	82	75-125			
Matrix Spike Dup (3070454-MSD1)		Source: AWG0376-19					Prepared: 07/22/13 Analyzed: 07/23/13			
Mercury	10.1	0.200	ug/L	2.5000	7.89	88	75-125	2	20	
Post Spike (3070454-PS1)		Source: AWG0376-19					Prepared: 07/22/13 Analyzed: 07/23/13			
Mercury	6.71		ug/L	1.6667	5.26	87	80-120			
Batch 3070531 - EPA 3005A										
Blank (3070531-BLK1)							Prepared & Analyzed: 07/24/13			
Antimony	0.39	6.00	ug/L							J
Arsenic	ND	10.0	ug/L							
Barium	ND	100	ug/L							
Beryllium	ND	1.00	ug/L							
Cadmium	ND	1.00	ug/L							
Chromium	ND	10.0	ug/L							
Cobalt	ND	10.0	ug/L							
Copper	ND	10.0	ug/L							

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Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070531 - EPA 3005A										
Blank (3070531-BLK1)							Prepared & Analyzed: 07/24/13			
Lead	ND	10.0	ug/L							
Nickel	ND	50.0	ug/L							
Selenium	ND	10.0	ug/L							
Silver	ND	10.0	ug/L							
Thallium	ND	5.50	ug/L							
Vanadium	ND	25.0	ug/L							
Zinc	ND	10.0	ug/L							
LCS (3070531-BS1)							Prepared & Analyzed: 07/24/13			
Antimony	107	6.00	ug/L	100.00		107	80-120			
Arsenic	103	10.0	ug/L	100.00		103	80-120			
Barium	96.4	100	ug/L	100.00		96	80-120			J
Beryllium	109	1.00	ug/L	100.00		109	80-120			
Cadmium	98.6	1.00	ug/L	100.00		99	80-120			
Chromium	103	10.0	ug/L	100.00		103	80-120			
Cobalt	104	10.0	ug/L	100.00		104	80-120			
Copper	103	10.0	ug/L	100.00		103	80-120			
Lead	96.0	10.0	ug/L	100.00		96	80-120			
Nickel	102	50.0	ug/L	100.00		102	80-120			
Selenium	102	10.0	ug/L	100.00		102	80-120			
Silver	98.6	10.0	ug/L	100.00		99	80-120			
Thallium	96.2	5.50	ug/L	100.00		96	80-120			
Vanadium	97.7	25.0	ug/L	100.00		98	80-120			
Zinc	103	10.0	ug/L	100.00		103	80-120			
Matrix Spike (3070531-MS1)	**Source: AWG0500-02**						Prepared & Analyzed: 07/24/13			
Antimony	105	6.00	ug/L	100.00	0.97	104	75-125			

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Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070531 - EPA 3005A										
Matrix Spike (3070531-MS1)		**Source: AWG0500-02**					Prepared & Analyzed: 07/24/13			
Arsenic	98.4	10.0	ug/L	100.00	ND	98	75-125			
Barium	167	100	ug/L	100.00	72.0	95	75-125			
Beryllium	106	1.00	ug/L	100.00	2.19	104	75-125			
Cadmium	95.4	1.00	ug/L	100.00	ND	95	75-125			
Chromium	95.5	10.0	ug/L	100.00	2.53	93	75-125			
Cobalt	124	10.0	ug/L	100.00	28.0	96	75-125			
Copper	97.4	10.0	ug/L	100.00	1.18	96	75-125			
Lead	96.2	10.0	ug/L	100.00	1.55	95	75-125			
Nickel	103	50.0	ug/L	100.00	9.55	94	75-125			
Selenium	98.1	10.0	ug/L	100.00	1.44	97	75-125			
Silver	95.2	10.0	ug/L	100.00	ND	95	75-125			
Thallium	92.6	5.50	ug/L	100.00	0.10	92	75-125			
Vanadium	86.1	25.0	ug/L	100.00	ND	86	75-125			
Zinc	101	10.0	ug/L	100.00	5.40	96	75-125			
Matrix Spike Dup (3070531-MSD1)		**Source: AWG0500-02**					Prepared & Analyzed: 07/24/13			
Antimony	107	6.00	ug/L	100.00	0.97	106	75-125	2	20	
Arsenic	99.8	10.0	ug/L	100.00	ND	100	75-125	1	20	
Barium	169	100	ug/L	100.00	72.0	97	75-125	1	20	
Beryllium	108	1.00	ug/L	100.00	2.19	106	75-125	2	20	
Cadmium	96.5	1.00	ug/L	100.00	ND	97	75-125	1	20	
Chromium	97.2	10.0	ug/L	100.00	2.53	95	75-125	2	20	
Cobalt	126	10.0	ug/L	100.00	28.0	98	75-125	1	20	
Copper	96.4	10.0	ug/L	100.00	1.18	95	75-125	1	20	
Lead	97.9	10.0	ug/L	100.00	1.55	96	75-125	2	20	
Nickel	105	50.0	ug/L	100.00	9.55	95	75-125	1	20	
Selenium	99.2	10.0	ug/L	100.00	1.44	98	75-125	1	20	

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Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070531 - EPA 3005A										
Matrix Spike Dup (3070531-MSD1)		**Source: AWG0500-02**					Prepared & Analyzed: 07/24/13			
Silver	97.2	10.0	ug/L	100.00	ND	97	75-125	2	20	
Thallium	94.9	5.50	ug/L	100.00	0.10	95	75-125	2	20	
Vanadium	96.2	25.0	ug/L	100.00	ND	96	75-125	11	20	
Zinc	101	10.0	ug/L	100.00	5.40	96	75-125	0.2	20	
Post Spike (3070531-PS1)		**Source: AWG0500-02**					Prepared & Analyzed: 07/24/13			
Antimony	85.8		ug/L	100.00	0.97	85	80-120			
Arsenic	96.5		ug/L	100.00	-0.26	97	80-120			
Barium	166		ug/L	100.00	72.0	94	80-120			
Beryllium	106		ug/L	100.00	2.19	104	80-120			
Cadmium	95.0		ug/L	100.00	0.03	95	80-120			
Chromium	96.8		ug/L	100.00	2.53	94	80-120			
Cobalt	124		ug/L	100.00	28.0	96	80-120			
Copper	96.0		ug/L	100.00	1.18	95	80-120			
Lead	94.9		ug/L	100.00	1.55	93	80-120			
Nickel	104		ug/L	100.00	9.55	94	80-120			
Selenium	97.5		ug/L	100.00	1.44	96	80-120			
Silver	95.4		ug/L	100.00	0.15	95	80-120			
Thallium	94.8		ug/L	100.00	0.10	95	80-120			
Vanadium	93.4		ug/L	100.00	1.62	92	80-120			
Zinc	100		ug/L	100.00	5.40	95	80-120			

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Blank (3070383-BLK1)							Prepared & Analyzed: 07/18/13			
Acetone	ND	25	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	0.8	3.0	ug/L							J
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	3.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	ug/L							

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Blank (3070383-BLK1)							Prepared & Analyzed: 07/18/13			
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	25	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	100	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	3.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	0.4	1.0	ug/L							J
Trichlorofluoromethane	ND	1.0	ug/L							
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*102*	*78-120*			
Surr: Toluene-d8	*49*		*ug/L*	*50.000*		*98*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Blank (3070383-BLK2)							Prepared & Analyzed: 07/19/13			

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Blank (3070383-BLK2)							Prepared & Analyzed: 07/19/13			
Acetone	ND	100	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	ND	3.0	ug/L							
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	3.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	ug/L							

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Blank (3070383-BLK2)							Prepared & Analyzed: 07/19/13			
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	100	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	3.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	1.0	ug/L							
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*52*		*ug/L*	*50.000*		*104*	*78-120*			
Surr: Toluene-d8	*50*		*ug/L*	*50.000*		*100*	*80-120*			
Surr: 4-Bromofluorobenzene	*52*		*ug/L*	*50.000*		*105*	*80-120*			
LCS (3070383-BS1)							Prepared & Analyzed: 07/18/13			

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
LCS (3070383-BS1)							Prepared & Analyzed: 07/18/13			
Benzene	49		ug/L	50.000		98	67-134			
Chlorobenzene	51		ug/L	50.000		103	69-122			
1,1-Dichloroethene	50		ug/L	50.000		100	58-142			
Toluene	49		ug/L	50.000		97	68-127			
Trichloroethene	50		ug/L	50.000		100	72-132			
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*94*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*52*		*ug/L*	*50.000*		*104*	*78-120*			
Surr: Toluene-d8	*50*		*ug/L*	*50.000*		*99*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Matrix Spike (3070383-MS1)	**Source: AWG0500-02**						Prepared & Analyzed: 07/18/13			
Benzene	50		ug/L	50.000	ND	100	67-134			
Chlorobenzene	52		ug/L	50.000	ND	104	69-122			
1,1-Dichloroethene	49		ug/L	50.000	ND	98	58-142			
Toluene	49		ug/L	50.000	ND	98	68-127			
Trichloroethene	48		ug/L	50.000	ND	97	72-132			
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*54*		*ug/L*	*50.000*		*107*	*78-120*			
Surr: Toluene-d8	*49*		*ug/L*	*50.000*		*99*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Matrix Spike Dup (3070383-MSD1)	**Source: AWG0500-02**						Prepared & Analyzed: 07/19/13			
Benzene	49		ug/L	50.000	ND	98	67-134	1	9	
Chlorobenzene	50		ug/L	50.000	ND	99	69-122	5	13	
1,1-Dichloroethene	48		ug/L	50.000	ND	97	58-142	2	9	

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 3070383 - EPA 5030B										
Matrix Spike Dup (3070383-MSD1)		**Source: AWG0500-02**					Prepared & Analyzed: 07/19/13			
Toluene	48		ug/L	50.000	ND	97	68-127	1	9	
Trichloroethene	49		ug/L	50.000	ND	99	72-132	2	11	
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*91*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*49*		*ug/L*	*50.000*		*99*	*78-120*			
Surr: Toluene-d8	*49*		*ug/L*	*50.000*		*99*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			

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Laboratory Certifications

Code	Description	Number	Expires
LA	Louisiana	02069	06/30/2014
NC	North Carolina	381	12/31/2013
NELAC	FL DOH (Non-Pot. Water, Solids) Eff:: 07/01/2012	E87315	06/30/2014
SC	South Carolina	98011001	06/30/2014
TX	Texas	T104704397-08-TX	03/31/2014
VA	Virginia	1340	12/14/2013

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Republic Services of North Carolina, LLC
1220 Commerce Street, SW
Conover NC, 28613

Attention: Mr. Ray Hoffman

August 02, 2013

Legend

Defination of Laboratory Terms

ND - Not Detected at levels greater than or equal to SWSL/RL
SWSL/RL - NC DENR Solid Waste Section LImit/Reporting Limit (Adjusted for DF/Prep Factor)
DF - Dilution Factor
MDL - Method Detection Limit

Qualifiers

R-01 Elevated reporting limit due to matrix interference.

QR-01 RPD was outside acceptance limits due to sample concentrations near or below the reporting limit.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

B-01 Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.

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220129

ASI ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY NORCROSS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME: Republic Services of NC LLC
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 1220 Commerce St SW Conover, NC 28613
REPORT TO: Mr. Ray Hoffman
CC: dayrobert@republicservices.com
REQUESTED COMPLETION DATE: Standard
PO #:
PROJECT NAME/STATE: East Carolina Landfill Landfill 07-03
PROJECT #: 8-01-120-01

DATE	TIME	MATRIX CODE*	# OF CONTAINERS	SAMPLE IDENTIFICATION	NC App. 1 VOCs	NC App. 1 Metals	Bob. TSS	Bob. Nitrate - Nitrite	Cyanide	Nitrate, Nitrite, Sulfate	Phosphorus, TKN	Oil + Grease	Phenols	REMARKS/ADDITIONAL INFORMATION
7/1/13	1505	W	12	0703-Landfill	X	X	X	X	X	X	X	X	X	—

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, 4°; 2 - H2SO4, 4°; 3 - HNO3, 4°; 4 - NaOH, 4°; 5 - NaOH/ZnAc, 4°; 6 - Na2S2O3, 4°; 7 - 4°

*MATRIX CODES: DW - DRINKING WATER; WW - WASTEWATER; GW - GROUNDWATER; SW - SURFACE WATER; ST - STORM WATER; W - WATER; S - SOIL; SL - SLUDGE; SD - SOLID; A - AIR; L - LIQUID; P - PRODUCT

SAMPLED BY AND TITLE: Michael Erickson Arcadis, Tech — DATE/TIME: 7/1/13
RELINQUISHED BY: Michael Erickson, Arcadis Lab — DATE/TIME: 7/1/13 1945
RECEIVED BY: — DATE/TIME:
RELINQUISHED BY: — DATE/TIME:
RECEIVED BY LAB: — DATE/TIME: 7/8/13 0905
pH: Laboratory Blank; Lab: 1 (3) or No
SAMPLE SHIPPED VIA: UPS FED-EX COURIER CLIENT OTHER:
Temperature: 2°C Custody Seal: Intact Broken Missing
Cooler Seal: Intact Broken Missing
Please use Black Ink to complete form

FOR LAB USE ONLY
LAB #: AWC-01488
In-house location: V4 HH W3 W1
Entered into LIMS: CH

2893

ASI

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(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 8/2/2013 6:25:38AM

Attn: Mr. Ray Hoffman

Client: Republic Services of North Carolina, LLC
Project: East Carolina Regional Landfill Leachate
Date Received: 07/18/13 09:05

Work Order: AWG0488
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 1 **#Containers:** 12

Minimum Temp(C): 2.0 **Maximum Temp(C):** 2.0 **Custody Seal(s) Used:** Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

The pH was adjusted for O&G, Metals, and COD/NO3+NO2/P/TKN from 6 to <2 with HCL lot# 2301412, HNO3 lot# 3012857 and H2SO4 lot# 083 respectively. CFH

Appendix C

Summary Table and Statistical Analyses Worksheets

Summary of Statistical Analyses
East Carolina Regional Landfill, Permit No. 08-03
Bertie County, North Carolina

Constituent	NC 2L	GWPS	Data Distribution	Statistical Method used to Establish Background	Calculated Background Concentration	Highest Reported Concentration for July 2013 and Well	Noted SSI Increase
Cobalt	N/E	1	Log Normal	Upper Tolerance Limit - Interwell	55.6 ug/L	28.0 ug/L GW-7	None

Notes:
1. Concentrations are in micrograms per liter (µg/L).
2. NC 2L = North Carolina 2L Groundwater Standard.
3. GWPS = Groundwater Protect Standard.
4. SSI = Statistically significant increase.
5. N/E = Not established.
5. N/A = Not applicable.

Joyce Project: **East Carolina Regional Landfill**
Project No: 894.1301.12
Task No: 02
Date: 17-Jul-13

Analyte: **Cobalt**

Sample No.	Sample Date	Location	Concentration (µg/L)	QL	Sorted Concentration (µg/L)	
1	28-Oct-98	GW-2	ND		8.59	12.60
2	07-Apr-99	GW-2	ND		9.50	12.50
3	08-Dec-99	GW-2	10		9.53	12.00
4	27-Apr-00	GW-2	ND		9.65	11.90
5	18-Oct-00	GW-2	ND		9.76	11.40
6	19-Apr-01	GW-2	ND		10.00	11.30
7	24-Dec-01	GW-2	ND		10.00	10.80
8	23-Apr-02	GW-2	ND		10.00	10.40
9	23-Oct-02	GW-2	ND		10.00	10.30
10	01-Apr-03	GW-2	10		10.10	10.10
11	28-Oct-03	GW-2	ND		10.30	10.00
12	27-Apr-04	GW-2	ND		10.40	10.00
13	26-Oct-04	GW-2	ND		10.80	10.00
14	15-Mar-05	GW-2	10		11.30	10.00
15	12-Jul-05	GW-2	ND		11.40	9.76
16	19-Jan-06	GW-2	11.9		11.90	9.65
17	11-Jul-06	GW-2	12.5		12.00	9.53
18	17-Jan-07	GW-2	10.3		12.50	9.50
19	09-Jul-07	GW-2	10.0		12.60	8.59
20	14-Jan-08	GW-2	11.3			
21	14-Jul-08	GW-2	10.1			
22	19-Jan-09	GW-2	12.0			
23	20-Jul-09	GW-2	11.4			
24	25-Jan-10	GW-2	12.6			
25	06-Jul-10	GW-2	8.59	J		
26	04-Jan-11	GW-2	9.65	J		
27	05-Jul-11	GW-2	10.4			
28	09-Jan-12	GW-2	9.51	J		
29	09-Jul-12	GW-2	9.76	J		
30	28-Jan-13	GW-2	9.53	J		
31	17-Jul-13	GW-2	10.8			

Number of Data: 31
Number of Truncated Data: 12
Percentage of Truncated Data: 39%

Upper Tolerance Limit 55.6 µg/L

All concentrations in micrograms per liter (µg/L).
B = Blank qualified data not used in statistical calculations.
J = Estimated concentration below quantification limit.
ND = Not detected above the detection limit (truncated).

JOYCE Project: **East Carolina Regional Landfill**
Project No: 894.1301.12
Task No: 02
Date: 17-Jul-13

Probability Plots to determine the distribution of **Cobalt**

Complete the following table where

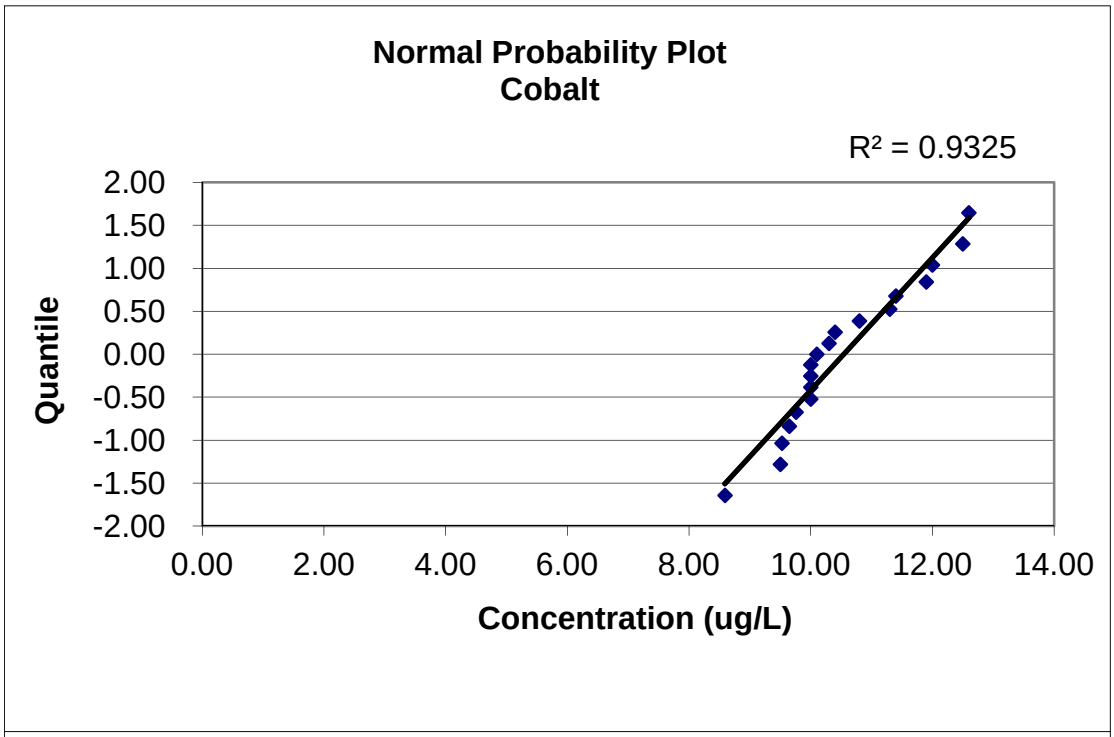
i = ordered value of sample, arranged from smallest to largest
X(i) = sample values arranged from smallest to largest
LN[X(i)] = Natural Log Value of sample concentrations arranged from smallest to largest
[i/(n+1)] = Cumulative probability
n = number of samples = 19

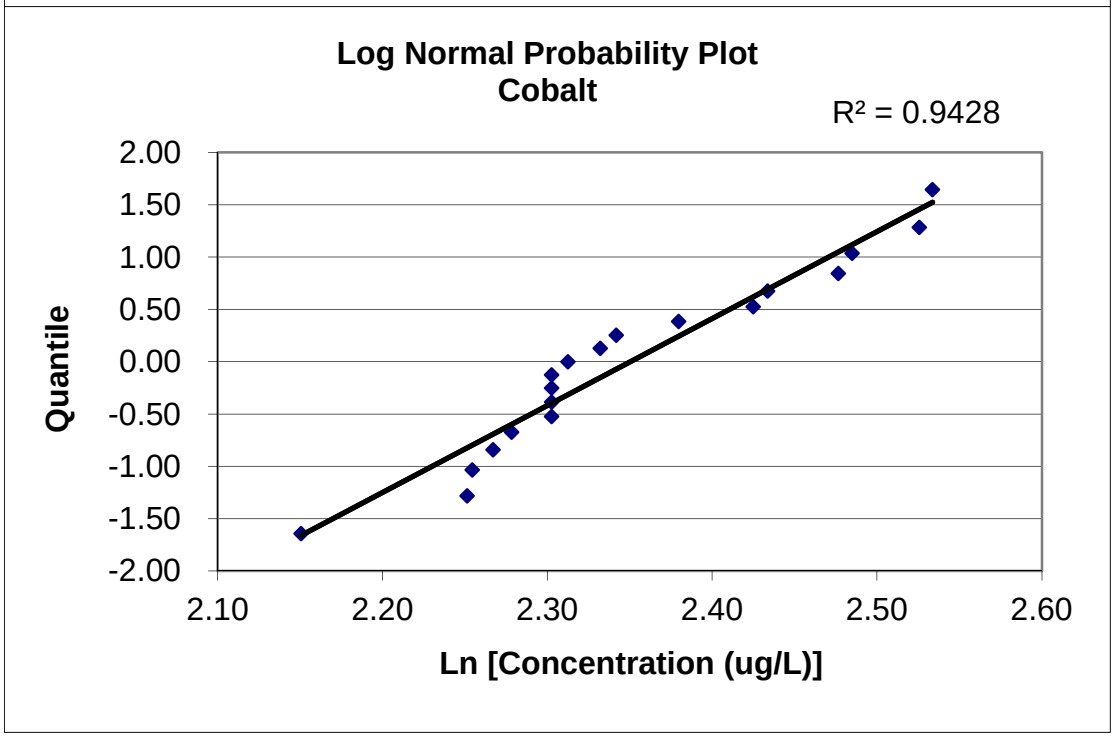
X(i)	LN[X(i)]	i	Rank	[Rank/(n+1)]	Quantiles
8.59	2.15	1	1	0.050	-1.64
9.50	2.25	2	2	0.100	-1.28
9.53	2.25	3	3	0.150	-1.04
9.65	2.27	4	4	0.200	-0.84
9.76	2.28	5	5	0.250	-0.67
10.00	2.30	6	6	0.300	-0.52
10.00	2.30	7	7	0.350	-0.39
10.00	2.30	8	8	0.400	-0.25
10.00	2.30	9	9	0.450	-0.13
10.10	2.31	10	10	0.500	0.00
10.30	2.33	11	11	0.550	0.13
10.40	2.34	12	12	0.600	0.25
10.80	2.38	13	13	0.650	0.39
11.30	2.42	14	14	0.700	0.52
11.40	2.43	15	15	0.750	0.67
11.90	2.48	16	16	0.800	0.84
12.00	2.48	17	17	0.850	1.04
12.50	2.53	18	18	0.900	1.28
12.60	2.53	19	19	0.950	1.64

Plot analysis indicates that the data more closely follow a log normal distribution.

JEI Project: **East Carolina Regional Landfill**
Project No: 894.1301.12
Task No: 02
Date: 17-Jul-13

Probability Plots to determine the distribution of **Cobalt**





JOYCE Project **East Carolina Regional Landfill**
Project No: 894.1301.12
Task No: 02
Date: 17-Jul-13

Determination of reported background value as an outlier

Analyte: **Cobalt**

Background Data

Sample No.	Sample Date	Location	ln(Concentration) (µg/L)	
1	28-Oct-98	GW-2	ND	
2	07-Apr-99	GW-2	ND	
3	08-Dec-99	GW-2	10.00	
4	27-Apr-00	GW-2	ND	
5	18-Oct-00	GW-2	ND	
6	19-Apr-01	GW-2	ND	
7	24-Dec-01	GW-2	ND	
8	23-Apr-02	GW-2	ND	
9	23-Oct-02	GW-2	ND	
10	01-Apr-03	GW-2	10.00	
11	28-Oct-03	GW-2	ND	
12	27-Apr-04	GW-2	ND	
13	26-Oct-04	GW-2	ND	
14	15-Mar-05	GW-2	10.00	
15	12-Jul-05	GW-2	ND	
16	19-Jan-06	GW-2	11.90	
17	11-Jul-06	GW-2	12.50	
18	17-Jan-07	GW-2	10.30	
19	09-Jul-07	GW-2	10.00	
20	14-Jan-08	GW-2	11.30	
21	14-Jul-08	GW-2	10.10	
22	19-Jan-09	GW-2	12.00	
23	20-Jul-09	GW-2	11.40	
24	25-Jan-10	GW-2	12.60	
25	06-Jul-10	GW-2	8.59	J
26	04-Jan-11	GW-2	9.65	J
27	05-Jul-11	GW-2	10.40	
28	09-Jan-12	GW-2	9.51	J
29	09-Jul-12	GW-2	9.76	J
30	28-Jan-13	GW-2	9.53	J
31	17-Jul-13	GW-2	10.80	
		Mean =	10.544	
		STD =	1.110	

Note: All concentrations are in ug/L.

Using the data listed above, form the statisitc Tn:

Tn = (Xn - mean) / STD

where: Xn = largest observed sample value
mean = mean of the background values
STD = standard deviation of the background values

For Xn = 12.600
mean = 10.544
STD = 1.110

Tn = 1.852

From Table 8 included in the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities - Interim Final Guidance, the critical value for the given sample group is

Number of samples = 19
Tc = 2.532

Since Tc>Tn, the sample result is not considered to be an outlier.

JEI Project: **East Carolina Regional Landfill**
Project No: 894.1301.12
Task No: 02
Date: 17-Jul-13

Shapiro Wilk Test Statistic (W) for log normality of **Cobalt**

Complete the following table where

i = ordered value of sample, arranged from smallest to largest
X(i) = sample values arranged from smallest to largest
X(n-i+1) = sample values arranged from largest to smallest
A(n-i+1) = coefficient from table A-1, Statistical Analysis of Ground-Water Data at RCRA Facilities
B(i) = summation of (X(n-i+1)-X(i))A(n-i+1)

i	X(i)	X(n-i+1)	X(n-i+1) - X(i)	A(n-i+1)	B(i)
1	2.151	2.534	0.383	0.4808	0.184
2	2.251	2.526	0.274	0.3232	0.089
3	2.254	2.485	0.230	0.2561	0.059
4	2.267	2.477	0.210	0.2059	0.043
5	2.278	2.434	0.155	0.1641	0.025
6	2.303	2.425	0.122	0.1271	0.016
7	2.303	2.380	0.077	0.0932	0.007
8	2.303	2.342	0.039	0.0612	0.002
9	2.303	2.332	0.030	0.0300	0.001
10	2.313	2.313	0.000	0.0000	0.0000
11	2.332	2.303	-0.030		
12	2.342	2.303	-0.039		
13	2.380	2.303	-0.077		
14	2.425	2.303	-0.122		
15	2.434	2.278	-0.155		
16	2.477	2.267	-0.210		
17	2.485	2.254	-0.230		
18	2.526	2.251	-0.274		
19	2.534	2.151	-0.383		

The test statistic W can be found using:

W = SQR((B/SD x SQRT(n-1))

where:

B =	summation of (X(n-i+1)-X(i))A(n-i+1)	=	0.427
SD =	standard deviation of the data group	=	0.104
n =	number of samples	=	19
		W =	0.939

Compare this value to the critical value in Table A-2 of Statistical Analysisof Ground-Water Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance (Draft) July, 1992, to determine if the data is normally distributed.

From Table A-2 with (n) samples and a 95% confidence level, the critical value is

W(crit) = 0.901
and the calculated W = 0.939

Therefore the data set is Log-Normal.

JOYCE Projec **East Carolina Regional Landfill**
Project No: 894.1301.12
Task No: 02
Date: 17-Jul-13

Aitchison's Adjustment for **Cobalt**

Background Values (positive detects only)

Sample No.	Sample Date	Location	Concentration (µg/l)	ln(conc)
1	28-Oct-98	GW-2	ND	
2	7-Apr-99	GW-2	ND	
3	8-Dec-99	GW-2	10.00	2.303
4	27-Apr-00	GW-2	ND	
5	18-Oct-00	GW-2	ND	
6	19-Apr-01	GW-2	ND	
7	24-Dec-01	GW-2	ND	
8	23-Apr-02	GW-2	ND	
9	23-Oct-02	GW-2	ND	
10	1-Apr-03	GW-2	10.00	2.303
11	28-Oct-03	GW-2	ND	
12	27-Apr-04	GW-2	ND	
13	26-Oct-04	GW-2	ND	
14	15-Mar-05	GW-2	10.00	2.303
15	12-Jul-05	GW-2	ND	
16	19-Jan-06	GW-2	11.90	2.477
17	11-Jul-06	GW-2	12.50	2.526
18	17-Jan-07	GW-2	10.30	2.332
19	9-Jul-07	GW-2	10.00	2.303
20	14-Jan-08	GW-2	11.30	2.425
21	14-Jul-08	GW-2	10.10	2.313
22	19-Jan-09	GW-2	12.00	2.485
23	20-Jul-09	GW-2	11.40	2.434
24	25-Jan-10	GW-2	12.60	2.534
25	6-Jul-10	GW-2	8.59	2.151
26	4-Jan-11	GW-2	9.65	2.267
27	5-Jul-11	GW-2	10.40	2.342
28	9-Jan-12	GW-2	9.51	2.252
29	9-Jul-12	GW-2	9.76	2.278
30	28-Jan-13	GW-2	9.53	2.254
31	17-Jul-13	GW-2	10.80	2.380

Mean of detected values = 2.35
Standard Deviation of detected values = 0.10

The adjusted mean can be found using

$$M(a) = (1-d/n) \times M$$

where:	d =	number non- detected values	=	12
	n =	total number samples	=	31
	M =	mean detected values	=	2.35
		M(a)	**=**	**1.44**

The adjusted standard deviation squared may be found using

$$STD(a) = [(n-(d+1))/(n-1)]\ S + d/n((n-d)/(n-1))MM$$

where:	n =	total number samples	=	31
	d =	number non-detected values	=	12
	S =	std deviation of detected values squared	=	0.01
	MM =	mean of detected values squared	=	5.52
		STD(a)	=	1.36

and the adjusted standard deviation is then

S(a) = SQRT(STD(a)) = 1.17

Joyce Project: **East Carolina Regional Landfill**
Project No: 894.1301.12
Task No: 02
Date: 17-Jul-13

Parametric Tolerance Interval for Aitchison's adjusted data

Analyte: **Cobalt**

Background Data

Sample No.	Sample Date	Location	Concentration (µg/l)	Quantitation Limit (µg/l)	ln(Concentration) (µg/l)
1	28-Oct-98	GW-2	ND	10	
2	7-Apr-99	GW-2	ND	10	
3	8-Dec-99	GW-2	10.00	10	2.303
4	27-Apr-00	GW-2	ND	10	
5	18-Oct-00	GW-2	ND	10	
6	19-Apr-01	GW-2	ND	10	
7	24-Dec-01	GW-2	ND	10	
8	23-Apr-02	GW-2	ND	10	
9	23-Oct-02	GW-2	ND	10	
10	1-Apr-03	GW-2	10.00	10	2.303
11	28-Oct-03	GW-2	ND	10	
12	27-Apr-04	GW-2	ND	10	
13	26-Oct-04	GW-2	ND	10	
14	15-Mar-05	GW-2	10.00	10	2.303
15	12-Jul-05	GW-2	ND	10	
16	19-Jan-06	GW-2	11.90	10	2.477
17	11-Jul-06	GW-2	12.50	10	2.526
18	17-Jan-07	GW-2	10.30	10	2.332
19	9-Jul-07	GW-2	10.00	10	2.303
20	14-Jan-08	GW-2	11.30	10	2.425
21	14-Jul-08	GW-2	10.10	10	2.313
22	19-Jan-09	GW-2	12.00	10	2.485
23	20-Jul-09	GW-2	11.40	10	2.434
24	25-Jan-10	GW-2	12.60	10	2.534
25	6-Jul-10	GW-2	8.59	10	2.151
26	4-Jan-11	GW-2	9.65	10	2.267
27	5-Jul-11	GW-2	10.40	10	2.342
28	9-Jan-12	GW-2	9.51	10	2.252
29	9-Jul-12	GW-2	9.76	10	2.278
30	28-Jan-13	GW-2	9.53	10	2.254
31	17-Jul-13	GW-2	10.80	10	2.380

Note: All sample concentrations are micrograms per liter

The background mean and standard deviation were modified using Aitchison's Adjustment.
The adjusted mean and standard deviation are as follows:

The ln(adjusted mean) and ln(standard deviation) are

ln(adjusted mean) = 1.44
ln(adjusted standard deviation) = 1.17

Using the background data, the upper Tolerance Limit can be determined using

Upper Tolerance Limit = (Mean Concentration) + K x (Standard Deviation Samples)

where: K = factor for constructing one sided normal tolerance limit taken from table 4-2, page 87, Statistical Methods for Groundwater Monitoring, Gibbons, 1994
n = number of background samples

For: K = 2.209
n = 31

UTL = 55.56 µg/L