December 7, 2011

Edgecombe County, Solid Waste Dept.
201 Saint Andrews Street, Box 10
Tarboro, North Carolina 27886

Attention: Mr. Mike Cummings, Edgecombe County Solid Waste Manager

Reference: **Environmental Compliance Monitoring Report - July 2011**
Edgecombe County Landfill (Permit No. 33-01)
Tarboro, North Carolina
S&ME Project No. 1054-07-238D

Dear Mr. Cummings:

S&ME, Inc. (S&ME) is pleased to submit this report documenting the environmental compliance monitoring conducted on July 27-28, 2011 at the Edgecombe County Landfill located in Tarboro, North Carolina. These services have been performed in general accordance with S&ME Proposal No. P091-11V, dated June 30, 2011. A compact disk (CD) containing an electronic copy of this report in portable document format (.pdf) and **Table 1** in Excel spreadsheet format (.xls) is included in **Appendix II**. One copy of this report is attached for your file, and one copy was delivered on your behalf directly to the North Carolina Department of Environment and Natural Resources - Division of Waste Management (NCDENR-DWM), Solid Waste Section (Section).

According to the *Corrective Action Plan Review* letter, dated January 16, 2009, NCDENR-DWM Section recommended that semiannual sampling be continued at the site for analytes listed in the Appendix I of 40 CFR Part 258 (detection monitoring) and for geochemical parameters necessary to evaluate Monitored Natural Attenuation (MNA) as a corrective action. S&ME has completed four baseline data sets of MNA parameters and is in the process of completing the Baseline Water Quality and MNA Corrective Action Evaluation Report. Following the baseline water quality and MNA assessment, S&ME will recommend a reduced list of analytes and a reduced number of monitor well locations for future MNA parameter sampling as a means to cut costs for subsequent sampling.

S&ME appreciates the opportunity to provide environmental services to Edgecombe County. Please call us at (919) 872-2660 if you have any questions or comments, or if we can be of further assistance.

Sincerely,
S&ME, Inc.

Michelle L. Logut
Environmental Scientist

Samuel P. Watts, P.G.
Senior Project Manager

Attachment: *July 2011 - Environmental Compliance Monitoring Report*, dated December 7, 2011

JULY 2011
ENVIRONMENTAL COMPLIANCE MONITORING REPORT
EDGECOMBE COUNTY LANDFILL
(PERMIT # 33-01)
TARBORO, NORTH CAROLINA

S&ME Project No. 1054-07-238D

Prepared for:

Edgecombe County
Solid Waste Department
PO Box 10
Tarboro, NC 27886

Prepared by:

S&ME, Inc.
3201 Spring Forest Road
Raleigh, North Carolina 27616

December 7, 2011

Michelle L. Logut
Environmental Scientist

Samuel P. Watts, P.G.
Senior Project Manager

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):

S&ME, Inc. (consultant)

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

Name: Sam Watts Phone: 919-801-4920

E-mail: swatts@smeinc.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Edgecombe County Landfill	2872 Colonial Road Tarboro, NC 27886	33-01	.1600	July 27-28, 2011

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☐ Surface water monitoring data
☐ Methane gas monitoring data
☒ Corrective action data (specify) MNA Parameters
☐ 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.

Samuel P. Watts — Consultant / Geologist — (919) 872-2660

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

Signature — 1/12/12 Date

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA LICENSED 1806 GEOLOGIST SAMUEL P. WATTS 1/12/12

S&ME, Inc., 3201 Spring Forest Rd., Raleigh, NC 27616

Facility Representative Address

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

Revised 6/2009

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1.0 PROJECT INFORMATION AND STATUS

1.1 Introduction

Edgecombe County currently operates a solid waste facility on a tract of land located off of Colonial Road (S.R. 1601) in Edgecombe County, south of Tarboro, North Carolina (**Figure 1**). In general, the solid waste facility includes a municipal solid waste (MSW) transfer facility; a construction & demolition (C&D) debris landfill unit; white goods and pallets storage area; soil borrow pits; and various operational buildings. The C&D landfill unit is operated over an existing closed MSW landfill, in general accordance with North Carolina Department of Environment and Natural Resources Division of Waste Management (NCDENR-DWM) Permit No. 33-01. Edgecombe County continues to perform groundwater and surface water monitoring on a semiannual basis to comply with the requirements of North Carolina Solid Waste Management Rules (Solid Waste Rules), 15A NCAC 13B. S&ME has prepared this report on behalf of Edgecombe County to present the results of the July 2011 monitoring event as required by § .0600 and .1632 of the Solid Waste Rules.

The July 2011 monitoring event included sampling for groundwater quality from the following wells which comprise the groundwater monitoring network:

Water Quality Monitoring Network Groundwater Sampling Locations

Background Monitor Wells	Compliance Monitor Wells	
MW-3B	MW-5	MW-13
MW-4	MW-6	MW-14
MW-9	MW-7A	MW-15
	MW-12	MW-16

Jerry's Creek is the surface water feature located on the northern boundary of the landfill where two surface water samples (upstream and downstream) are typically collected to review surface water quality (**Figure 2**). Neither the upstream nor the downstream surface water samples were collected during the July 2011 monitoring event because Jerry's Creek was dry during the July monitoring event.

1.2 Background

Groundwater has been monitored at the landfill facility since 1994 in accordance with § .1632 of the Solid Waste Rules under the landfill's *Water Quality Monitoring Plan* (WQMP). The WQMP was originally written in September 1994, revised in June 2008 and again in January 2010. Current groundwater monitoring at the landfill is conducted in general confirmation with the January 2010 WQMP.

Volatile organic compounds (VOCs) and inorganic constituents (metals) have been detected above North Carolina groundwater protection standards in groundwater samples collected from groundwater compliance monitoring points at Edgecombe County Landfill. Previous statistical evaluation of the groundwater monitoring data indicated that a release of VOCs and metals had occurred. In accordance with NCDENR North Carolina Solid Waste Rules defined under 15A NCAC 13B, S&ME has completed the following activities on behalf of Edgecombe County in response to the detections of the VOC and metals in groundwater:

- Statistical analyses (January 2007) of semiannual water quality results of compliance well monitoring system in accordance with the facility's Water Quality Monitoring Plan (WQMP);

- Alternate Source Demonstration (ASD) study in accordance with Solid Waste Rules defined under 15A NCAC 13B.1633(c)(3) and .1634(g)(2);

- Nature and Extent Study (NES) prepared in accordance with Solid Waste Rules defined under 15A NCAC 13B.1634(g)(1);

- Assessment of Corrective Measures (ACM) in accordance with Solid Waste Rules defined under 15A NCAC 13B.1635; and,

- Corrective Action Plan (CAP) in accordance with Solid Waste Rules defined under 15A NCAC 13B.1636.

The July 2011 semiannual groundwater sampling services were completed in general accordance with the requirements of the Solid Waste Rules defined under 15A NCAC 13B .1632 (Groundwater Sampling and Analysis Requirements), .1634 (Assessment Monitoring Program), and .1637 (Implementation of the Corrective Action Program).

2.0 JULY 2011 SAMPLING EVENT

On July 27-28, 2011, S&ME personnel collected groundwater samples from 11 monitor wells (MW-3B, MW-4, MW-5, MW-6, MW-7A, MW-9, MW-12, MW-13, MW-14, MW-15, and MW-16) at the Edgecombe County Landfill (**Figure 2**). S&ME personnel performed sampling in general accordance with the Solid Waste Rules and the facility's WQMP, dated June 2008, revised January 2010.

Prior to collecting groundwater samples, the monitor wells and piezometers listed in the WQMP network of points for groundwater elevation measurements were opened and allowed to equilibrate with atmospheric conditions before gauging the liquid level. Groundwater depths were measured to an accuracy of ±0.01 feet using an electronic water level indicator, which was decontaminated before its initial use and between measurements. The measurements were collected to calculate relative groundwater elevations; develop a groundwater potentiometric map; and to estimate the hydraulic gradient and groundwater flow direction at the time of the sampling event. Water level measurements are presented in **Table 1** and **Figure 2**.

After collecting the static groundwater levels, stagnant water from wells that were scheduled for sampling were purged using a peristaltic pump. Low-flow sampling methods were followed to purge and sample groundwater from the monitor wells. As purging proceeded, an YSI® multi-meter with a flow-through cell was used to measure field parameters that included pH, temperature, specific conductance, dissolved oxygen, oxidation-reduction potential, and turbidity on groundwater purged from the monitor wells. Purge parameter measurements were measured and recorded at regular intervals before sampling. The multi-meter was calibrated by Pine Environmental Services, Inc. and the calibration was field-checked with calibration standards by S&ME personnel before use.

A groundwater sample was collected after field parameters (pH, temperature, and conductivity) stabilized and the turbidity measurement was approximately 10 Nephelometric Turbidity Units (NTUs) or less. In accordance with the WQMP, field parameters were considered stable when they were changing less than 10 percent over three consecutive measurements. The field parameter measurements are presented in **Table 1**. One duplicate groundwater sample was collected from MW-5 for the purpose of Quality Control (QC). In addition, one trip blank and one equipment blank sample were also collected for QC. These results are included in **Table 2**.

Groundwater samples were collected through the silicon tubing directly into clean containers provided by the laboratory. Once filled, the sample containers were sealed, labeled, and placed into an insulated container with ice. The samples were managed under chain-of-custody protocols and shipped to Environmental Conservation Laboratories, Inc. (ENCO), a North Carolina-certified laboratory. ENCO analyzed the samples for constituents listed in 40 CFR 258 Appendix I and additional geochemical

parameters selected to evaluate Monitored Natural Attenuation (MNA) as a corrective action for groundwater contamination detected at the site.

S&ME personnel also collected gas-phase vapor samples from each background and compliance monitor wells. The vapor samples were collected with a gas stripping cell provided by Microseeps Laboratory (Microseeps). Stagnant water from each sampled well was purged using a peristaltic pump. New silicon tubing placed through the drive of the peristaltic pump was attached to a section of dedicated Teflon-lined tubing that was inserted into the water column in the monitor well. A new section of polyethylene tubing connected the inlet port of the gas stripping cell to the silicon tubing through the drive of the peristaltic pump. Approximately 20 milliliters (mL) of air was injected into the cell with a new syringe and plunger provided by Microseeps. Groundwater was pumped through the cell at approximately 170 mL per minute for approximately 20 minutes, which is the equilibrium time needed to strip gas at this flow rate. Once the equilibrium time expired, approximately 15 mL of sample gas was withdrawn from the cell with the syringe and plunger, and the withdrawn gas sample was injected into a new sample vial provided by the laboratory. Once filled, the sample vials were sealed, labeled, and placed into a cardboard box with packing material. The samples were submitted under chain-of-custody protocols to Microseeps in Pittsburgh, Pennsylvania. Microseeps tested the vapor samples for hydrogen by Method AM20GAX.

The results of analytical testing are discussed in **Section 4.1** and a summary of constituent concentrations are presented in **Table 1**, **Table 2,** and **Table 3**. A copy of the laboratory reports is provided in **Appendix I**. A compact disk (CD) with an electronic copy of **Table 1** in Excel spreadsheet format (.xls) and an electronic copy of this report in portable document format (.pdf) are included in **Appendix II**.

3.0 SITE HYDROGEOLOGY

3.1 Groundwater Elevations and Flow Direction

The uppermost aquifer at the site is unconfined and is found in the silty sands of the Sunderland Formation. This aquifer is recharged by inflow from upgradient areas and by precipitation infiltration. The uppermost aquifer underlying the landfill is expected to discharge to the local surface water features including Jerry's Creek and the drainage features in the active landfill area. During flood conditions, the southwest perimeter trench and the farm pond located in the southeast corner of the site may recharge the aquifer. The marine clay layer (Yorktown Formation) encountered at depths from approximately 8 to 24 feet below the original ground surface acts as an aquitard and semi-confining layer below the landfill.

Shallow monitoring wells and piezometers are installed in the surficial aquifer with the bottoms of the wells resting above, on, or penetrating the top of the Yorktown Formation. As previously discussed, static water levels in fifteen monitor wells and twelve piezometers of the site monitoring network were measured prior to sampling.

Static water level measurements collected during the July 2011 sampling event (Table 1) were used to calculate the corresponding groundwater elevations based on surveyed top of casing (TOC) elevations. A groundwater potentiometric map was developed using the groundwater elevations (**Figure 2**). Based upon the groundwater potentiometric surface elevations, the groundwater flow direction was estimated to be to the north-northeast. The average horizontal hydraulic gradient was calculated from three point calculation solutions using two sets (three wells per set) of groundwater elevation data measured on July 27, 2011 and by applying the following equation (Driscoll, 1986):

$$i = \frac{h_1 - h_2}{L}$$

where:

i = Hydraulic gradient
$h_1 - h_2$ = Difference in hydraulic head (feet)
L = Distance along flow path (feet)

The three point calculation is used to estimate the hydraulic gradient perpendicular to a groundwater potentiometric contour of equal elevation determined from high, intermediate, and low groundwater elevations at three monitor wells. The gradient calculated perpendicular to the equal elevation contour plotted from the well set is representative of a true gradient rather than the apparent gradient that is estimated from a two-well point gradient calculation. Based on the Driscoll gradient equation and using a third groundwater elevation to plot the equal elevation contour, the distance L can be measured between h_1 and h_2 perpendicular to the equal elevation contour to estimate the true hydraulic gradient for the three groundwater elevation data points. The average

horizontal hydraulic gradient from two three point solutions using well sets MW-3B, MW-7A, and MW-5, and P-1, MW-7A and MW-5 is estimated to be 0.0210 ft/ft. The hydraulic gradient calculations are included in **Appendix III**.

3.2 Groundwater Flow Velocity

An approximate average linear groundwater flow velocity (V) was calculated using the following equation (Freeze and Cherry, 1979):

$$V = \frac{Ki}{n}$$

where:
V = Average linear groundwater flow velocity [feet per year (ft/yr)]
K = Hydraulic conductivity (ft/yr)
i = Flow gradient as a ratio (ft/ft)
n = Effective soil porosity (percent)

Aquifer rising and falling head tests were previously performed at the site by Law Engineering Company (Law) and by S&ME. The aquifer test data were used to estimate the hydraulic conductivity of the sediments in the surficial aquifer intersected by the screened intervals of the monitor wells tested. The aquifer test data (provided in previous reports) were analyzed by the Bouwer and Rice Method.

The hydraulic conductivity, K, values previously measured at the site ranged from 1.29×10^{-5} centimeters per second (cm/sec) to 3.65×10^{-4} cm/sec. An average hydraulic conductivity value of 5.95×10^{-5} cm/sec was used for calculating the site-wide flow velocity. The average hydraulic gradient of 0.0210 ft/ft, calculated from the three point solution described above was used as the site-wide average gradient. An effective soil porosity, n, of 15% was used as the site-wide average.

The average groundwater flow velocity, V, for the site, using the equation and input values above, was estimated at 8.62 ft/yr. Groundwater flow velocity calculations are included in **Appendix III**. The average groundwater flow velocity information is presented on **Figure 2**.

4.0 GROUNDWATER QUALITY

In general accordance with the assessment monitoring requirements described in § .1634 of the Solid Waste Rules, S&ME sampled three background and eight compliance groundwater monitor wells during the July 2011 sampling event. The samples were analyzed by ENCO for constituents listed in the 40 CFR 258, Appendix I analyte list using the analytical methods that included EPA Method 6010/6020 (metals) and Method 8260B (VOCs). Groundwater samples from each background and compliance well were also tested for additional MNA parameters; the test methods are listed in the ENCO laboratory report. The field measurements and analytical results are summarized on **Table 1.** The groundwater summary of compound detections is presented in **Table 2** and **in Table 3**. The chain-of-custody form and the laboratory reports from ENCO are provided in **Appendix I**.

During the July 2011 sampling event, one groundwater sample (MW-13) was analyzed for both total metals (required) and dissolved metals (voluntary additional analyses). The purpose of the dissolved analyses was to provide supplemental data for interpretation of total metals results. Analysis of total metals provides the level of both dissolved and mobile particulate-associated metals available for potential transport. Typically, a dissolved (filtered) metal determination is less than its concentration as a total (unfiltered) metal, indicating that mobile particulates, removed by filtering for the dissolved analysis, contribute to the total concentration. A high total metals result paired with a low to non-detectable dissolved metals result suggests that the total metal concentration reported by the laboratory may be the result of turbidity (suspended solids) in the sample. Mobile particulates are frequently present in groundwater with high turbidity, such as has been previously observed in groundwater sampled from several of the on-site wells.

Effective December 1, 2006 NCDENR-DWM, Section, changed the standard limits for comparing constituent detections in laboratory analysis from the Practical Quantitation Limits (PQLs) established in 1994 to the Solid Waste Reporting Limits (SWRLs). On February 23, 2007, the Section further revised the reporting limits from the SWRL to the Solid Waste Section Limit (SWSL). The SWSL was defined as the lowest amount of analyte in a sample that can be quantitatively determined with suitable precision and accuracy. The new SWSL limits are lower than the previous PQL limits. Concentrations reported by the laboratory that are above the Method Detection Limit (MDL) but below the SWSL must be qualified as estimated values designated by the letter “J”. According to the laboratory quality control performed by ENCO, detections above the MDL but below the method reporting limit (MRL) are considered estimated values, designated by the letter “J”.

4.1 Groundwater Analytical Data

Constituent concentrations detected above the laboratory MDLs are summarized on **Table 2**. For comparison purposes, these results are shown with their respective SWSL and the 15A North Carolina Administrative Code (NCAC) Subchapter 2L .0200 Groundwater Quality Standards (2L Standard), which were recently revised and became

effective January 1, 2010. Where target groundwater constituents have no established 2L Standard, the MDL is the default 2L Standard. However, since the DWM has listed constituent concentrations protective of groundwater, the NCDENR-DWM Section Ground Water Protection Standard (GWPST) established in accordance with the Solid Waste Management Rules, Section .1634(h) is used as the action level for detections where no 2L Standard is established.

4.1.1 Compare Background and Compliance Detections to the SWSL

The following table summarizes the monitor well locations where Appendix I constituents were detected at levels that are equal to or exceed the **SWSL** concentration in one or more samples in the July 2011 monitoring event:

July 2011 Groundwater Sampling Event
Appendix I Constituent Concentration Detected Equal to or Greater than SWSL

Background Monitor Wells	Appendix I Detected Constituents Equal to or Greater Than Their SWSL
MW-3B	barium, beryllium, cobalt, zinc
MW-4	--
MW-9	barium
Compliance Monitor Wells	**Appendix I Detected Constituents Equal to or Greater Than Their SWSL**
MW-5	chlorobenzene, *1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, *toluene, vinyl chloride, arsenic, barium, cobalt, nickel, zinc
MW-6	barium
MW-7A	benzene, barium
MW-12	benzene, chlorobenzene, 1,4-dichlorobenzene, barium, cobalt, selenium, zinc
MW-13	benzene, chlorobenzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, barium, chromium, cobalt, nickel, selenium, zinc
MW-14	barium
MW-15	cis-1,2-dichloroethene, 1,2-dichloropropane, vinyl chloride, barium, cobalt
MW-16	barium

-- = No Appendix I constituent concentrations were detected above SWSL
* = constituent detected in duplicate sample, but not record sample

Volatile Organic Compounds

No Appendix I VOC concentrations were reported at concentrations above the analytical method's detection limit in the groundwater samples collected from the background monitor wells MW-3B, MW-4, and MW-9, nor were they detected in the groundwater samples collected from the compliance monitor wells MW-14 and MW-16.

The table above lists the VOCs detected in groundwater sampled from monitor wells MW-5, MW-7A, MW-12, MW-13, and MW-15 that were detected above their respective SWSLs. Two VOCs were detected in the groundwater sample collected from compliance monitor well MW-6, but below their respective SWSLs.

Inorganic Compounds

The table above lists the inorganic compounds detected in groundwater sampled from the upgradient background monitor wells MW-3B and MW-9 and downgradient compliance monitor wells MW-5, MW-6, MW-7A, MW-12, MW-13, MW-14, MW-15, and MW-16 that were detected above their respective SWSLs. Four inorganic compounds were detected in the groundwater sample collected from background monitor well MW-4, but below their respective SWSLs.

The dissolved concentration of selenium reported in the filtered sample from MW-13 (8.64J µg/L) was less than the SWSL of 10 µg/L, versus 11.0 µg/L of selenium detected in the unfiltered sample from MW-13.

4.1.2 Compare Background and Compliance Detections to Standards

The following table summarizes the monitor well locations where Appendix I constituents were detected above the **2L Standard or GWPST** (presented in **Table 2**). The following targeted chemicals were detected in one or more groundwater samples analyzed for the July 2011 monitoring event:

July 2011 Groundwater Sampling Event
Appendix I Constituent Concentration Detected Above 2L Standard or GWPST

Background Monitor Wells	Appendix I Detected Constituents Above 2L Standard or GWPST
MW-3B	cobalt
MW-4	antimony, vanadium
MW-9	--
Compliance Monitor Wells	**Appendix I Detected Constituents Above 2L Standard or GWPST**
MW-5	*1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, vinyl chloride, arsenic, cobalt
MW-6	cobalt
MW-7A	benzene
MW-12	benzene, 1,4-dichlorobenzene, cobalt
MW-13	benzene, vinyl chloride, chromium, cobalt, nickel, thallium
MW-14	--
MW-15	1,2-dichloropropane, vinyl chloride, cobalt
MW-16	--

-- = No Appendix I constituent concentrations were detected above 2L Standard or GWPST.
* = constituent detected in duplicate sample, but not record sample

No Appendix I VOC or inorganic compound concentrations were detected above their respective 2L Standards or GWPSTs, in the groundwater samples collected from the upgradient background monitor well MW-9, nor were they detected in the groundwater sample collected from the downgradient compliance monitor wells MW-14 and MW-16. Constituent concentrations were detected above their respective 2L Standard or GWPST in groundwater samples collected from background monitor wells MW-3B and MW-4 and compliance monitor wells MW-5, MW-6, MW-7A, MW-12, MW-13, and MW-15.

4.1.3 Compare Background and Compliance Detections to MDL

The analytical data was reviewed by comparing constituent detections in the background and compliance monitor wells to the laboratory's Method Detection Limit (MDL). Twenty-six Appendix I constituents (summarized in **Table 2**) were detected above the MDL in one or more groundwater samples collected during the July 2011 monitoring event.

The dissolved concentration of the inorganic compound arsenic was reported as above its respective laboratory MDL in the filtered sample and below its respective laboratory MDL in the unfiltered sample for compliance monitor well MW-13.

4.1.4 Geochemical / Monitored Natural Attenuation (MNA) Parameters

Groundwater samples were analyzed for geochemical and monitored natural attenuation (MNA) parameters in each background and compliance monitor well. The analyses were performed to review the status of previously discovered impact to the groundwater from landfill leachate, as well as to review the geochemical parameters that may indicate that the degradation process to reduce leachate constituent concentrations is occurring. Data from MNA and field parameters at the background and compliance monitor wells were used to assess the natural biological degradation processes of the chemical constituents that were released to the groundwater. **Table 3** is a summary of the geochemical and MNA constituent results from field measurements and from analytical testing performed during the July 2011 monitoring event.

The field parameter data measured using the YSI® multi meter with flow through cell (or equivalent) was reviewed to assess the potential biological activity and the type of environment that appears to be helping to decrease concentrations of source contaminants (i.e. tetrachloroethene, trichloroethene, and hydrocarbons) present in landfill leachate. Dissolved oxygen (DO) concentrations that are less than 1 milligram per liter (mg/L) indicate anaerobic conditions in the aquifer. Low DO measurements were observed in background well MW-9 and compliance wells MW-13 and MW-16. Low oxygen reduction potential (ORP) measurements often indicate a reducing environment. Compared to background monitor wells, ORP readings were lower than background in MW-5, MW-6, MW-7A, MW-13, MW-14, MW-15, and MW-16. From the ORP measurements, a reducing environment appears to be present near and downgradient to sources of petroleum and chlorinated solvents.

The review of geochemical and MNA parameter data in tandem with groundwater quality data indicate that reductive dechlorination is occurring under anaerobic conditions at the site. Evidence of this are the elevated alkalinity, chloride, carbon dioxide, and methane values compared to upgradient or background sample measurements. In addition, monitor well MW-13 is the only sample location in the July 2011 event that had a low level detection of trichloroethene (TCE). The groundwater sample collected from monitor well MW-13 also had detections of daughter compound concentrations from the reduction of TCE including 1,1-dichloroethane, cis-1,2-dicloroethene, and vinyl chloride, as well as detections of compounds indicative of hydrocarbon degradation including benzene, chlorobenzene, chloroethane, and 1,4-dichlorobenzene. Similarly, low levels of chlorinated daughter compounds and/or hydrocarbons were also detected in wells MW-5, MW-6, MW-7A, MW-12, and MW-15. Chloride and ethene are metabolic byproducts of the total reduction of chlorinated solvents. Chloride concentrations were detected in the samples collected from background wells MW-3B, MW-4, and MW-9 and downgradient compliance wells MW-5, MW-6, MW-7A, MW-12, MW-13, MW-14, MW-15, and

MW-16. Ethene was detected in the sample collected from downgradient compliance well MW-5.

Further analyses for the geochemical parameters from selected monitor wells in the network may be necessary to review influences on constituent concentrations by naturally occurring biological degradation processes.

4.1.5 Quality Control

Quality assurance and quality control of field sampling methods and analytical test methods were assessed by collecting and analyzing one duplicate sample, one equipment blank sample, and one trip blank sample. The duplicate and equipment blank samples were analyzed for Appendix I constituents by the same methods and for the same target constituents as the record samples, with the exception of dissolved metals. Duplicate sample analysis documents the consistency of field sampling methods and the consistency of laboratory testing between samples. Equipment blank sample analysis documents the quality of sampling equipment and decontamination procedures used to reduce the potential of cross-contamination or carry-over effects from sampling equipment used on-site. The trip blank is analyzed for VOCs to document the effect of external conditions on samples/sample containers during lab pack preparation and transportation to and from the site.

The concentrations of Appendix I VOCs and inorganic compounds detected in the record and in the duplicate samples collected from monitor well MW-5 were within an acceptable tolerance level and indicate a suitable replication of results from the test procedures. Three VOCs (1,4-dichlorobenzene at 8.8JD µg/L, trans-1,2-dichloroethene at 4.9JD µg/L, toluene at 8.7JD µg/L) and one inorganic constituent (selenium at 1.64J µg/L) were detected in the MW-5 duplicate sample. These VOCS were not in the record sample collected from MW-5 (1,4-dichlorobenzene at <7.9JD µg/L, trans-1,2-dichloroethene at <1.2D µg/L, toluene at <8.5D µg/L, and selenium at <0.83 µg/L). In addition, the inorganic constituent silver was detected at 2.19J µg/L in the record sample collected from monitor well MW-5 and not in the duplicate sample (<1.90 µg/L). Given that the record sample and the duplicate sample for MW-5 were analyzed at a one to ten dilution factor for the VOC analysis, these results fall within an acceptable tolerance level and indicate suitable replications of results from the test procedures.

Methylene chloride was the only VOC detected in the equipment blank and trip blank samples above its respective MDL, but below its respective SWSL. However, methylene chloride was not detected above its MDL in any of the monitor well record samples. In addition, copper was the only other constituent detected at a concentration that exceeded its respective MDL, but below its respective SWSL in the equipment blank sample. Because copper was detected in the equipment blank sample, the determination of the presence of copper in the monitor well record samples was inconclusive.

Some technical limitations exist in the laboratory's reporting of MDLs. MDLs for some VOCs and some inorganic constituents are above applicable standards. The MDL for

vinyl chloride (0.60 µg/L), cobalt (1.10 µg/L), and vanadium (1.40 µg/L) in groundwater are greater than the 2L Standard of 0.03 µg/L for vinyl chloride and the GWPSTs of 1.0 µg/L for cobalt and 0.3 µg/L for vanadium. Therefore, vinyl chloride, cobalt, and vanadium may have been present at concentrations above their respective 2L Standard/GWPST, but were reported as being below their respective MDLs. In addition, due to the dilution factor of 10 used in the analysis of groundwater from the monitor well MW-5 record sample and duplicate sample VOC analysis, the laboratory MDLs for benzene (<6.8 µg/L), 1,4-dichlorobenzene (7.5 µg/L), 1,2-dichloropropane (<5.9 µg/L), and trichloroethene (<7.2 µg/L) are greater than the 2L Standards of 1.0 µg/L, 6.0 µg/L, 0.6 µg/L, and 3.0 µg/L, respectively. Therefore, benzene, 1,4-dichlorobenzene, 1,2-dichloropropane, and trichloroethene may have been present at concentrations above their respective 2L Standards in the samples collected from monitor well MW-5, but were reported as being below their respective MDLs.

4.2 Surface Water Analytical Data

No surface water samples were collected as part of the July 2011 monitoring event because the two surface water sampling points (upstream and downstream) located on Jerry's Creek were dry at the time of our site visit. Surface water sample stations are illustrated on **Figure 2**.

5.0 DISCUSSION OF GROUNDWATER DETECTIONS

Section 4.0 presented the analytical results with respect to the Solid Waste Rules defined under 15A NCAC 13B. To understand the significance of these results, additional data evaluation is needed. The following discussion of groundwater and surface water data at the landfill relates to the use of statistics for assessing groundwater quality and its relevance to North Carolina regulations. The application of statistical procedures used to evaluate compliance to North Carolina regulations needs to consider all data, including results that are above the analytical method's MDLs or below the MDLs (i.e., non-detections) that are below applicable groundwater quality standards or groundwater protection standards. Identifying which chemical constituents that were reported above the laboratory's MDL is the initial task in this evaluation. The following individual Appendix I constituents were detected during the July 2011 monitoring event:

July 2011 Groundwater Sampling Event
Appendix I Constituent Concentration Detected Above MDL

Background Monitor Wells	Appendix I Detected Constituents Detected Above MDL
MW-3B	barium, beryllium, cadmium, cobalt, nickel, selenium, zinc
MW-4	antimony, barium, copper, vanadium
MW-9	barium
Compliance Monitor Wells	**Appendix I Detected Constituents Detected Above MDL**
MW-5	chlorobenzene, *1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, *trans-1,2-dichloroethene, *toluene, vinyl chloride, arsenic, barium, chromium, cobalt, nickel, *selenium, **silver, zinc
MW-6	1,1-dichloroethane, cis-1,2-dichloroethene, barium, chromium, cobalt, nickel, selenium
MW-7A	benzene, chlorobenzene, chloroethane, barium, copper, selenium, zinc
MW-12	benzene, chlorobenzene, chloroethane, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, barium, beryllium, chromium, cobalt, lead, nickel, selenium, thallium, zinc
MW-13	benzene, chlorobenzene, chloroethane, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, arsenic, barium, chromium, cobalt, nickel, selenium, silver, thallium, zinc
MW-14	barium, chromium, selenium
MW-15	chlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,2-dichloropropane, vinyl chloride, arsenic, barium, chromium, cobalt, nickel, selenium, silver, zinc
MW-16	barium, nickel, selenium

* = constituent detected in duplicate sample, but not record sample
** = constituent detected in record sample, but not duplicate sample

Of the 26 Appendix I constituents that were reported above the MDL from the July 2011 monitoring event, fifteen are inorganic compounds. In June 2008 S&ME performed an Alternate Source Demonstration (ASD) study that concluded that several inorganic compounds detected in groundwater were the result of the natural occurrence of these constituents in the native, residual soil. The detections of the fifteen inorganic compounds were compared to the Dilution/Attenuation Factor (DAF) computations included in the ASD (reference **Table 2**). This comparison indicates that the concentrations of the naturally occurring metals arsenic, beryllium, cadmium, chromium, copper, lead, selenium, thallium, vanadium, and zinc within the in-situ soil at the facility are sufficient to influence the concentrations of these metals in groundwater samples collected during the July 2011 monitoring event. Therefore, only five of the 15 inorganic compounds (antimony, barium, cobalt, nickel, and silver) detected during the July 2011 monitoring event are included in the statistical analyses.

As required by Sections .1632, .1633, and .1634 of the Solid Waste Rules and the facility's WQMP (S&ME, 2008, Revised 2010), statistical analyses were applied to the July 2011 analytical results. Those analytes detected during the July 2011 sampling event were reviewed and analyzed in comparison to previous sampling results from the Edgecombe County Landfill facility. This method was used in order to evaluate trends and changes in the sampling results as well as statistically significant differences between upgradient and downgradient wells.

The data set used to evaluate the July 2011 detections at the Edgecombe County Landfill facility includes 37 groundwater sampling events completed between September 1994 and July 2011. Since several wells were abandoned or replaced during this time period, S&ME selected data from three existing background wells (MW-3B, MW-4, and MW-9) and data from eight existing compliance wells (MW-5, MW-6, MW-7A, MW-12, MW-13, MW-14, MW-15, and MW-16) located at the Edgecombe County Landfill to use in the statistical analyses.

5.1 Statistical Analysis

Analyses of historical data provided insight into the dynamics of the analytes detected during the July 2011 monitoring event. By using a larger array of data, S&ME was able to apply statistical procedures to evaluate trends in groundwater quality. This statistical evaluation used a step-wise approach to identify potential releases from the landfill.

5.1.1 Evaluation of Non-Detected Values

First, the data was evaluated for non-detected values. Our analyses showed that the data for Edgecombe County Landfill contains more than 50 percent non-detected results for individual analytes, most of which (12 of 18 analytes) exceeded 80 percent non-detected results. A summary of the non-detected results used to select the statistical analyses (the Wilcoxon Rank-Sum Test) is shown on **Table 4**.

5.1.2 Results of the Wilcoxon Rank-Sum Test

The application of the Wilcoxon Rank-Sum Test (WRST) was the second step in the statistical analyses. Due to the large number of non-detected values, the WRST, a non-parametric statistical analysis, was used to compare individual downgradient or compliance wells to the upgradient or background well group. This analysis was performed on data sets of VOCs and five inorganic constituents. However, statistical evidence at this level does not necessarily dictate non-compliance with regard to groundwater quality. The result of the WRST analyses for data from September 1994 to July 2011 is summarized in **Table 5**.

Evidence of a release from the landfill was found for several Appendix I VOCs and four inorganic constituents (barium, cobalt, nickel, and silver). Statistical evidence of a release is supported by the reported detections of VOCs and/or inorganic constituents in compliance wells MW-5, MW-6, MW-7A, MW-12, MW-13, MW-14, MW-15, and MW-16. As shown in **Table 5**, evidence of a release of individual VOCs and metals varies for each of the compliance wells.

5.1.3 Comparison to Groundwater Standards

The third step was to compare significant findings of a release for each analyte to its respective standard. Because the number of non-detections was greater than 15% in the dataset, the Two-Sample Test of Proportions, a non-parametric procedure, was used for this analysis. Analytes with statistical evidence of a release was compared at the 95% confidence level to their respective 2L Standard/GWPST where the standard is above the MDL. This comparison is summarized in **Table 6**. The following individual analytes statistically exceeded their respective groundwater standards:

Analytes Exceeding Groundwater Standards

Analyte
Benzene
1,4-Dichlorobenzene
1,1-Dichloroethane
cis-1,2-Dichlorethene
Trichloroethene
Vinyl chloride
Nickel

5.2 Qualitative Groundwater Review of Analytical Results

For those analytes detected during the July 2011 sampling event where evidence of a significant difference at the 95% confidence level demonstrates an exceedance of their

respective groundwater standards, S&ME performed a trend analysis of the data and of time concentration graphs to assess whether groundwater quality was improving, degrading, or remaining constant.

The Groundwater Protection Standards (GWPSTs) have recently been revised and the standard for cobalt has decreased from the previous GWPST of 70 µg/L to the current GWPST of 1 µg/L. Due to this decrease in the GWPST for cobalt, the Two-Tailed Test of Proportions (described above in **Section 5.1.3**) indicates that there is no significant evidence of contamination at the 95% confidence level in compliance location observations when compared to background and to the GWPST of 1 µg/L. In the past, cobalt has been considered a constituent of concern at the landfill, due to statistical evidence of contamination using the previous GWPST of 70 µg/L. For consistency, S&ME has also performed a trend analysis of the cobalt data.

Data entry and analysis was performed using the ChemStat® statistical software by Starpoint Software following EPA and DWM protocols for approved statistical analysis methods for groundwater data. The July 2011 data was entered into the historical source database for the site, and was reviewed and evaluated using the statistical analysis methods discussed in **Section 5.1**. Time series graphs for wells MW-5, MW-6, MW-7A, MW-12, MW-13, and MW-15 are graphical representations of data trends over time and are included in **Appendix IV** of this report. These time series graphs are of groundwater quality for those chemical constituents that; 1) were detected during the July 2011 sampling event, 2) resulted in significant evidence of a release, or 3) exceeded its respective standard.

For those analytes detected during the July 2011 sampling event with no evident trend, S&ME performed a statistical trend analysis. The analyses used were the Mann-Kendall analyses (one analysis for upward trends and one analysis for downward trends) and the Sen's Slope analysis, which analyses for both upward and downward trends. **Table 7** presents the results of the trend analyses for each compound in each well.

5.2.1 Compliance Monitor Well MW-5

Six Appendix I VOCs (chlorobenzene, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, toluene, and vinyl chloride) and five inorganic compounds (arsenic, barium, cobalt, nickel, and zinc) were detected in the samples collected from monitor well MW-5 (record or duplicate) above their respective SWSLs during the July 2011 sampling event. Concentrations of chlorobenzene, toluene, and barium have been detected sporadically over time, and concentrations reported at the facility do not exceed their respective groundwater standards. The concentrations of the naturally occurring metals, arsenic and zinc, in the soil are sufficient to influence the concentrations of arsenic and zinc in the groundwater sample collected from monitor well MW-5 during (July 2011 monitoring event). Therefore, no trend analyses were performed for these constituents at monitor well MW-5.

Concentrations of benzene and trichloroethene were not detected in the sample collected from MW-5 during the July 2011 sampling event. However, concentrations of benzene and trichloroethene have been detected sporadically over time, and detections at the facility statistically exceed the respective groundwater standards at the 95% confidence level. Therefore, a trend analysis was also performed for benzene and trichloroethene at monitor well MW-5.

In monitor well MW-5, six Appendix I VOCs and two inorganic constituent (benzene, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, cobalt, and nickel) showed statistical evidence at the 95% confidence level exceeded their respective groundwater standards. A qualitative review of the trend graphs (see **Appendix IV**) for four of the Appendix I constituents (benzene, 1,1-dichloroethane, trichloroethene, and nickel) show a trend of decreasing concentrations over time. The trend graphs for the VOC cis-1,2-dichloroethene and the inorganic constituent cobalt show a trend of increasing concentrations over time. A review of the time series data graphs shows no evident trend for 1,4-dichlorobenzene and vinyl chloride concentrations in well MW-5, so a Mann-Kendall and a Sen's Slope statistical trend analysis were applied to the data. **Table 7** presents the results of the Mann-Kendall and a Sen's Slope statistical trend analyses for each compound in each well. The Mann-Kendall and the Sen's Slope analysis resulted in no evident trend for 1,4-dichlorobenzene and vinyl chloride concentrations in monitor well MW-5.

5.2.2 Compliance Monitor Well MW-6

One Appendix I inorganic compound (barium) was detected in monitor well MW-6 above its respective SWSL during the July 2011 sampling event. However, concentrations of barium have been detected sporadically over time, and the concentration for barium does not exceed its respective groundwater standard at the 95% confidence level. Therefore, no trend analysis was performed for barium at monitor well MW-6. Statistical analyses of historical data from compliance well MW-6 indicate that two Appendix I constituents (1,1-dichloroethane and cis-1,2-dichloroethene) exceed the respective groundwater standard at the 95% confidence level. A qualitative review of the time series data graphs show no evident trends for 1,1-dichloroethane or cis-1,2-dichloroethene concentrations in well MW-6, so a Mann-Kendall and a Sen's Slope statistical trend analysis were applied to the data. The Mann-Kendall and the Sen's Slope analysis resulted in no evident trends for 1,1-dichloroethane or cis-1,2-dichloroethene. Results of trend analyses are included in **Table 7**. The time series graphs for 1,1-dichloroethane and cis-1,2-dichloroethene concentrations in compliance well MW-6 are included in **Appendix IV**.

5.2.3 Compliance Monitor Well MW-7A

One Appendix I VOC (benzene) and one inorganic compound (barium) were detected in monitor well MW-7A above their respective SWSLs during the July 2011 sampling event. However, concentrations of barium have been detected sporadically over time, and the statistical evidence for these detections does not exceed its respective groundwater standard at the 95% confidence level. Concentrations of 1,4-dichlorobenzene, cis-1,2-

dichloroethene, and vinyl chloride have been detected sporadically over time, and evidence at the 95% confidence level exceed their respective groundwater standards. Therefore, trend analyses were also performed for 1,4-dichlorobenzene, cis-1,2-dichloroethene, and vinyl chloride at monitor well MW-7A.

A qualitative review of the time series data graphs show no evident trend for benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, and vinyl chloride concentrations in well MW-7A, so a Mann-Kendall and a Sen's Slope statistical trend analysis were applied to the data. **Table 7** presents the results of the Mann-Kendall and a Sen's Slope statistical trend analyses for each compound in each well. The Mann-Kendall and the Sen's Slope analysis resulted in no evident trend for benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, or vinyl chloride concentrations in monitor well MW-7A.

5.2.4 Compliance Monitor Well MW-12

Three Appendix I VOCs (benzene, chlorobenzene, and 1,4-dichlorobenzene) and four inorganic compounds (barium, cobalt, selenium, and zinc) were detected in monitor well MW-12 above their respective SWSLs during the July 2011 sampling event. However, concentrations of chlorobenzene and barium have been detected sporadically over time, and the statistical evidence at the 95% confidence level for these detections indicates no exceedance of its respective groundwater standard. In addition, the concentrations of the naturally occurring metals selenium and zinc within the in-situ soil at the facility are sufficient to influence the concentrations of these metals in the groundwater sample collected from monitor well MW-12 during the July 2011 monitoring event. Concentrations of 1,1-dichloroethane, cis-1,2-dichloroethene, and vinyl chloride have been detected sporadically over time, and the 95% UPLs for these detections at the facility exceed their respective groundwater standards. Therefore, trend analyses were also performed for 1,1-dichloroethane, cis-1,2-dichloroethene, and vinyl chloride at monitor well MW-12.

The trend graph for 1,1-dichloroethane shows a trend of decreasing concentrations over time. A review of the time series data graphs show no evident trend for benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, vinyl chloride, and cobalt concentrations in well MW-12, so a Mann-Kendall and a Sen's Slope statistical trend analysis were applied to the data. **Table 7** presents the results of the Mann-Kendall and a Sen's Slope statistical trend analyses for each compound in each well. The Mann-Kendall and the Sen's Slope analysis resulted in no evident trend for benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, vinyl chloride, or cobalt concentrations in monitor well MW-12.

5.2.5 Compliance Monitor Well MW-13

Six Appendix I VOCs (benzene, chlorobenzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride) and six inorganic compounds (barium, chromium, cobalt, nickel, selenium, and zinc) were detected in monitor well MW-13 above their respective SWSLs during the July 2011 sampling event. However, concentrations of chlorobenzene and barium have been detected sporadically over time, and statistical evidence at the 95% confidence level shows no exceedance of their

respective groundwater standards. In addition, analytical data must be collected for at least four consecutive monitoring events before statistical analyses can be used to characterize a well. There is not a sufficient amount of nickel data available for monitor well MW-13 to run a trend analysis. Also, the concentrations of the naturally occurring metals chromium, selenium, and zinc within the in-situ soil at the facility are sufficient to influence the concentrations of these metals in the groundwater sample collected from monitor well MW-13 during the July 2011 monitoring event. Concentrations of 1,1-dichloroethane have been detected sporadically over time, and evidence at the 95% confidence level for these detections indicate an exceedance of its respective groundwater standard. Therefore, a trend analysis was also performed for 1,1-dichloroethane at monitor well MW-13.

A review of the time series data graphs show no evident trend for benzene, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, and cobalt concentrations in well MW-13, so a Mann-Kendall and a Sen's Slope statistical trend analysis were applied to the data. **Table 7** presents the results of the Mann-Kendall and a Sen's Slope statistical trend analyses for each compound in each well. The Mann-Kendall and the Sen's Slope analysis resulted in no evident trend for benzene, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, or cobalt concentrations in monitor well MW-13.

5.2.6 Compliance Monitor Well MW-14

One Appendix I inorganic compound (barium) was detected in monitor well MW-14 above its respective SWSL during the July 2011 sampling event. However, concentrations of barium have been detected sporadically over time, and statistical evidence at the 95% confidence level for these detections at the facility does not indicate an exceedance of its respective groundwater standard. Therefore, no trend analyses were performed at monitor well MW-14.

5.2.7 Compliance Monitor Well MW-15

Three Appendix I VOCs (cis-1,2-dichloroethene, 1,2-dichloropropane, and vinyl chloride) and two inorganic compounds (barium and cobalt) were detected in monitor well MW-15 above their respective SWSLs during the July 2011 sampling event. However, concentrations of 1,2-dichloropropane and barium have been detected sporadically over time, and the statistical evidence at the 95% confidence level for these detections do not indicate an exceedance of their respective groundwater standards. Concentrations of benzene, 1,1-dichloroethane, and trichloroethene have been detected sporadically over time, and the statistical evidence at the 95% confidence level for these detections indicate an exceedance of their respective groundwater standards. Therefore, trend analyses were also performed for benzene, 1,1-dichloroethane, and trichloroethene at monitor well MW-15.

The trend graphs for 1,1-dichloroethane and cis-1,2-dichloroethene show a trend of decreasing concentrations over time. The trend graph for cobalt shows a trend of increasing concentrations over time. A review of the time series data graphs show no

evident trend for benzene, trichloroethene, and vinyl chloride concentrations in well MW-15, so a Mann-Kendall and a Sen's Slope statistical trend analysis were applied to the data. **Table 7** presents the results of the Mann-Kendall and a Sen's Slope statistical trend analyses for each compound in each well. The Mann-Kendall and the Sen's Slope analysis resulted in no evident trend for benzene, trichloroethene, or vinyl chloride concentrations in monitor well MW-15.

5.2.8 Compliance Monitor Well MW-16

One Appendix I inorganic compound (barium) was detected in monitor well MW-16 above its respective SWSL during the July 2011 sampling event. However, concentrations of barium have been detected sporadically over time, and the statistical evidence at the 95% confidence level for these detections indicates no exceedance of its respective groundwater standard. Therefore, no trend analysis was performed at monitor well MW-16.

Time series graphs for wells MW-5, MW-6, MW-7A, MW-12, MW-13, and MW-15 are graphical representations of data trends over time and are included in **Appendix IV**.

5.3 Previous Investigations Selected Corrective Measures Remedy

Investigations relevant to the constituents detected during detection monitoring were performed to delineate the area impacted by potential constituents of concern (COCs). The findings of the investigation to delineate the potential COCs are summarized in the NES report (S&ME, June 2008). Potential COCs were further reviewed through an Alternate Source Demonstration (ASD) study (S&ME, June 2008). The ASD concluded that several inorganic COCs detected in groundwater were the result of the natural occurrence of these constituents in the native, residual soil.

Based on the NES and ASD, the Assessment of Corrective Measures (ACM) report (S&ME, June 2008) has evaluated feasible technologies to remediate COCs documented in the NES. Based on the feasibility study of the ACM, a remedy for corrective measures was selected and described in a formal Corrective Action Plan (CAP) (S&ME, June 2008). The CAP included a selection of in situ isolation combined with MNA as the remedial alternatives for impacted groundwater. The in situ isolation will minimize water exposure to buried waste limiting the release of contaminants to the groundwater and the environment utilizing an upgradient hydraulic barrier and improvements to the landfill cover and surface water drainage system.

6.0 CONCLUSIONS AND RECOMMENDATIONS

S&ME performed semiannual sampling at the Edgecombe County Landfill in Tarboro, North Carolina. During the July 2011 sampling event, groundwater elevations were calculated from water levels measured in approximately 27 points in the monitoring network described in the WQMP. Groundwater samples were collected from three background (upgradient) monitor wells and eight compliance (downgradient) monitor wells.

6.1 Summary of July 2011 Sampling Event

- Based on the water table elevations and calculated potentiometric surface, the groundwater flow direction within the surficial aquifer was estimated to be toward the north-northeast with an average hydraulic gradient of 0.0210 ft/ft. The average groundwater flow velocity for the site is approximately 8.62 ft/yr.

- Constituent concentrations of 26 Appendix I analytes were detected in one or more samples collected during the July 2011 monitoring event. Seventeen of the 26 Appendix I analytes were detected in one or more samples at concentrations equal to or exceeding their respective SWSLs. Barium, beryllium, cobalt, and zinc were detected in one or more upgradient (background) samples at concentrations above their respective SWSLs.

- Seven analytes detected during the July 2011 sampling event were shown to have statistical evidence of a release from the facility, where statistical evidence at the 95% confidence level indicated that concentrations were greater than their respective groundwater standards. These analytes were: benzene, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, and nickel. In the past, cobalt was a constituent of concern at the landfill due to statistical evidence of contamination. For consistency, S&ME has also performed a trend analysis of the cobalt data. A trend analysis of these eight constituents shows the following trends:

  - No trend was evident for benzene concentrations over time in monitor wells MW-7A, MW-12, MW-13, and MW-15. Concentrations of benzene show a trend of decreasing concentration over time in monitor well MW-5.
  - No trend was evident for 1,4-dichlorobenzene concentrations in monitor wells MW-5, MW-7A, MW-12, and MW-13.
  - No trend was evident for 1,1-dichloroethane concentrations in monitor wells MW-6 and MW-13. Concentrations of 1,1-dichloroethane show a trend of decreasing concentration over time in monitor wells MW-5, MW-12, and MW-15.
  - Cis-1,2-dichloroethene concentrations show an increasing concentration trend over time in monitor well MW-5 and decreasing concentration trend over time in monitor well MW-15. No trend was evident for cis-1,2-dichloroethene concentrations over time in monitor wells MW-6, MW-7A, MW-12, and MW-13.

- No trend was evident for trichloroethene concentrations in monitor wells MW-13 and MW-15. Trichloroethene has a trend of decreasing concentration over time in monitor well MW-5.
- No trend was evident for vinyl chloride concentrations in monitor wells MW-5, MW-7A, MW-12, MW-13 and MW-15.
- No trend was evident for cobalt concentrations in monitor wells MW-12 and MW-13. Cobalt concentrations show increasing trends over time in monitor wells MW-5 and MW-15.
- Nickel concentrations show a decreasing trend over time in monitor well MW-5.

- Thirteen Appendix I analytes were detected at concentrations exceeding their respective 2L Standards or GWPSTs including benzene, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, 1,2-dichloropropane, vinyl chloride, antimony, arsenic, chromium, cobalt, nickel, thallium, and vanadium. Monitor wells with one or more constituent concentrations above the standards included MW-3B, MW-4, MW-5, MW-6, MW-7A, MW-12, MW-13, and MW-15.

- Constituent detections above the 2L Standard or GWPST trigger implementing the assessment monitoring program. This monitoring event was performed in general accordance with § .1634 (d)(2)of the Solid Waste Rules since the Assessment Monitoring Program was already implemented. An Alternate Source Demonstration (ASD) study was performed, the Nature and Extent Study (NES) was prepared, the Assessment of Corrective Measures (ACM) was performed, and the Corrective Action Plan (CAP) was prepared and approved by the NCDENR. Corrective measures have been initiated with grading improvements on the landfill cap; therefore, monitoring for this event is also for compliance with § .1637 (a)(1) under Implementation of the Corrective Action Program.

- The review of geochemical and MNA parameter data in tandem with groundwater quality data indicate that reductive dechlorination is occurring under anaerobic conditions at the site.

6.2 Recommendations

The results of the July 2011 sampling event show that groundwater near the Edgecombe County Landfill has been impacted by a release of constituents from the facility. The additional assessment performed at the site as part of the NES and ACM refined the source characterization, determination of constituents-of-concern, and evaluation of corrective actions. Based on the additional findings presented in the NES and ACM, the County selected a remedy for corrective measures and submitted a CAP. The applicable sampling and analysis requirements described in the revised WQMP should be implemented during the next semiannual sampling event scheduled in January 2012. S&ME recommends that the schedule for the corrective actions be maintained, and that the corrective measures, including re-grading activities that have already been initiated, and the design work for the hydraulic barrier and permitting activities move forward as scheduled.

According to the *Corrective Action Plan Review* letter, dated January 16, 2009, the Solid Waste Section recommends that semiannual sampling be continued at the site for analytes on the Appendix I constituent list.

S&ME has completed four baseline data sets of MNA parameters and is in the process of completing the Baseline Water Quality and MNA Corrective Action Evaluation Report. Continued analyses of the MNA parameters from wells in the network are necessary to review concentrations and to evaluate aquifer zones influenced by naturally occurring biological degradation. However, S&ME believes the number of analytes and number of monitor wells sampled may be reduced to target the areas with identified groundwater contamination. Following the baseline water quality and MNA assessment, S&ME will recommend targeted analytes and select monitor well locations for continued sampling and analysis for MNA parameters.

As required by North Carolina Solid Waste Management Rule .1634, these results should be forwarded to the owner/operator of the Edgecombe County Landfill for inclusion in the operating record and to the North Carolina Division of Solid Waste for their review.

7.0 REFERENCES

Department of Environment and Natural Resources, Division of Water Quality, *15A NC Administrative Code Subchapter 2B .0200 Classifications and Water Quality Standards Applicable to Surface Waters and Wetlands of NC*, May 2007.

Department of Environment and Natural Resources, Division of Water Quality, *15A NC Administrative Code Subchapter 2L .0200 Groundwater Quality Standards*, January 2010.

Department of Environment and Natural Resources, Division of Waste Management, *15A NC Administrative Code Subchapter 13B .1634(h) Solid Waste Groundwater Protection Standard, Solid Waste Management Rules*, November 2004.

Law Engineering Company, *Initial baseline Sampling of Groundwater, Edgecombe County Landfill*, October 1994.

Montgomery, John H., *Groundwater Chemicals, Second Edition Desk Reference*, CRC Press, Inc., 1996.

Pankow, James F. and Cherry, John A., *Dense Chlorinated Solvents and other DNAPLs in Groundwater*, p. 267-284, 1996.

S&ME, Inc., *Alternate Source Demonstration Report, Edgecombe County Landfill*, June 10, 2008.

S&ME, Inc., *Assessment of Corrective Measures Report, Edgecombe County Landfill*, June 26, 2008.

S&ME, Inc., *Corrective Action Plan, Edgecombe County Landfill*, June 30, 2008.

S&ME, Inc., *Nature and Extent Study, Edgecombe County Landfill*, June 25, 2008.

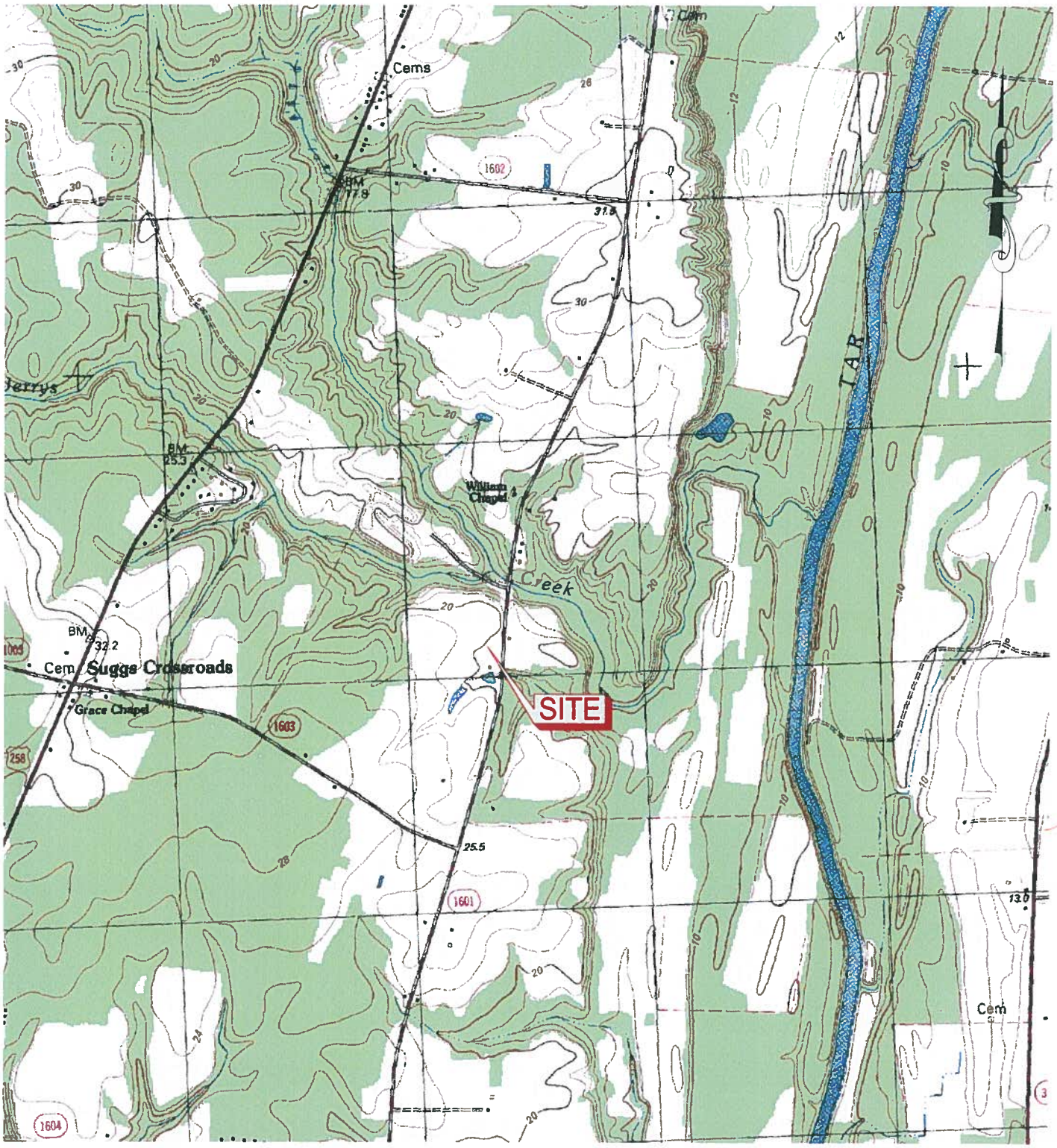
S&ME, Inc., *Water Quality Monitoring Plan, Edgecombe County Landfill, Tarboro, North Carolina*, May 10, 1994.

S&ME, Inc., *Water Quality Monitoring Plan, Edgecombe County Landfill, Tarboro, North Carolina*, June 30, 2008, Revised January 2010.

S&ME, Inc, *Revision to the Sampling and Analysis Plan (SAP) Edgecombe County Landfill*, November 9, 1998.

US Department of Agriculture, Soil Conservation Service, *Soil Survey of Edgecombe County, NC*, November 1979.

FIGURES



GRAPHIC SCALE

1000 0 500 1000 2000

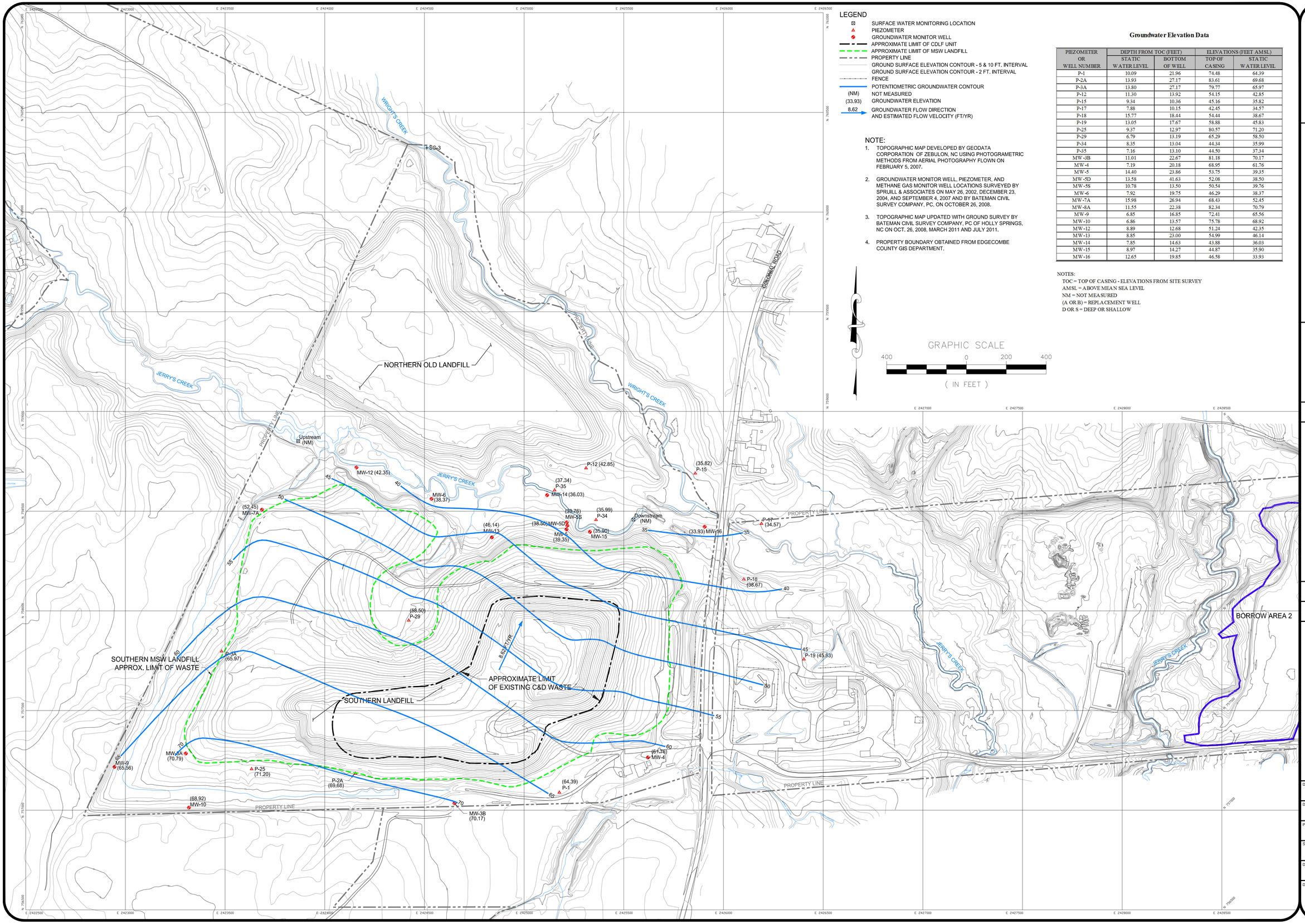
(IN FEET)

TOPO SOURCE: NCGS DRG
OLD SPARTA, NC (035077G5) DATED 1981
CONTOUR INTERVAL: 2 METERS

A-2630

SCALE: 1" = 2000'	S&ME WWW.SMEINC.COM	VICINITY MAP	FIGURE NO.
DATE: SEPT. 2011		COMPLIANCE MONITORING REPORT EDGECOMBE COUNTY LANDFILL TARBORO, NORTH CAROLINA	1
DRAWN BY:			
PROJECT NO: 1054-07-238D	NC ENGINEER LICENSE #F-0176 3201 SPRING FOREST RD, RALEIGH, NC 27616		

S:\PROJECTS\2007\07-238D Edgecombe - Environmental Monitoring 2011-12\CAD\A2630.dwg, FIG1, 9/14/2011 11:21:33 AM, 1:1



LEGEND

- SURFACE WATER MONITORING LOCATION
- PIEZOMETER
- GROUNDWATER MONITOR WELL
- APPROXIMATE LIMIT OF CDLF UNIT
- APPROXIMATE LIMIT OF MSW LANDFILL
- PROPERTY LINE
- GROUND SURFACE ELEVATION CONTOUR - 5 & 10 FT. INTERVAL
- GROUND SURFACE ELEVATION CONTOUR - 2 FT. INTERVAL
- FENCE
- POTENTIOMETRIC GROUNDWATER CONTOUR
- (NM) NOT MEASURED
- (33.93) GROUNDWATER ELEVATION
- 8.62 GROUNDWATER FLOW DIRECTION AND ESTIMATED FLOW VELOCITY (FT/YR)

NOTE:

1. TOPOGRAPHIC MAP DEVELOPED BY GEODATA CORPORATION OF ZEBULON, NC USING PHOTOGRAMETRIC METHODS FROM AERIAL PHOTOGRAPHY FLOWN ON FEBRUARY 5, 2007.
2. GROUNDWATER MONITOR WELL, PIEZOMETER, AND METHANE GAS MONITOR WELL LOCATIONS SURVEYED BY SPRUILL & ASSOCIATES ON MAY 26, 2002, DECEMBER 23, 2004, AND SEPTEMBER 4, 2007 AND BY BATEMAN CIVIL SURVEY COMPANY, PC, ON OCTOBER 26, 2008.
3. TOPOGRAPHIC MAP UPDATED WITH GROUND SURVEY BY BATEMAN CIVIL SURVEY COMPANY, PC OF HOLLY SPRINGS, NC ON OCT. 26, 2008, MARCH 2011 AND JULY 2011.
4. PROPERTY BOUNDARY OBTAINED FROM EDGECOMBE COUNTY GIS DEPARTMENT.

GRAPHIC SCALE

400 0 200 400

(IN FEET)

Groundwater Elevation Data

PIEZOMETER OR WELL NUMBER	DEPTH FROM TOC (FEET)		ELEVATIONS (FEET AMSL)	
	STATIC WATER LEVEL	BOTTOM OF WELL	TOP OF CASING	STATIC WATER LEVEL
P-1	10.09	21.96	74.48	64.39
P-2A	13.93	27.17	83.61	69.68
P-3A	13.80	27.17	79.77	65.97
P-12	11.30	13.92	54.15	42.85
P-15	9.34	10.36	45.16	35.82
P-17	7.88	10.15	42.45	34.57
P-18	15.77	18.44	54.44	38.67
P-19	13.05	17.67	58.88	45.83
P-25	9.37	12.97	80.57	71.20
P-29	6.79	13.19	65.29	58.50
P-34	8.35	13.04	44.34	35.99
P-35	7.16	13.10	44.50	37.34
MW-3B	11.01	22.67	81.18	70.17
MW-4	7.19	20.18	68.95	61.76
MW-5	14.40	23.86	53.75	39.35
MW-5D	13.58	41.63	52.08	38.50
MW-5S	10.78	13.50	50.54	39.76
MW-6	7.92	19.75	46.29	38.37
MW-7A	15.98	26.94	68.43	52.45
MW-8A	11.55	22.38	82.34	70.79
MW-9	6.85	16.85	72.41	65.56
MW-10	6.86	13.57	75.78	68.92
MW-12	8.89	12.68	51.24	42.35
MW-13	8.85	23.00	54.99	46.14
MW-14	7.85	14.63	43.88	36.03
MW-15	8.97	14.27	44.87	35.90
MW-16	12.65	19.85	46.58	33.93

NOTES:
TOC = TOP OF CASING - ELEVATIONS FROM SITE SURVEY
AMSL = ABOVE MEAN SEA LEVEL
NM = NOT MEASURED
(A OR B) = REPLACEMENT WELL
D OR S = DEEP OR SHALLOW

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NO.	DATE	DESCRIPTION	BY

GROUNDWATER POTENTIOMETRIC MAP
JULY 27, 2011

ENVIRONMENTAL COMPLIANCE MONITORING
EDGECOMBE COUNTY LANDFILL
TARBORO, NORTH CAROLINA

DRAWN BY: BTR	CHECKED BY:
DESIGNED BY:	APPROVED BY:
PROJECT NUMBER: 1054-07-238D	
SCALE: 1" = 200'	DATE: SEPT. 2011
DRAWING NUMBER: D-1239	
DRAWING: 2	OF: 2

S:\PROJECTS\2007\07-238D Edgecombe - Environmental Monitoring 2011-12\CAD\D1239.dwg FIG2, 2/29/2012 2:44:13 PM, 1:1

TABLES

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-P-1		318	Depth To Water	10.09	ft						7/27/2011			
33-01	3301-P-1		411	Total Well Depth	21.96	ft						7/27/2011			
33-01	3301-P-1		328	TOC Elevation	74.48	ft AMSL						7/27/2011			
33-01	3301-P-1		319	Groundwater Elevation	64.39	ft AMSL						7/27/2011			
33-01	3301-P-2A		318	Depth To Water	13.93	ft						7/27/2011			
33-01	3301-P-2A		411	Total Well Depth	27.17	ft						7/27/2011			
33-01	3301-P-2A		328	TOC Elevation	83.61	ft AMSL						7/27/2011			
33-01	3301-P-2A		319	Groundwater Elevation	69.68	ft AMSL						7/27/2011			
33-01	3301-P-3A		318	Depth To Water	13.80	ft						7/27/2011			
33-01	3301-P-3A		411	Total Well Depth	27.17	ft						7/27/2011			
33-01	3301-P-3A		328	TOC Elevation	79.77	ft AMSL						7/27/2011			
33-01	3301-P-3A		319	Groundwater Elevation	65.97	ft AMSL						7/27/2011			
33-01	3301-P-12		318	Depth To Water	11.30	ft						7/27/2011			
33-01	3301-P-12		411	Total Well Depth	13.92	ft						7/27/2011			
33-01	3301-P-12		328	TOC Elevation	54.15	ft AMSL						7/27/2011			
33-01	3301-P-12		319	Groundwater Elevation	42.85	ft AMSL						7/27/2011			
33-01	3301-P-15		318	Depth To Water	9.34	ft						7/27/2011			
33-01	3301-P-15		411	Total Well Depth	10.36	ft						7/27/2011			
33-01	3301-P-15		328	TOC Elevation	45.16	ft AMSL						7/27/2011			
33-01	3301-P-15		319	Groundwater Elevation	35.82	ft AMSL						7/27/2011			
33-01	3301-P-17		318	Depth To Water	7.88	ft						7/27/2011			
33-01	3301-P-17		411	Total Well Depth	10.15	ft						7/27/2011			
33-01	3301-P-17		328	TOC Elevation	42.45	ft AMSL						7/27/2011			
33-01	3301-P-17		319	Groundwater Elevation	34.57	ft AMSL						7/27/2011			
33-01	3301-P-18		318	Depth To Water	15.77	ft						7/27/2011			
33-01	3301-P-18		411	Total Well Depth	18.44	ft						7/27/2011			
33-01	3301-P-18		328	TOC Elevation	54.44	ft AMSL						7/27/2011			
33-01	3301-P-18		319	Groundwater Elevation	38.67	ft AMSL						7/27/2011			
33-01	3301-P-19		318	Depth To Water	13.05	ft						7/27/2011			
33-01	3301-P-19		411	Total Well Depth	17.67	ft						7/27/2011			
33-01	3301-P-19		328	TOC Elevation	58.88	ft AMSL						7/27/2011			
33-01	3301-P-19		319	Groundwater Elevation	45.83	ft AMSL						7/27/2011			
33-01	3301-P-25		318	Depth To Water	9.37	ft						7/27/2011			
33-01	3301-P-25		411	Total Well Depth	12.97	ft						7/27/2011			
33-01	3301-P-25		328	TOC Elevation	80.57	ft AMSL						7/27/2011			
33-01	3301-P-25		319	Groundwater Elevation	71.20	ft AMSL						7/27/2011			
33-01	3301-P-29		318	Depth To Water	6.79	ft						7/27/2011			
33-01	3301-P-29		411	Total Well Depth	13.19	ft						7/27/2011			
33-01	3301-P-29		328	TOC Elevation	65.29	ft AMSL						7/27/2011			
33-01	3301-P-29		319	Groundwater Elevation	58.50	ft AMSL						7/27/2011			
33-01	3301-P-34		318	Depth To Water	8.35	ft						7/27/2011			
33-01	3301-P-34		411	Total Well Depth	13.04	ft						7/27/2011			
33-01	3301-P-34		328	TOC Elevation	44.34	ft AMSL						7/27/2011			
33-01	3301-P-34		319	Groundwater Elevation	35.99	ft AMSL						7/27/2011			
33-01	3301-P-35		318	Depth To Water	7.16	ft						7/27/2011			
33-01	3301-P-35		411	Total Well Depth	13.10	ft						7/27/2011			
33-01	3301-P-35		328	TOC Elevation	44.50	ft AMSL						7/27/2011			
33-01	3301-P-35		319	Groundwater Elevation	37.34	ft AMSL						7/27/2011			
33-01	3301-MW-3B		318	Depth To Water	11.01	ft						7/27/2011			
33-01	3301-MW-3B		411	Total Well Depth	22.67	ft						7/27/2011			
33-01	3301-MW-3B		328	TOC Elevation	81.18	ft AMSL						7/27/2011			
33-01	3301-MW-3B		319	Groundwater Elevation	70.17	ft AMSL						7/27/2011			
33-01	3301-MW-3B		320	pH	4.13	standard units						7/27/2011			
33-01	3301-MW-3B		323	Specific Conductivity	0.214	mS/cm						7/27/2011			
33-01	3301-MW-3B		325	Temperature	19.80	ºC						7/27/2011			
33-01	3301-MW-3B		330	Turbidity	9.2	NTUs						7/27/2011			
33-01	3301-MW-3B	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	75-34-3	75	1,1-Dichloroethane	0.080	ug/L	U	8260B	0.080	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-3B	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	7440-39-3	15	Barium Total	112	ug/L		6010C	1.00	100	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	71-43-2	16	Benzene	0.68	ug/L	U	8260B	0.68	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	7440-41-7	23	Beryllium Total	1.68	ug/L		6010C	0.100	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	SW316	316	Biochemical Oxygen Demand	2000	ug/L	U	SM 5210B	2000	NE	1	7/27/2011	7/28/2011	7/28/2011	591
33-01	3301-MW-3B	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B	7440-43-9	34	Cadmium Total	0.544	ug/L	J	6010C	0.360	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	124-38-9	413	Carbon dioxide	69400	ug/L		RSK-175	1300	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-3B	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	SW317	317	Chemical Oxygen Demand	10000	ug/L	U	SM 5220D	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-3B	SW301	301	Chloride	32000	ug/L	B	300.0	47	NE	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-3B	108-90-7	39	Chlorobenzene	0.74	ug/L	U	8260B	0.74	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	75-00-3	41	Chloroethane	0.75	ug/L	U	8260B	0.75	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	7440-47-3	51	Chromium Total	1.00	ug/L	U	6010C	1.00	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	156-59-2	78	cis-1,2-Dichloroethene	0.72	ug/L	U	8260B	0.72	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	7440-48-4	53	Cobalt Total	25.4	ug/L		6010C	1.10	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	74-84-0	331	Ethane	1.00	ug/L	U	RSK-175	1.00	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-3B	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-3B	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	7439-89-6	340	Iron Total	3790	ug/L		6010C	22.0	300	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B	50-21-5	415	Lactic Acid	270	ug/L	J	VGC-13	110	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	7439-96-5	342	Manganese Total	88.1	ug/L		6010C	1.10	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-3B	74-82-8	333	Methane	1.88	ug/L		RSK-175	0.720	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-3B	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	7440-02-0	152	Nickel Total	27.6	ug/L	J	6010C	1.80	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	SW303	303	Nitrate as N	180	ug/L	J	353.2	25	10000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-3B	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B	79-09-4	417	Propionic Acid	170	ug/L	U	VGC-13	170	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-3B	7782-49-2	183	Selenium Total	1.37	ug/L	J	6020A	0.830	10	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-3B	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	14808-79-8	315	Sulfate as SO4	40000	ug/L	J	300.0	20	250000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-3B	18496-25-8	187	Sulfide	10	ug/L	U	SM18 4500-S D	10	1000	1	7/27/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-3B	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-3B	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	SW337	337	Total Alkalinity as CaCO3	12000	ug/L	U	310.2	12000	NE	1	7/27/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-3B	SW311	311	Total Dissolved Solids	160000	ug/L		SM 2540C	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-3B	E-10195	357	Total Organic Carbon	980	ug/L	J	SM18 5310B	280	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-3B	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-MW-3B	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-3B	7440-66-6	213	Zinc Total	54.1	ug/L		6010C	3.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-3B			Hydrogen	1.7	nM		AM20GAX	0.25		1	7/27/2011		8/14/2011	
33-01	3301-MW-4		318	Depth To Water	7.19	ft						7/27/2011			
33-01	3301-MW-4		411	Total Well Depth	20.18	ft						7/27/2011			
33-01	3301-MW-4		328	TOC Elevation	68.95	ft AMSL						7/27/2011			
33-01	3301-MW-4		319	Groundwater Elevation	61.76	ft AMSL						7/27/2011			
33-01	3301-MW-4		320	pH	5.83	standard units						7/27/2011			
33-01	3301-MW-4		323	Specific Conductivity	0.297	mS/cm						7/27/2011			
33-01	3301-MW-4		325	Temperature	26.10	ºC						7/27/2011			
33-01	3301-MW-4		330	Turbidity	5.2	NTUs						7/27/2011			
33-01	3301-MW-4	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	75-34-3	75	1,1-Dichloroethane	0.080	ug/L	U	8260B	0.080	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	7440-36-0	13	Antimony Total	1.39	ug/L	J	6020A	0.220	6	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-4	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	7440-39-3	15	Barium Total	56.7	ug/L	J	6010C	1.00	100	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	71-43-2	16	Benzene	0.68	ug/L	U	8260B	0.68	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	SW316	316	Biochemical Oxygen Demand	2000	ug/L	U	SM 5210B	2000	NE	1	7/27/2011	7/28/2011	7/28/2011	591
33-01	3301-MW-4	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	124-38-9	413	Carbon dioxide	164000	ug/L	D	RSK-175	13000	NE	10	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-4	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	SW317	317	Chemical Oxygen Demand	38000	ug/L		SM 5220D	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-4	SW301	301	Chloride	6200	ug/L	B	300.0	47	NE	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-4	108-90-7	39	Chlorobenzene	0.74	ug/L	U	8260B	0.74	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	75-00-3	41	Chloroethane	0.75	ug/L	U	8260B	0.75	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	7440-47-3	51	Chromium Total	1.00	ug/L	U	6010C	1.00	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	156-59-2	78	cis-1,2-Dichloroethene	0.72	ug/L	U	8260B	0.72	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	7440-48-4	53	Cobalt Total	1.10	ug/L	U	6010C	1.10	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	7440-50-8	54	Copper Total	3.09	ug/L	J	6010C	1.60	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	74-84-0	331	Ethane	1.00	ug/L	U	RSK-175	1.00	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-4	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-4	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	7439-89-6	340	Iron Total	243	ug/L	J	6010C	22.0	300	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4	50-21-5	415	Lactic Acid	110	ug/L	U	VGC-13	110	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	7439-96-5	342	Manganese Total	7.81	ug/L	J	6010C	1.10	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-4	74-82-8	333	Methane	13.1	ug/L		RSK-175	0.720	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-4	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	7440-02-0	152	Nickel Total	1.80	ug/L	U	6010C	1.80	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	SW303	303	Nitrate as N	7800	ug/L	J	353.2	25	10000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-4	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4	79-09-4	417	Propionic Acid	170	ug/L	U	VGC-13	170	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-4	7782-49-2	183	Selenium Total	0.830	ug/L	U	6020A	0.830	10	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-4	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	14808-79-8	315	Sulfate as SO4	25000	ug/L	BJ	300.0	20	250000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-4	18496-25-8	187	Sulfide	10	ug/L	U	SM18 4500-S D	10	1000	1	7/27/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-4	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-4	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	SW337	337	Total Alkalinity as CaCO3	56000	ug/L		310.2	12000	NE	1	7/27/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-4	SW311	311	Total Dissolved Solids	210000	ug/L		SM 2540C	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-4	E-10195	357	Total Organic Carbon	9300	ug/L		SM18 5310B	280	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-4	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	7440-62-2	209	Vanadium Total	1.65	ug/L	J	6010C	1.40	25	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-4	7440-66-6	213	Zinc Total	3.80	ug/L	U	6010C	3.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-4			Hydrogen	2.3	nM		AM20GAX	0.25		1	7/27/2011		8/14/2011	
33-01	3301-MW-5		318	Depth To Water	14.40	ft						7/27/2011			
33-01	3301-MW-5		411	Total Well Depth	23.86	ft						7/27/2011			
33-01	3301-MW-5		328	TOC Elevation	53.75	ft AMSL						7/27/2011			
33-01	3301-MW-5		319	Groundwater Elevation	39.35	ft AMSL						7/27/2011			
33-01	3301-MW-5		320	pH	6.24	standard units						7/27/2011			
33-01	3301-MW-5		323	Specific Conductivity	1.051	mS/cm						7/27/2011			
33-01	3301-MW-5		325	Temperature	20.88	ºC						7/27/2011			
33-01	3301-MW-5		330	Turbidity	0.2	NTUs						7/27/2011			
33-01	3301-MW-5	630-20-6	190	1,1,1,2-Tetrachloroethane	9.0	ug/L	UD	8260B	9.0	5	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	71-55-6	200	1,1,1-Trichloroethane	6.5	ug/L	UD	8260B	6.5	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	79-34-5	191	1,1,2,2-Tetrachloroethane	7.5	ug/L	UD	8260B	7.5	3	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	79-00-5	202	1,1,2-Trichloroethane	6.6	ug/L	UD	8260B	6.6	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	75-34-3	75	1,1-Dichloroethane	9.0	ug/L	JD	8260B	0.80	5	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	75-35-4	77	1,1-Dichloroethene	6.0	ug/L	UD	8260B	6.0	5	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	96-18-4	206	1,2,3-Trichloropropane	7.2	ug/L	UD	8260B	7.2	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	96-12-8	67	1,2-Dibromo-3-chloropropane	4.8	ug/L	UD	8260B	4.8	13	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	106-93-4	68	1,2-Dibromoethane	6.6	ug/L	UD	8260B	6.6	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	95-50-1	69	1,2-Dichlorobenzene	1.1	ug/L	UD	8260B	1.1	5	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	107-06-2	76	1,2-Dichloroethane	4.7	ug/L	UD	8260B	4.7	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	78-87-5	82	1,2-Dichloropropane	5.9	ug/L	UD	8260B	5.9	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	106-46-7	71	1,4-Dichlorobenzene	7.9	ug/L	UD	8260B	7.9	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	78-93-3	141	2-Butanone	13	ug/L	UD	8260B	13	100	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	591-78-6	124	2-Hexanone	8.8	ug/L	UD	8260B	8.8	50	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	108-10-1	147	4-Methyl-2-pentanone	11	ug/L	UD	8260B	11	100	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	67-64-1	3	Acetone	12	ug/L	UD	8260B	12	100	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	107-13-1	8	Acrylonitrile	35	ug/L	UD	8260B	35	200	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-5	7440-38-2	14	Arsenic Total	21.2	ug/L		6010C	2.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	7440-39-3	15	Barium Total	230	ug/L		6010C	1.00	100	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	71-43-2	16	Benzene	6.8	ug/L	UD	8260B	6.8	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	SW316	316	Biochemical Oxygen Demand	5800	ug/L		SM 5210B	2000	NE	1	7/28/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-5	74-97-5	28	Bromochloromethane	8.7	ug/L	UD	8260B	8.7	3	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	75-27-4	29	Bromodichloromethane	7.5	ug/L	UD	8260B	7.5	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	75-25-2	30	Bromoform	6.8	ug/L	UD	8260B	6.8	3	10	7/28/2011	8/5/2011	8/5/2011	591

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-MW-5	74-83-9	136	Bromomethane	5.8	ug/L	UD	8260B	5.8	10	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	124-38-9	413	Carbon dioxide	844000	ug/L	D	RSK-175	26000	NE	20	7/28/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-5	75-15-0	35	Carbon disulfide	15	ug/L	UD	8260B	15	100	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	56-23-5	36	Carbon tetrachloride	6.9	ug/L	UD	8260B	6.9	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	SW317	317	Chemical Oxygen Demand	100000	ug/L		SM 5220D	10000	NE	1	7/28/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-5	SW301	301	Chloride	12000	ug/L	B	300.0	47	NE	1	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-5	108-90-7	39	Chlorobenzene	15	ug/L	D	8260B	7.4	3	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	75-00-3	41	Chloroethane	7.5	ug/L	UD	8260B	7.5	10	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	67-66-3	44	Chloroform	7.0	ug/L	UD	8260B	7.0	5	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	74-87-3	137	Chloromethane	5.5	ug/L	UD	8260B	5.5	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	7440-47-3	51	Chromium Total	8.14	ug/L	J	6010C	1.00	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	156-59-2	78	cis-1,2-Dichloroethene	620	ug/L	D	8260B	7.2	5	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	10061-01-5	86	cis-1,3-Dichloropropene	0.75	ug/L	UD	8260B	0.75	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	7440-48-4	53	Cobalt Total	230	ug/L		6010C	1.10	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	124-48-1	66	Dibromochloromethane	6.3	ug/L	UD	8260B	6.3	3	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	74-95-3	139	Dibromomethane	9.0	ug/L	UD	8260B	9.0	10	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	74-84-0	331	Ethane	2.16	ug/L		RSK-175	1.00	NE	1	7/28/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-5	87701-65-3	332	Ethene	5.97	ug/L		RSK-175	2.30	NE	1	7/28/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-5	100-41-4	110	Ethylbenzene	6.2	ug/L	UD	8260B	6.2	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	74-88-4	142	Iodomethane	17	ug/L	UD	8260B	17	10	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	7439-89-6	340	Iron Total	169000	ug/L		6010C	22.0	300	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	50-21-5	415	Lactic Acid	410	ug/L	J	VGC-13	110	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	7439-96-5	342	Manganese Total	34500	ug/L	D	6010C	5.50	50	5	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/28/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-5	74-82-8	333	Methane	689	ug/L	D	RSK-175	14.4	NE	20	7/28/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-5	75-09-2	140	Methylene chloride	1.4	ug/L	UD	8260B	1.4	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	7440-02-0	152	Nickel Total	55.4	ug/L		6010C	1.80	50	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	SW303	303	Nitrate as N	170	ug/L	J	353.2	25	10000	1	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-5	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	79-09-4	417	Propionic Acid	170	ug/L	U	VGC-13	170	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	7782-49-2	183	Selenium Total	0.830	ug/L	U	6020A	0.830	10	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-5	7440-22-4	184	Silver Total	2.19	ug/L	J	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	100-42-5	186	Styrene	0.53	ug/L	UD	8260B	0.53	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	14808-79-8	315	Sulfate as SO4	44000	ug/L	BJ	300.0	20	250000	1	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-5	18496-25-8	187	Sulfide	10	ug/L	U	SM18 4500-S D	10	1000	1	7/28/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-5	127-18-4	192	Tetrachloroethene	7.3	ug/L	UD	8260B	7.3	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-5	108-88-3	196	Toluene	8.5	ug/L	UD	8260B	8.5	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	SW337	337	Total Alkalinity as CaCO3	400000	ug/L	D	310.2	48000	NE	4	7/28/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-5	SW311	311	Total Dissolved Solids	580000	ug/L		SM 2540C	10000	NE	1	7/28/2011	8/3/2011	8/3/2011	591
33-01	3301-MW-5	E-10195	357	Total Organic Carbon	5600	ug/L		SM18 5310B	280	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-5	156-60-5	79	trans-1,2-Dichloroethene	1.2	ug/L	UD	8260B	1.2	5	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	10061-02-6	87	trans-1,3-Dichloropropene	5.0	ug/L	UD	8260B	5.0	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	110-57-6	73	trans-1,4-Dichloro-2-butene	7.0	ug/L	UD	8260B	7.0	100	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	79-01-6	201	Trichloroethene	7.2	ug/L	UD	8260B	7.2	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	75-69-4	203	Trichlorofluoromethane	6.6	ug/L	UD	8260B	6.6	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5	108-05-4	210	Vinyl acetate	9.5	ug/L	UD	8260B	9.5	50	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	75-01-4	211	Vinyl chloride	32	ug/L	D	8260B	6.0	1	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	1330-20-7	346	Xylenes (Total)	21	ug/L	UD	8260B	21	5	10	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-5	7440-66-6	213	Zinc Total	84.5	ug/L		6010C	3.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5			Hydrogen	2.8	nM		AM20GAX	0.25		1	7/28/2011		8/16/2011	
33-01	3301-Duplicate	630-20-6	190	1,1,1,2-Tetrachloroethane	9.0	ug/L	UD	8260B	9.0	5	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	71-55-6	200	1,1,1-Trichloroethane	6.5	ug/L	UD	8260B	6.5	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	79-34-5	191	1,1,2,2-Tetrachloroethane	7.5	ug/L	UD	8260B	7.5	3	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	79-00-5	202	1,1,2-Trichloroethane	6.6	ug/L	UD	8260B	6.6	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	75-34-3	75	1,1-Dichloroethane	9.1	ug/L	JD	8260B	0.80	5	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	75-35-4	77	1,1-Dichloroethene	6.0	ug/L	UD	8260B	6.0	5	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	96-18-4	206	1,2,3-Trichloropropane	7.2	ug/L	UD	8260B	7.2	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	96-12-8	67	1,2-Dibromo-3-chloropropane	4.8	ug/L	UD	8260B	4.8	13	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	106-93-4	68	1,2-Dibromoethane	6.6	ug/L	UD	8260B	6.6	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	95-50-1	69	1,2-Dichlorobenzene	1.1	ug/L	UD	8260B	1.1	5	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	107-06-2	76	1,2-Dichloroethane	4.7	ug/L	UD	8260B	4.7	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	78-87-5	82	1,2-Dichloropropane	5.9	ug/L	UD	8260B	5.9	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	106-46-7	71	1,4-Dichlorobenzene	8.8	ug/L	JD	8260B	7.9	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	78-93-3	141	2-Butanone	13	ug/L	UD	8260B	13	100	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	591-78-6	124	2-Hexanone	8.8	ug/L	UD	8260B	8.8	50	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	108-10-1	147	4-Methyl-2-pentanone	11	ug/L	UD	8260B	11	100	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	67-64-1	3	Acetone	12	ug/L	UD	8260B	12	100	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	107-13-1	8	Acrylonitrile	35	ug/L	UD	8260B	35	200	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-Duplicate	7440-38-2	14	Arsenic Total	24.7	ug/L		6010C	2.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	7440-39-3	15	Barium Total	227	ug/L		6010C	1.00	100	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	71-43-2	16	Benzene	6.8	ug/L	UD	8260B	6.8	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	74-97-5	28	Bromochloromethane	8.7	ug/L	UD	8260B	8.7	3	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	75-27-4	29	Bromodichloromethane	7.5	ug/L	UD	8260B	7.5	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	75-25-2	30	Bromoform	6.8	ug/L	UD	8260B	6.8	3	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	74-83-9	136	Bromomethane	5.8	ug/L	UD	8260B	5.8	10	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	75-15-0	35	Carbon disulfide	15	ug/L	UD	8260B	15	100	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	56-23-5	36	Carbon tetrachloride	6.9	ug/L	UD	8260B	6.9	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	108-90-7	39	Chlorobenzene	15	ug/L	D	8260B	7.4	3	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	75-00-3	41	Chloroethane	7.5	ug/L	UD	8260B	7.5	10	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	67-66-3	44	Chloroform	7.0	ug/L	UD	8260B	7.0	5	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	74-87-3	137	Chloromethane	5.5	ug/L	UD	8260B	5.5	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7440-47-3	51	Chromium Total	7.61	ug/L	J	6010C	1.00	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	156-59-2	78	cis-1,2-Dichloroethene	650	ug/L	D	8260B	7.2	5	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	10061-01-5	86	cis-1,3-Dichloropropene	0.75	ug/L	UD	8260B	0.75	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7440-48-4	53	Cobalt Total	227	ug/L		6010C	1.10	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	124-48-1	66	Dibromochloromethane	6.3	ug/L	UD	8260B	6.3	3	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	74-95-3	139	Dibromomethane	9.0	ug/L	UD	8260B	9.0	10	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	100-41-4	110	Ethylbenzene	6.2	ug/L	UD	8260B	6.2	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	74-88-4	142	Iodomethane	17	ug/L	UD	8260B	17	10	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7439-89-6	340	Iron Total	169000	ug/L		6010C	22.0	300	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	7439-96-5	342	Manganese Total	34300	ug/L	D	6010C	5.50	50	5	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	75-09-2	140	Methylene chloride	1.4	ug/L	UD	8260B	1.4	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7440-02-0	152	Nickel Total	54.1	ug/L		6010C	1.80	50	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	7782-49-2	183	Selenium Total	1.64	ug/L	J	6020A	0.830	10	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-Duplicate	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	100-42-5	186	Styrene	0.53	ug/L	UD	8260B	0.53	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	127-18-4	192	Tetrachloroethene	7.3	ug/L	UD	8260B	7.3	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-Duplicate	108-88-3	196	Toluene	8.7	ug/L	JD	8260B	8.5	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	156-60-5	79	trans-1,2-Dichloroethene	4.9	ug/L	JD	8260B	1.2	5	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	10061-02-6	87	trans-1,3-Dichloropropene	5.0	ug/L	UD	8260B	5.0	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	110-57-6	73	trans-1,4-Dichloro-2-butene	7.0	ug/L	UD	8260B	7.0	100	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	79-01-6	201	Trichloroethene	7.2	ug/L	UD	8260B	7.2	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	75-69-4	203	Trichlorofluoromethane	6.6	ug/L	UD	8260B	6.6	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Duplicate	108-05-4	210	Vinyl acetate	9.5	ug/L	UD	8260B	9.5	50	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	75-01-4	211	Vinyl chloride	25	ug/L	D	8260B	6.0	1	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	1330-20-7	346	Xylenes (Total)	21	ug/L	UD	8260B	21	5	10	7/28/2011	8/5/2011	8/8/2011	591
33-01	3301-Duplicate	7440-66-6	213	Zinc Total	83.5	ug/L		6010C	3.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-5D		318	Depth To Water	13.58	ft						7/27/2011			
33-01	3301-MW-5D		411	Total Well Depth	41.63	ft						7/27/2011			
33-01	3301-MW-5D		328	TOC Elevation	52.08	ft AMSL						7/27/2011			
33-01	3301-MW-5D		319	Groundwater Elevation	38.50	ft AMSL						7/27/2011			
33-01	3301-MW-5S		318	Depth To Water	10.78	ft						7/27/2011			
33-01	3301-MW-5S		411	Total Well Depth	13.50	ft						7/27/2011			
33-01	3301-MW-5S		328	TOC Elevation	50.54	ft AMSL						7/27/2011			
33-01	3301-MW-5S		319	Groundwater Elevation	39.76	ft AMSL						7/27/2011			
33-01	3301-MW-6		318	Depth To Water	7.92	ft.						7/27/2011			
33-01	3301-MW-6		411	Total Well Depth	19.75	ft.						7/27/2011			
33-01	3301-MW-6		328	TOC Elevation	46.29	ft AMSL						7/27/2011			
33-01	3301-MW-6		319	Groundwater Elevation	38.37	ft AMSL						7/27/2011			
33-01	3301-MW-6		320	pH	5.95	standard units						7/27/2011			
33-01	3301-MW-6		323	Specific Conductivity	0.569	mS/cm						7/27/2011			

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-MW-6		325	Temperature	22.01	ºC						7/27/2011			
33-01	3301-MW-6		330	Turbidity	5.4	NTUs						7/27/2011			
33-01	3301-MW-6	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	75-34-3	75	1,1-Dichloroethane	0.62	ug/L	J	8260B	0.080	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-6	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	7440-39-3	15	Barium Total	302	ug/L		6010C	1.00	100	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	71-43-2	16	Benzene	0.68	ug/L	U	8260B	0.68	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	SW316	316	Biochemical Oxygen Demand	2000	ug/L	U	SM 5210B	2000	NE	1	7/27/2011	7/28/2011	7/28/2011	591
33-01	3301-MW-6	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	124-38-9	413	Carbon dioxide	227000	ug/L	D	RSK-175	130000	NE	100	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-6	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	SW317	317	Chemical Oxygen Demand	32000	ug/L		SM 5220D	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-6	SW301	301	Chloride	94000	ug/L	B	300.0	47	NE	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-6	108-90-7	39	Chlorobenzene	0.74	ug/L	U	8260B	0.74	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	75-00-3	41	Chloroethane	0.75	ug/L	U	8260B	0.75	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	7440-47-3	51	Chromium Total	1.22	ug/L	J	6010C	1.00	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	156-59-2	78	cis-1,2-Dichloroethene	1.2	ug/L	J	8260B	0.72	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	7440-48-4	53	Cobalt Total	2.88	ug/L	J	6010C	1.10	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	74-84-0	331	Ethane	1.00	ug/L	U	RSK-175	1.00	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-6	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-6	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	7439-89-6	340	Iron Total	22900	ug/L		6010C	22.0	300	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6	50-21-5	415	Lactic Acid	110	ug/L	U	VGC-13	110	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	7439-96-5	342	Manganese Total	233	ug/L		6010C	1.10	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-6	74-82-8	333	Methane	2350	ug/L	D	RSK-175	72.0	NE	100	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-6	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	7440-02-0	152	Nickel Total	2.31	ug/L	J	6010C	1.80	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	SW303	303	Nitrate as N	130	ug/L	J	353.2	25	10000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-6	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6	79-09-4	417	Propionic Acid	170	ug/L	U	VGC-13	170	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-6	7782-49-2	183	Selenium Total	4.61	ug/L	J	6020A	0.830	10	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-6	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	14808-79-8	315	Sulfate as SO4	6900	ug/L	BJ	300.0	20	250000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-6	18496-25-8	187	Sulfide	15	ug/L	J	SM18 4500-S D	10	1000	1	7/27/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-6	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-6	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	SW337	337	Total Alkalinity as CaCO3	150000	ug/L		310.2	12000	NE	1	7/27/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-6	SW311	311	Total Dissolved Solids	450000	ug/L		SM 2540C	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-6	E-10195	357	Total Organic Carbon	5700	ug/L		SM18 5310B	280	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-6	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-6	7440-66-6	213	Zinc Total	3.80	ug/L	U	6010C	3.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-6			Hydrogen	2.2	nM		AM20GAX	0.25		1	7/27/2011		8/14/2011	
33-01	3301-MW-7A		318	Depth To Water	15.98	ft						7/27/2011			
33-01	3301-MW-7A		411	Total Well Depth	26.94	ft						7/27/2011			
33-01	3301-MW-7A		328	TOC Elevation	68.43	ft AMSL						7/27/2011			
33-01	3301-MW-7A		319	Groundwater Elevation	52.45	ft AMSL						7/27/2011			
33-01	3301-MW-7A		320	pH	6.07	standard units						7/27/2011			
33-01	3301-MW-7A		323	Specific Conductivity	0.800	mS/cm						7/27/2011			
33-01	3301-MW-7A		325	Temperature	21.11	ºC						7/27/2011			
33-01	3301-MW-7A		330	Turbidity	0.9	NTUs						7/27/2011			
33-01	3301-MW-7A	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	75-34-3	75	1,1-Dichloroethane	0.080	ug/L	U	8260B	0.080	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-7A	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	7440-39-3	15	Barium Total	215	ug/L		6010C	1.00	100	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	71-43-2	16	Benzene	1.5	ug/L		8260B	0.68	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	SW316	316	Biochemical Oxygen Demand	6000	ug/L	U	SM 5210B	6000	NE	1	7/27/2011	7/28/2011	7/28/2011	591
33-01	3301-MW-7A	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	124-38-9	413	Carbon dioxide	677000	ug/L	D	RSK-175	130000	NE	100	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-7A	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	SW317	317	Chemical Oxygen Demand	45000	ug/L		SM 5220D	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-7A	SW301	301	Chloride	34000	ug/L	B	300.0	47	NE	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-7A	108-90-7	39	Chlorobenzene	2.1	ug/L	J	8260B	0.74	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	75-00-3	41	Chloroethane	2.0	ug/L	J	8260B	0.75	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/27/2011	8/4/2011	8/5/2011	591

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-MW-7A	7440-47-3	51	Chromium Total	1.00	ug/L	U	6010C	1.00	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	156-59-2	78	cis-1,2-Dichloroethene	0.72	ug/L	U	8260B	0.72	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	7440-48-4	53	Cobalt Total	1.10	ug/L	U	6010C	1.10	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	7440-50-8	54	Copper Total	1.61	ug/L	J	6010C	1.60	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	74-84-0	331	Ethane	1.00	ug/L	U	RSK-175	1.00	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-7A	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-7A	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	7439-89-6	340	Iron Total	175000	ug/L		6010C	22.0	300	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A	50-21-5	415	Lactic Acid	110	ug/L	U	VGC-13	110	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	7439-96-5	342	Manganese Total	331	ug/L		6010C	1.10	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-7A	74-82-8	333	Methane	7980	ug/L	D	RSK-175	72.0	NE	100	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-7A	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	7440-02-0	152	Nickel Total	1.80	ug/L	U	6010C	1.80	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	SW303	303	Nitrate as N	76	ug/L	J	353.2	25	10000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-7A	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A	79-09-4	417	Propionic Acid	170	ug/L	U	VGC-13	170	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-7A	7782-49-2	183	Selenium Total	2.53	ug/L	J	6020A	0.830	10	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-7A	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	14808-79-8	315	Sulfate as SO4	2200	ug/L	JB	300.0	20	250000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-7A	18496-25-8	187	Sulfide	10	ug/L	U	SM18 4500-S D	10	1000	1	7/27/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-7A	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-7A	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	SW337	337	Total Alkalinity as CaCO3	170000	ug/L	D	310.2	24000	NE	2	7/27/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-7A	SW311	311	Total Dissolved Solids	340000	ug/L		SM 2540C	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-7A	E-10195	357	Total Organic Carbon	4600	ug/L		SM18 5310B	280	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-7A	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-7A	7440-66-6	213	Zinc Total	6.63	ug/L	J	6010C	3.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-7A			Hydrogen	2.0	nM		AM20GAX	0.25		1	7/27/2011		8/14/2011	
33-01	3301-MW-8A		318	Depth To Water	11.55	ft						7/27/2011			
33-01	3301-MW-8A		411	Total Well Depth	22.38	ft						7/27/2011			
33-01	3301-MW-8A		328	TOC Elevation	82.34	ft AMSL						7/27/2011			
33-01	3301-MW-8A		319	Groundwater Elevation	70.79	ft AMSL						7/27/2011			
33-01	3301-MW-9		318	Depth To Water	6.85	ft						7/27/2011			
33-01	3301-MW-9		411	Total Well Depth	16.85	ft						7/27/2011			
33-01	3301-MW-9		328	TOC Elevation	72.41	ft AMSL						7/27/2011			
33-01	3301-MW-9		319	Groundwater Elevation	65.56	ft AMSL						7/27/2011			
33-01	3301-MW-9		320	pH	6.98	standard units						7/27/2011			
33-01	3301-MW-9		323	Specific Conductivity	0.213	mS/cm						7/27/2011			
33-01	3301-MW-9		325	Temperature	21.87	ºC						7/27/2011			
33-01	3301-MW-9		330	Turbidity	3.8	NTUs						7/27/2011			
33-01	3301-MW-9	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	75-34-3	75	1,1-Dichloroethane	0.080	ug/L	U	8260B	0.080	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-9	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	7440-39-3	15	Barium Total	146	ug/L		6010C	1.00	100	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	71-43-2	16	Benzene	0.68	ug/L	U	8260B	0.68	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	SW316	316	Biochemical Oxygen Demand	2000	ug/L	U	SM 5210B	2000	NE	1	7/27/2011	7/28/2011	7/28/2011	591
33-01	3301-MW-9	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	124-38-9	413	Carbon dioxide	28200	ug/L		RSK-175	1300	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-9	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	SW317	317	Chemical Oxygen Demand	10000	ug/L	U	SM 5220D	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-9	SW301	301	Chloride	3200	ug/L	JB	300.0	47	NE	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-9	108-90-7	39	Chlorobenzene	0.74	ug/L	U	8260B	0.74	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	75-00-3	41	Chloroethane	0.75	ug/L	U	8260B	0.75	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	7440-47-3	51	Chromium Total	1.00	ug/L	U	6010C	1.00	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	156-59-2	78	cis-1,2-Dichloroethene	0.72	ug/L	U	8260B	0.72	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	7440-48-4	53	Cobalt Total	1.10	ug/L	U	6010C	1.10	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	74-84-0	331	Ethane	1.00	ug/L	U	RSK-175	1.00	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-9	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-9	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	7439-89-6	340	Iron Total	6150	ug/L		6010C	22.0	300	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9	50-21-5	415	Lactic Acid	170	ug/L	J	VGC-13	110	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	7439-96-5	342	Manganese Total	136	ug/L		6010C	1.10	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-9	74-82-8	333	Methane	4.87	ug/L		RSK-175	0.720	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-9	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	7440-02-0	152	Nickel Total	1.80	ug/L	U	6010C	1.80	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	SW303	303	Nitrate as N	66	ug/L	J	353.2	25	10000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-9	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9	79-09-4	417	Propionic Acid	170	ug/L	U	VGC-13	170	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-9	7782-49-2	183	Selenium Total	0.830	ug/L	U	6020A	0.830	10	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-9	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	14808-79-8	315	Sulfate as SO4	2900	ug/L	JB	300.0	20	250000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-9	18496-25-8	187	Sulfide	10	ug/L	U	SM18 4500-S D	10	1000	1	7/27/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-9	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-9	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	SW337	337	Total Alkalinity as CaCO3	97000	ug/L		310.2	12000	NE	1	7/27/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-9	SW311	311	Total Dissolved Solids	130000	ug/L		SM 2540C	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-9	E-10195	357	Total Organic Carbon	400	ug/L	J	SM18 5310B	280	NE	1	7/27/2011	8/1/2011	8/1/2011	442

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-MW-9	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-9	7440-66-6	213	Zinc Total	3.80	ug/L	U	6010C	3.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-9			Hydrogen	2.6	nM		AM20GAX	0.25		1	7/27/2011		8/14/2011	
33-01	3301-MW-10		318	Depth To Water	6.86	ft						7/27/2011			
33-01	3301-MW-10		411	Total Well Depth	13.57	ft						7/27/2011			
33-01	3301-MW-10		328	TOC Elevation	75.78	ft AMSL						7/27/2011			
33-01	3301-MW-10		319	Groundwater Elevation	68.92	ft AMSL						7/27/2011			
33-01	3301-MW-12		318	Depth To Water	8.89	ft						7/27/2011			
33-01	3301-MW-12		411	Total Well Depth	12.68	ft						7/27/2011			
33-01	3301-MW-12		328	TOC Elevation	51.24	ft AMSL						7/27/2011			
33-01	3301-MW-12		319	Groundwater Elevation	42.35	ft AMSL						7/27/2011			
33-01	3301-MW-12		320	pH	4.28	standard units						7/27/2011			
33-01	3301-MW-12		323	Specific Conductivity	0.836	mS/cm						7/27/2011			
33-01	3301-MW-12		325	Temperature	20.58	ºC						7/27/2011			
33-01	3301-MW-12		330	Turbidity	0.3	NTUs						7/27/2011			
33-01	3301-MW-12	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	75-34-3	75	1,1-Dichloroethane	1.5	ug/L	J	8260B	0.080	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	106-46-7	71	1,4-Dichlorobenzene	7.2	ug/L		8260B	0.79	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-12	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	7440-39-3	15	Barium Total	322	ug/L		6010C	1.00	100	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	71-43-2	16	Benzene	4.1	ug/L		8260B	0.68	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	7440-41-7	23	Beryllium Total	0.528	ug/L	J	6010C	0.100	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	SW316	316	Biochemical Oxygen Demand	2000	ug/L	U	SM 5210B	2000	NE	1	7/28/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-12	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	124-38-9	413	Carbon dioxide	1310000	ug/L	D	RSK-175	26000	NE	20	7/28/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-12	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	SW317	317	Chemical Oxygen Demand	53000	ug/L		SM 5220D	10000	NE	1	7/28/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-12	SW301	301	Chloride	220000	ug/L	BD	300.0	190	NE	4	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-12	108-90-7	39	Chlorobenzene	5.1	ug/L		8260B	0.74	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	75-00-3	41	Chloroethane	1.8	ug/L	J	8260B	0.75	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	7440-47-3	51	Chromium Total	1.21	ug/L	J	6010C	1.00	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	156-59-2	78	cis-1,2-Dichloroethene	0.83	ug/L	J	8260B	0.72	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	7440-48-4	53	Cobalt Total	15.1	ug/L		6010C	1.10	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	74-84-0	331	Ethane	1.00	ug/L	U	RSK-175	1.00	NE	1	7/28/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-12	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/28/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-12	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	7439-89-6	340	Iron Total	11800	ug/L		6010C	22.0	300	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	50-21-5	415	Lactic Acid	110	ug/L	U	VGC-13	110	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	7439-92-1	131	Lead Total	1.91	ug/L	J	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	7439-96-5	342	Manganese Total	105	ug/L		6010C	1.10	50	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/28/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-12	74-82-8	333	Methane	260	ug/L	D	RSK-175	14.4	NE	20	7/28/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-12	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	7440-02-0	152	Nickel Total	21.6	ug/L	J	6010C	1.80	50	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	SW303	303	Nitrate as N	78	ug/L	J	353.2	25	10000	1	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-12	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	79-09-4	417	Propionic Acid	12000	ug/L		VGC-13	170	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	7782-49-2	183	Selenium Total	15.9	ug/L		6020A	0.830	10	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-12	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	14808-79-8	315	Sulfate as SO4	50000	ug/L	BDJ	300.0	80	250000	4	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-12	18496-25-8	187	Sulfide	10	ug/L	U	SM18 4500-S D	10	1000	1	7/28/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-12	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	7440-28-0	194	Thallium Total	0.213	ug/L	J	6020A	0.110	5.5	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-12	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	SW337	337	Total Alkalinity as CaCO3	12000	ug/L	U	310.2	12000	NE	1	7/28/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-12	SW311	311	Total Dissolved Solids	540000	ug/L		SM 2540C	10000	NE	1	7/28/2011	8/3/2011	8/3/2011	591
33-01	3301-MW-12	E-10195	357	Total Organic Carbon	11000	ug/L		SM18 5310B	280	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-12	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-12	7440-66-6	213	Zinc Total	173	ug/L		6010C	3.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-12			Hydrogen	1.3	nM		AM20GAX	0.25		1	7/28/2011		8/14/2011	
33-01	3301-MW-13		318	Depth To Water	8.85	ft						7/27/2011			
33-01	3301-MW-13		411	Total Well Depth	23.00	ft						7/27/2011			
33-01	3301-MW-13		328	TOC Elevation	54.99	ft AMSL						7/27/2011			
33-01	3301-MW-13		319	Groundwater Elevation	46.14	ft AMSL						7/27/2011			
33-01	3301-MW-13		320	pH	5.78	standard units						7/27/2011			
33-01	3301-MW-13		323	Specific Conductivity	0.904	mS/cm						7/27/2011			
33-01	3301-MW-13		325	Temperature	20.80	ºC						7/27/2011			
33-01	3301-MW-13		330	Turbidity	15.0	NTUs						7/27/2011			
33-01	3301-MW-13	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	75-34-3	75	1,1-Dichloroethane	0.74	ug/L	J	8260B	0.080	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	106-46-7	71	1,4-Dichlorobenzene	2.2	ug/L		8260B	0.79	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/28/2011	8/5/2011	8/5/2011	591

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-MW-13	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-13	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	7440-39-3	15	Barium Total	202	ug/L		6010C	1.00	100	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	71-43-2	16	Benzene	1.2	ug/L		8260B	0.68	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	SW316	316	Biochemical Oxygen Demand	2000	ug/L	U	SM 5210B	2000	NE	1	7/28/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-13	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	124-38-9	413	Carbon dioxide	816000	ug/L	D	RSK-175	130000	NE	100	7/28/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-13	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	SW317	317	Chemical Oxygen Demand	96000	ug/L		SM 5220D	10000	NE	1	7/28/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-13	SW301	301	Chloride	120000	ug/L	BD	300.0	94	NE	2	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-13	108-90-7	39	Chlorobenzene	10	ug/L		8260B	0.74	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	75-00-3	41	Chloroethane	0.76	ug/L	J	8260B	0.75	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	7440-47-3	51	Chromium Total	10.3	ug/L		6010C	1.00	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	156-59-2	78	cis-1,2-Dichloroethene	14	ug/L		8260B	0.72	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	7440-48-4	53	Cobalt Total	1540	ug/L		6010C	1.10	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	74-84-0	331	Ethane	1.86	ug/L	J	RSK-175	1.00	NE	1	7/28/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-13	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/28/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-13	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	7439-89-6	340	Iron Total	42900	ug/L		6010C	22.0	300	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	50-21-5	415	Lactic Acid	110	ug/L	U	VGC-13	110	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	7439-96-5	342	Manganese Total	38700	ug/L	D	6010C	5.50	50	5	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/28/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-13	74-82-8	333	Methane	1270	ug/L	D	RSK-175	72.0	NE	100	7/28/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-13	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	7440-02-0	152	Nickel Total	307	ug/L		6010C	1.80	50	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	SW303	303	Nitrate as N	56	ug/L	J	353.2	25	10000	1	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-13	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	79-09-4	417	Propionic Acid	5500	ug/L		VGC-13	170	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	7782-49-2	183	Selenium Total	11.0	ug/L		6020A	0.830	10	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-13	7440-22-4	184	Silver Total	5.61	ug/L	J	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	14808-79-8	315	Sulfate as SO4	35000	ug/L	BDJ	300.0	40	250000	2	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-13	18496-25-8	187	Sulfide	10	ug/L	U	SM18 4500-S D	10	1000	1	7/28/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-13	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	7440-28-0	194	Thallium Total	1.27	ug/L	J	6020A	0.110	5.5	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-13	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	SW337	337	Total Alkalinity as CaCO3	230000	ug/L	D	310.2	24000	NE	2	7/28/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-13	SW311	311	Total Dissolved Solids	560000	ug/L		SM 2540C	10000	NE	1	7/28/2011	8/3/2011	8/3/2011	591
33-01	3301-MW-13	E-10195	357	Total Organic Carbon	7900	ug/L		SM18 5310B	280	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-13	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	79-01-6	201	Trichloroethene	1.0	ug/L		8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	75-01-4	211	Vinyl chloride	2.2	ug/L		8260B	0.60	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-13	7440-66-6	213	Zinc Total	170	ug/L		6010C	3.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-13	7440-36-0	13	Antimony Dissolved	0.220	ug/L	U	6020A	0.220	6	1	7/28/2011	8/16/2011	8/22/2011	591
33-01	3301-MW-13	7440-38-2	14	Arsenic Dissolved	3.74	ug/L	JB	6010C	2.80	10	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7440-39-3	15	Barium Dissolved	161	ug/L		6010C	1.00	100	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7440-41-7	23	Beryllium Dissolved	0.100	ug/L	U	6010C	0.100	1	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7440-43-9	34	Cadmium Dissolved	0.360	ug/L	U	6010C	0.360	1	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7440-47-3	51	Chromium Dissolved	11.0	ug/L		6010C	1.00	10	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7440-48-4	53	Cobalt Dissolved	1460	ug/L		6010C	1.10	10	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7440-50-8	54	Copper Dissolved	1.60	ug/L	U	6010C	1.60	10	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7439-92-1	131	Lead Dissolved	1.90	ug/L	U	6010C	1.90	10	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7440-02-0	152	Nickel Dissolved	292	ug/L		6010C	1.80	50	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7782-49-2	183	Selenium Dissolved	8.64	ug/L	J	6020A	0.830	10	1	7/28/2011	8/16/2011	8/22/2011	591
33-01	3301-MW-13	7440-22-4	184	Silver Dissolved	7.28	ug/L	J	6010C	1.90	10	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7440-28-0	194	Thallium Dissolved	1.25	ug/L	J	6020A	0.110	5.5	1	7/28/2011	8/16/2011	8/22/2011	591
33-01	3301-MW-13	7440-62-2	209	Vanadium Dissolved	1.40	ug/L	U	6010C	1.40	25	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13	7440-66-6	213	Zinc Dissolved	154	ug/L		6010C	3.80	10	1	7/28/2011	8/16/2011	8/17/2011	591
33-01	3301-MW-13			Hydrogen	2.3	nM		AM20GAX	0.25		1	7/28/2011		8/14/2011	
33-01	3301-MW-14		318	Depth To Water	7.85	ft						7/27/2011			
33-01	3301-MW-14		411	Total Well Depth	14.63	ft						7/27/2011			
33-01	3301-MW-14		328	TOC Elevation	43.88	ft AMSL						7/27/2011			
33-01	3301-MW-14		319	Groundwater Elevation	36.03	ft AMSL						7/27/2011			
33-01	3301-MW-14		320	pH	6.72	standard units						7/27/2011			
33-01	3301-MW-14		323	Specific Conductivity	0.461	mS/cm						7/27/2011			
33-01	3301-MW-14		325	Temperature	23.32	ºC						7/27/2011			
33-01	3301-MW-14		330	Turbidity	0.6	NTUs						7/27/2011			
33-01	3301-MW-14	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	75-34-3	75	1,1-Dichloroethane	0.080	ug/L	U	8260B	0.080	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-14	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	7440-39-3	15	Barium Total	301	ug/L		6010C	1.00	100	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	71-43-2	16	Benzene	0.68	ug/L	U	8260B	0.68	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	SW316	316	Biochemical Oxygen Demand	2000	ug/L	U	SM 5210B	2000	NE	1	7/27/2011	7/28/2011	7/28/2011	591
33-01	3301-MW-14	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	124-38-9	413	Carbon dioxide	101000	ug/L		RSK-175	1300	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-14	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	SW317	317	Chemical Oxygen Demand	17000	ug/L		SM 5220D	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-14	SW301	301	Chloride	13000	ug/L	B	300.0	47	NE	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-14	108-90-7	39	Chlorobenzene	0.74	ug/L	U	8260B	0.74	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	75-00-3	41	Chloroethane	0.75	ug/L	U	8260B	0.75	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	7440-47-3	51	Chromium Total	1.20	ug/L	J	6010C	1.00	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	156-59-2	78	cis-1,2-Dichloroethene	0.72	ug/L	U	8260B	0.72	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	7440-48-4	53	Cobalt Total	1.10	ug/L	U	6010C	1.10	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/27/2011	8/4/2011	8/5/2011	591

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-MW-14	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	74-84-0	331	Ethane	1.00	ug/L	U	RSK-175	1.00	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-14	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-14	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	7439-89-6	340	Iron Total	5060	ug/L		6010C	22.0	300	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14	50-21-5	415	Lactic Acid	130	ug/L	J	VGC-13	110	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	7439-96-5	342	Manganese Total	147	ug/L		6010C	1.10	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-14	74-82-8	333	Methane	392	ug/L	D	RSK-175	7.20	NE	10	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-14	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	7440-02-0	152	Nickel Total	1.80	ug/L	U	6010C	1.80	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	SW303	303	Nitrate as N	86	ug/L	J	353.2	25	10000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-14	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14	79-09-4	417	Propionic Acid	170	ug/L	U	VGC-13	170	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-14	7782-49-2	183	Selenium Total	1.04	ug/L	J	6020A	0.830	10	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-14	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	14808-79-8	315	Sulfate as SO4	30000	ug/L	BJ	300.0	20	250000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-14	18496-25-8	187	Sulfide	14	ug/L	J	SM18 4500-S D	10	1000	1	7/27/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-14	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-14	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	SW337	337	Total Alkalinity as CaCO3	180000	ug/L		310.2	12000	NE	1	7/27/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-14	SW311	311	Total Dissolved Solids	250000	ug/L		SM 2540C	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-14	E-10195	357	Total Organic Carbon	3000	ug/L		SM18 5310B	280	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-14	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-14	7440-66-6	213	Zinc Total	3.80	ug/L	U	6010C	3.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-14			Hydrogen	2.6	nM		AM20GAX	0.25		1	7/27/2011		8/14/2011	
33-01	3301-MW-15		318	Depth To Water	8.97	ft						7/27/2011			
33-01	3301-MW-15		411	Total Well Depth	14.27	ft						7/27/2011			
33-01	3301-MW-15		328	TOC Elevation	44.87	ft AMSL						7/27/2011			
33-01	3301-MW-15		319	Groundwater Elevation	35.90	ft AMSL						7/27/2011			
33-01	3301-MW-15		320	pH	6.30	standard units						7/27/2011			
33-01	3301-MW-15		323	Specific Conductivity	0.735	mS/cm						7/27/2011			
33-01	3301-MW-15		325	Temperature	20.92	ºC						7/27/2011			
33-01	3301-MW-15		330	Turbidity	7.7	NTUs						7/27/2011			
33-01	3301-MW-15	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	75-34-3	75	1,1-Dichloroethane	0.88	ug/L	J	8260B	0.080	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	78-87-5	82	1,2-Dichloropropane	2.0	ug/L		8260B	0.59	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-15	7440-38-2	14	Arsenic Total	9.98	ug/L	J	6010C	2.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	7440-39-3	15	Barium Total	429	ug/L		6010C	1.00	100	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	71-43-2	16	Benzene	0.68	ug/L	U	8260B	0.68	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	SW316	316	Biochemical Oxygen Demand	2000	ug/L	U	SM 5210B	2000	NE	1	7/28/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-15	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	124-38-9	413	Carbon dioxide	269000	ug/L	D	RSK-175	130000	NE	100	7/28/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-15	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	SW317	317	Chemical Oxygen Demand	32000	ug/L		SM 5220D	10000	NE	1	7/28/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-15	SW301	301	Chloride	14000	ug/L	B	300.0	47	NE	1	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-15	108-90-7	39	Chlorobenzene	2.0	ug/L	J	8260B	0.74	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	75-00-3	41	Chloroethane	0.75	ug/L	U	8260B	0.75	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	7440-47-3	51	Chromium Total	4.29	ug/L	J	6010C	1.00	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	156-59-2	78	cis-1,2-Dichloroethene	21	ug/L		8260B	0.72	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	7440-48-4	53	Cobalt Total	14.1	ug/L		6010C	1.10	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	74-84-0	331	Ethane	1.68	ug/L	J	RSK-175	1.00	NE	1	7/28/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-15	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/28/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-15	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	7439-89-6	340	Iron Total	28700	ug/L		6010C	22.0	300	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	50-21-5	415	Lactic Acid	290	ug/L	J	VGC-13	110	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	7439-96-5	342	Manganese Total	8400	ug/L		6010C	1.10	50	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/28/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-15	74-82-8	333	Methane	1600	ug/L	D	RSK-175	72.0	NE	100	7/28/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-15	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	7440-02-0	152	Nickel Total	10.8	ug/L	J	6010C	1.80	50	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	SW303	303	Nitrate as N	93	ug/L	J	353.2	25	10000	1	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-15	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	79-09-4	417	Propionic Acid	170	ug/L	U	VGC-13	170	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	7782-49-2	183	Selenium Total	1.35	ug/L	J	6020A	0.830	10	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-15	7440-22-4	184	Silver Total	1.94	ug/L	J	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	14808-79-8	315	Sulfate as SO4	13000	ug/L	BJ	300.0	20	250000	1	7/28/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-15	18496-25-8	187	Sulfide	10	ug/L	U	SM18 4500-S D	10	1000	1	7/28/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-15	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-MW-15	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	SW337	337	Total Alkalinity as CaCO3	340000	ug/L	D	310.2	48000	NE	4	7/28/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-15	SW311	311	Total Dissolved Solids	470000	ug/L		SM 2540C	10000	NE	1	7/28/2011	8/3/2011	8/3/2011	591
33-01	3301-MW-15	E-10195	357	Total Organic Carbon	4200	ug/L		SM18 5310B	280	NE	1	7/28/2011	8/2/2011	8/2/2011	442
33-01	3301-MW-15	156-60-5	79	trans-1,2-Dichloroethene	0.62	ug/L	J	8260B	0.12	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-15	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	75-01-4	211	Vinyl chloride	3.7	ug/L		8260B	0.60	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-MW-15	7440-66-6	213	Zinc Total	4.98	ug/L	J	6010C	3.80	10	1	7/28/2011	8/1/2011	8/2/2011	591

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-MW-15			Hydrogen	1.2	nM		AM20GAX	0.25		1	7/28/2011		8/14/2011	
33-01	3301-MW-16		318	Depth To Water	12.65	ft						7/27/2011			
33-01	3301-MW-16		411	Total Well Depth	19.85	ft						7/27/2011			
33-01	3301-MW-16		328	TOC Elevation	46.58	ft AMSL						7/27/2011			
33-01	3301-MW-16		319	Groundwater Elevation	33.93	ft AMSL						7/27/2011			
33-01	3301-MW-16		320	pH	6.03	standard units						7/27/2011			
33-01	3301-MW-16		323	Specific Conductivity	0.575	mS/cm						7/27/2011			
33-01	3301-MW-16		325	Temperature	20.94	ºC						7/27/2011			
33-01	3301-MW-16		330	Turbidity	8.2	NTUs						7/27/2011			
33-01	3301-MW-16	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	75-34-3	75	1,1-Dichloroethane	0.080	ug/L	U	8260B	0.080	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	64-19-7	416	Acetic Acid	200	ug/L	U	VGC-13	200	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-16	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	7440-39-3	15	Barium Total	337	ug/L		6010C	1.00	100	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	71-43-2	16	Benzene	0.68	ug/L	U	8260B	0.68	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	SW316	316	Biochemical Oxygen Demand	2000	ug/L	U	SM 5210B	2000	NE	1	7/27/2011	7/28/2011	7/28/2011	591
33-01	3301-MW-16	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	107-92-6	418	Butyric Acid	300	ug/L	U	VGC-13	300	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	124-38-9	413	Carbon dioxide	561000	ug/L	D	RSK-175	26000	NE	20	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	SW317	317	Chemical Oxygen Demand	53000	ug/L		SM 5220D	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-16	SW301	301	Chloride	23000	ug/L	B	300.0	47	NE	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-16	108-90-7	39	Chlorobenzene	0.74	ug/L	U	8260B	0.74	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	75-00-3	41	Chloroethane	0.75	ug/L	U	8260B	0.75	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	7440-47-3	51	Chromium Total	1.00	ug/L	U	6010C	1.00	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	156-59-2	78	cis-1,2-Dichloroethene	0.72	ug/L	U	8260B	0.72	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	7440-48-4	53	Cobalt Total	1.10	ug/L	U	6010C	1.10	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	7440-50-8	54	Copper Total	1.60	ug/L	U	6010C	1.60	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	74-84-0	331	Ethane	1.00	ug/L	U	RSK-175	1.00	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-16	87701-65-3	332	Ethene	2.30	ug/L	U	RSK-175	2.30	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-16	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	SW485	485	Hexanoic Acid	430	ug/L	U	VGC-13	430		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16			HIBA (2-Hydroxyisobutyric Acid)	79	ug/L	U	VGC-13	79		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	7439-89-6	340	Iron Total	55000	ug/L		6010C	22.0	300	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	SW486	486	iso-Hexanoic Acid	790	ug/L	U	VGC-13	790		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	SW488	488	iso-Pentanoic Acid	280	ug/L	U	VGC-13	280		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	50-21-5	415	Lactic Acid	110	ug/L	U	VGC-13	110	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	7439-96-5	342	Manganese Total	444	ug/L		6010C	1.10	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	7439-97-6	132	Mercury Total	0.170	ug/L	U	7470A	0.170	0.2	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-16	74-82-8	333	Methane	19300	ug/L	D	RSK-175	180	NE	250	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-16	75-09-2	140	Methylene chloride	0.14	ug/L	U	8260B	0.14	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	7440-02-0	152	Nickel Total	2.47	ug/L	J	6010C	1.80	50	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	SW303	303	Nitrate as N	130	ug/L	J	353.2	25	10000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-16	SW487	487	Pentanoic Acid	240	ug/L	U	VGC-13	240		1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	79-09-4	417	Propionic Acid	170	ug/L	U	VGC-13	170	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	127-17-3	414	Pyruvic Acid	67	ug/L	U	VGC-13	67	NE	1	7/27/2011	8/1/2011	8/2/2011	442
33-01	3301-MW-16	7782-49-2	183	Selenium Total	2.14	ug/L	J	6020A	0.830	10	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-16	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	14808-79-8	315	Sulfate as SO4	2200	ug/L	JB	300.0	20	250000	1	7/27/2011	8/8/2011	8/8/2011	591
33-01	3301-MW-16	18496-25-8	187	Sulfide	10	ug/L	U	SM18 4500-S D	10	1000	1	7/27/2011	7/29/2011	7/29/2011	591
33-01	3301-MW-16	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/27/2011	7/29/2011	8/10/2011	591
33-01	3301-MW-16	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	SW337	337	Total Alkalinity as CaCO3	220000	ug/L	D	310.2	24000	NE	2	7/27/2011	8/3/2011	8/7/2011	591
33-01	3301-MW-16	SW311	311	Total Dissolved Solids	290000	ug/L		SM 2540C	10000	NE	1	7/27/2011	8/2/2011	8/2/2011	591
33-01	3301-MW-16	E-10195	357	Total Organic Carbon	12000	ug/L		SM18 5310B	280	NE	1	7/27/2011	8/1/2011	8/1/2011	442
33-01	3301-MW-16	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/27/2011	8/4/2011	8/5/2011	591
33-01	3301-MW-16	7440-66-6	213	Zinc Total	3.80	ug/L	U	6010C	3.80	10	1	7/27/2011	8/1/2011	8/2/2011	591
33-01	3301-MW-16			Hydrogen	4.0	nM		AM20GAX	0.25		1	7/27/2011		8/14/2011	
33-01	3301-Equipment Blank	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	75-34-3	75	1,1-Dichloroethane	0.080	ug/L	U	8260B	0.080	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7440-36-0	13	Antimony Total	0.220	ug/L	U	6020A	0.220	6	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-Equipment Blank	7440-38-2	14	Arsenic Total	2.80	ug/L	U	6010C	2.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	7440-39-3	15	Barium Total	1.00	ug/L	U	6010C	1.00	100	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	71-43-2	16	Benzene	0.68	ug/L	U	8260B	0.68	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7440-41-7	23	Beryllium Total	0.100	ug/L	U	6010C	0.100	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7440-43-9	34	Cadmium Total	0.360	ug/L	U	6010C	0.360	1	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	108-90-7	39	Chlorobenzene	0.74	ug/L	U	8260B	0.74	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	75-00-3	41	Chloroethane	0.75	ug/L	U	8260B	0.75	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7440-47-3	51	Chromium Total	1.00	ug/L	U	6010C	1.00	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	156-59-2	78	cis-1,2-Dichloroethene	0.72	ug/L	U	8260B	0.72	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7440-48-4	53	Cobalt Total	1.10	ug/L	U	6010C	1.10	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	7440-50-8	54	Copper Total	2.16	ug/L	J	6010C	1.60	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/28/2011	8/5/2011	8/5/2011	591

Table 1 (Submitted Electronically)
Groundwater Elevation Data, Field Parameters, and
Laboratory Analysis Summary
Edgecombe County Landfill
July 27-28, 2011
S&ME Project No. 1054-07-238D

Facility Permit	Well ID	CAS Number	SWS ID	Parameter	Result	Units	Qualifier	Method	MDL	SWSL	Dilution Factor	Collection Date	Extraction Date	Analysis Date	NC Laboratory Certification Number
33-01	3301-Equipment Blank	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7439-89-6	340	Iron Total	22.0	ug/L	U	6010C	22.0	300	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	7439-92-1	131	Lead Total	1.90	ug/L	U	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	7439-96-5	342	Manganese Total	1.58	ug/L	J	6010C	1.10	50	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	75-09-2	140	Methylene chloride	0.44	ug/L	J	8260B	0.14	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7440-02-0	152	Nickel Total	1.80	ug/L	U	6010C	1.80	50	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	7782-49-2	183	Selenium Total	0.830	ug/L	U	6020A	0.830	10	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-Equipment Blank	7440-22-4	184	Silver Total	1.90	ug/L	U	6010C	1.90	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7440-28-0	194	Thallium Total	0.110	ug/L	U	6020A	0.110	5.5	1	7/28/2011	8/1/2011	8/8/2011	591
33-01	3301-Equipment Blank	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7440-62-2	209	Vanadium Total	1.40	ug/L	U	6010C	1.40	25	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Equipment Blank	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Equipment Blank	7440-66-6	213	Zinc Total	3.80	ug/L	U	6010C	3.80	10	1	7/28/2011	8/1/2011	8/2/2011	591
33-01	3301-Trip Blank	630-20-6	190	1,1,1,2-Tetrachloroethane	0.90	ug/L	U	8260B	0.90	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	71-55-6	200	1,1,1-Trichloroethane	0.65	ug/L	U	8260B	0.65	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	79-34-5	191	1,1,2,2-Tetrachloroethane	0.75	ug/L	U	8260B	0.75	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	79-00-5	202	1,1,2-Trichloroethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	75-34-3	75	1,1-Dichloroethane	0.080	ug/L	U	8260B	0.080	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	75-35-4	77	1,1-Dichloroethene	0.60	ug/L	U	8260B	0.60	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	96-18-4	206	1,2,3-Trichloropropane	0.72	ug/L	U	8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	96-12-8	67	1,2-Dibromo-3-chloropropane	0.48	ug/L	U	8260B	0.48	13	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	106-93-4	68	1,2-Dibromoethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	95-50-1	69	1,2-Dichlorobenzene	0.11	ug/L	U	8260B	0.11	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	107-06-2	76	1,2-Dichloroethane	0.47	ug/L	U	8260B	0.47	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	78-87-5	82	1,2-Dichloropropane	0.59	ug/L	U	8260B	0.59	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	106-46-7	71	1,4-Dichlorobenzene	0.79	ug/L	U	8260B	0.79	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	78-93-3	141	2-Butanone	1.3	ug/L	U	8260B	1.3	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	591-78-6	124	2-Hexanone	0.88	ug/L	U	8260B	0.88	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	108-10-1	147	4-Methyl-2-pentanone	1.1	ug/L	U	8260B	1.1	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	67-64-1	3	Acetone	1.2	ug/L	U	8260B	1.2	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	107-13-1	8	Acrylonitrile	3.5	ug/L	U	8260B	3.5	200	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	71-43-2	16	Benzene	0.68	ug/L	U	8260B	0.68	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	74-97-5	28	Bromochloromethane	0.87	ug/L	U	8260B	0.87	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	75-27-4	29	Bromodichloromethane	0.75	ug/L	U	8260B	0.75	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	75-25-2	30	Bromoform	0.68	ug/L	U	8260B	0.68	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	74-83-9	136	Bromomethane	0.58	ug/L	U	8260B	0.58	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	75-15-0	35	Carbon disulfide	1.5	ug/L	U	8260B	1.5	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	56-23-5	36	Carbon tetrachloride	0.69	ug/L	U	8260B	0.69	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	108-90-7	39	Chlorobenzene	0.74	ug/L	U	8260B	0.74	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	75-00-3	41	Chloroethane	0.75	ug/L	U	8260B	0.75	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	67-66-3	44	Chloroform	0.70	ug/L	U	8260B	0.70	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	74-87-3	137	Chloromethane	0.55	ug/L	U	8260B	0.55	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	156-59-2	78	cis-1,2-Dichloroethene	0.72	ug/L	U	8260B	0.72	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	10061-01-5	86	cis-1,3-Dichloropropene	0.075	ug/L	U	8260B	0.075	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	124-48-1	66	Dibromochloromethane	0.63	ug/L	U	8260B	0.63	3	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	74-95-3	139	Dibromomethane	0.90	ug/L	U	8260B	0.90	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	100-41-4	110	Ethylbenzene	0.62	ug/L	U	8260B	0.62	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	74-88-4	142	Iodomethane	1.7	ug/L	U	8260B	1.7	10	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	75-09-2	140	Methylene chloride	0.44	ug/L	J	8260B	0.14	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	100-42-5	186	Styrene	0.053	ug/L	U	8260B	0.053	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	127-18-4	192	Tetrachloroethene	0.73	ug/L	U	8260B	0.73	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	108-88-3	196	Toluene	0.85	ug/L	U	8260B	0.85	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	156-60-5	79	trans-1,2-Dichloroethene	0.12	ug/L	U	8260B	0.12	5	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	10061-02-6	87	trans-1,3-Dichloropropene	0.50	ug/L	U	8260B	0.50	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	110-57-6	73	trans-1,4-Dichloro-2-butene	0.70	ug/L	U	8260B	0.70	100	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	79-01-6	201	Trichloroethene	0.72	ug/L	U	8260B	0.72	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	75-69-4	203	Trichlorofluoromethane	0.66	ug/L	U	8260B	0.66	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	108-05-4	210	Vinyl acetate	0.95	ug/L	U	8260B	0.95	50	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	75-01-4	211	Vinyl chloride	0.60	ug/L	U	8260B	0.60	1	1	7/28/2011	8/5/2011	8/5/2011	591
33-01	3301-Trip Blank	1330-20-7	346	Xylenes (Total)	2.1	ug/L	U	8260B	2.1	5	1	7/28/2011	8/5/2011	8/5/2011	591

NOTES:
NM = Not Measured
U = Compound detected below laboratory method detection limit.
J = Analyte detected, but below the laboratory reporting limit therefore the result is an estimated concentration.
D = The sample was analyzed at dilution.
ft. = feet
TOC = Top of Casing; TOC elevations from site survey.
AMSL = Above Mean Sea Level
(A or B) = Replacement Well
mS/cm = microsiemens/centimeter
ºC = Degrees Celcius
NTUs = Nephelometric Turbidity Units
nM = Nanomolar
mg/L = Milligrams per Liter
ug/L = micrograms per liter
MDL = Method Detection Limit
SWSL = Solid Waste Section Limit. (ref. NC DENR-DWM, Solid Waste Section February 23, 2007 memorandum)
Blank entries indicate not applicable.

Table 2
Groundwater Quality Summary
Edgecombe County Landfill
July 27-28, 2011 Sampling Event
S&ME Project No. 1054-07-238D

APPENDIX I VOCs EPA METHOD 8260B	UNITS	2L STANDARD	BACKGROUND MONITOR WELLS			COMPLIANCE MONITOR WELLS								QUALITY CONTROL			SWSL	DAF Computation
			MW-3B	MW-4	MW-9	MW-5	MW-6	MW-7A	MW-12	MW-13	MW-14	MW-15	MW-16	DUPLICATE (MW-5)	EQUIPMENT BLANK	TRIP BLANK		
Benzene	µg/l	1	<0.68	<0.68	<0.68	<6.8D	<0.68	**1.5**	**4.1**	**1.2**	<0.68	<0.68	<0.68	<6.8D	<0.68	<0.68	1	NA
Chlorobenzene	µg/l	50	<0.74	<0.74	<0.74	**15.0D**	<0.74	**2.1J**	**5.1**	**10**	<0.74	**2.0J**	<0.74	**15.0D**	<0.74	<0.74	3	NA
Chloroethane	µg/l	3,000	<0.75	<0.75	<0.75	<7.5D	<0.75	**2.0J**	**1.8J**	**0.76J**	<0.75	<0.75	<0.75	<7.5D	<0.75	<0.75	10	NA
1,4-Dichlorobenzene	µg/l	6	<0.79	<0.79	<0.79	<7.9D	<0.79	<0.79	**7.2**	**2.2**	<0.79	<0.79	<0.79	**8.8JD**	<0.79	<0.79	1	NA
1,1-Dichloroethane	µg/l	6	<0.080	<0.080	<0.080	**9.0JD**	**0.62J**	<0.080	**1.5J**	**0.74J**	<0.080	**0.88J**	<0.080	**9.1JD**	<0.080	<0.080	5	NA
cis-1,2-Dichloroethene	µg/l	70	<0.72	<0.72	<0.72	**620D**	**1.2J**	<0.72	**0.83J**	**14.0**	<0.72	**21.0**	<0.72	**650D**	<0.72	<0.72	5	NA
trans-1,2-Dichloroethene	µg/l	100	<0.12	<0.12	<0.12	<1.2D	<0.12	<0.12	<0.12	<0.12	<0.12	**0.62J**	<0.12	**4.9JD**	<0.12	<0.12	5	NA
1,2-Dichloropropane	µg/l	0.6	<0.59	<0.59	<0.59	<5.9D	<0.59	<0.59	<0.59	<0.59	<0.59	**2.0**	<0.59	<5.9D	<0.59	<0.59	1	NA
Methylene chloride	µg/l	5	<0.14	<0.14	<0.14	<1.4D	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<1.4D	**0.44J**	**0.44J**	1	NA
Toluene	µg/l	600	<0.85	<0.85	<0.85	<8.5D	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	**8.7JD**	<0.85	<0.85	1	NA
Trichloroethene	µg/l	3	<0.72	<0.72	<0.72	<7.2D	<0.72	<0.72	<0.72	**1.0**	<0.72	<0.72	<0.72	<7.2D	<0.72	<0.72	1	NA
Vinyl chloride	µg/l	0.03	<0.60	<0.60	<0.60	**32.0D**	<0.60	<0.60	<0.60	**2.2**	<0.60	**3.7**	<0.60	**25.0D**	<0.60	<0.60	1	NA

APP. I INORGANIC EPA METHOD 6010B	UNITS	2L STANDARD	BACKGROUND MONITOR			COMPLIANCE MONITOR WELLS								QUALITY CONTROL			SWSL	DAF Computation
			MW-3B	MW-4	MW-9	MW-5	MW-6	MW-7A	MW-12	MW-13	MW-14	MW-15	MW-16	DUPLICATE (MW-5)	EQUIPMENT BLANK	TRIP BLANK		
Antimony (Total)	µg/l	1*	<0.22	**1.39J**	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	NS	6	NA
Antimony (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	<0.22	NS	NS	NS	NS	NS	NS		
Arsenic (Total)	µg/l	10	<2.80	<2.80	<2.80	**21.2**	<2.80	<2.80	<2.80	<2.80	<2.80	**9.98J**	<2.80	**24.7**	<2.80	NS	10	200
Arsenic (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	**3.74JB**	NS	NS	NS	NS	NS	NS		
Barium (Total)	µg/l	700	**112**	**56.7J**	**146**	**230**	**302**	**215**	**322**	**202**	**301**	**429**	**337**	**227**	<1.00	NS	100	118
Barium (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	**161**	NS	NS	NS	NS	NS	NS		
Beryllium (Total)	µg/l	4*	**1.68**	<0.10	<0.10	<0.10	<0.10	<0.10	**0.528J**	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NS	1	17
Beryllium (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	<0.10	NS	NS	NS	NS	NS	NS		
Cadmium (Total)	µg/l	2	**0.544J**	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	NS	1	20
Cadmium (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	<0.36	NS	NS	NS	NS	NS	NS		
Chromium (Total)	µg/l	10	<1.00	<1.00	<1.00	**8.14J**	**1.22J**	<1.00	**1.21J**	**10.3**	**1.20J**	**4.29J**	<1.00	**7.61**	<1.00	NS	10	640
Chromium (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	**11.0**	NS	NS	NS	NS	NS	NS		
Cobalt (Total)	µg/l	1*	**25.4**	<1.10	<1.10	**230**	**2.88J**	<1.10	**15.1**	**1,540**	<1.10	**14.1**	<1.10	**227**	<1.10	NS	10	410
Cobalt (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	**1,460**	NS	NS	NS	NS	NS	NS		
Copper (Total)	µg/l	1,000	<1.60	**3.09J**	<1.60	<1.60	<1.60	**1.61J**	<1.60	<1.60	<1.60	<1.60	<1.60	<1.60	**2.16J**	NS	10	210
Copper (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	<1.60	NS	NS	NS	NS	NS	NS		
Lead (Total)	µg/l	15	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90	**1.91J**	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90	NS	10	360
Lead (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	<1.90	NS	NS	NS	NS	NS	NS		
Nickel (Total)	µg/l	100	**27.6J**	<1.80	<1.80	**55.4**	**2.31J**	<1.80	**21.6J**	**307**	<1.80	**10.8J**	**2.47J**	**54.1**	<1.80	NS	50	230
Nickel (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	**292**	NS	NS	NS	NS	NS	NS		
Selenium (Total)	µg/l	20	**1.37J**	<0.83	<0.83	<0.83	**4.61J**	**2.53J**	**15.9**	**11.0**	**1.04J**	**1.35J**	**2.14J**	**1.64J**	<0.83	NS	10	80
Selenium (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	**8.64J**	NS	NS	NS	NS	NS	NS		
Silver (Total)	µg/l	20	<1.90	<1.90	<1.90	**2.19J**	<1.90	<1.90	<1.90	**5.61J**	<1.90	**1.94J**	<1.90	<1.90	<1.90	NS	10	NA
Silver (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	**7.28J**	NS	NS	NS	NS	NS	NS		
Thallium (Total)	µg/l	0.28*	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	**0.213J**	**1.27J**	<0.11	<0.11	<0.11	<0.11	<0.11	NS	5.5	5
Thallium (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	**1.25J**	NS	NS	NS	NS	NS	NS		
Vanadium (Total)	µg/l	0.3*	<1.40	**1.65J**	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	NS	25	670
Vanadium (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	<1.40	NS	NS	NS	NS	NS	NS		
Zinc (Total)	µg/l	1,000	**54.1**	<3.80	<3.80	**84.5**	<3.80	**6.63J**	**173**	**170**	<3.80	**4.98J**	<3.80	**83.5**	<3.80	NS	10	430
Zinc (Dissolved)	µg/l		NS	NS	NS	NS	NS	NS	NS	**154**	NS	NS	NS	NS	NS	NS		

NOTES:
Samples were collected on July 27-28, 2011 and analyzed by Environmental Conservation Laboratories, Inc. (ENCO). Detection limits are shown on laboratory reports.
Values which are **BOLD** indicate levels above laboratory detection limits.
Values which are **BOLD** and shaded indicate levels above their respective NCDENR 2L or GWPST.
DAF Comuptation = Dilution/Attenuation Factor Computation (ref. S&ME Alternate Source Demonstration, June 2008).
2L STANDARD = North Carolina groundwater standards as promulgated by 15A North Carolina Administrative Code, Subchapter 2L.
SWSL = Solid Waste Section Limit. (ref. NCDENR-DWM, Solid Waste Section February 23, 2007 memorandum)
* Indicates there is currently no 2L Standard. The target analyte was compared to the Solid Waste Groundwater Protection Standard (GWPST).
J = Analyte detected, but below the laboratory reporting limit therefore the result is an estimated concentration.
D = The sample was analyzed at dilution.
B = The analyte was detected in the associated method blank.
NS = Not Sampled for this parameter.
µg/L = Micrograms Per Liter
VOCs = Volatile Organic Compounds
Duplicate sample collected from monitor well MW-5.
Appendix I compounds not shown were not detected during this sampling event. See **Appendix I** of the report for laboratory reports.

Table 3
Geochemical / MNA Constituent Summary
Edgecombe County Landfill
July 27-28, 2011 Sampling Event
S&ME Project No. 1054-07-238D

MONITORED NATURAL ATTENUATION PARAMETERS*	UNITS	BACKGROUND MONITOR WELLS			COMPLIANCE MONITOR WELLS							
		MW-3B	MW-4	MW-9	MW-5	MW-6	MW-7A	MW-12	MW-13	MW-14	MW-15	MW-16
ph**	Std	4.13	5.83	6.98	6.24	5.95	6.07	4.28	5.78	6.72	6.30	6.03
Temperature**	^{o}C	19.80	26.10	21.87	20.88	22.01	21.11	20.58	20.80	23.32	20.92	20.94
Specific Conductance**	mS/cm	0.214	0.297	0.213	1.051	0.569	0.800	0.836	0.904	0.461	0.735	0.575
Oxygen Reduction Potential ORP**	mV	328.8	244.4	113.5	98.4	20.6	62.8	219.3	10.9	64.4	84.8	61.0
Dissolved Oxygen**	mg/L	1.06	4.08	0.82	1.79	1.17	1.41	1.18	0.62	1.19	1.07	0.85
Chloride	mg/L	32B	6.2B	3.2JB	12B	94B	34B	220BD	120BD	13B	14B	23B
Sulfate	mg/L	40J	25JB	2.9JB	44JB	6.9JB	2.2JB	50JBD	35JBD	30JB	13JB	2.2JB
Alkalinity	mg/L	<12.0	56	97	400D	150	170D	<12.0	230D	180	340D	220D
Biochemical Oxygen Demand (BOD)	mg/L	<2.0	<2.0	<2.0	5.8	<2.0	<6.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical Oxygen Demand (COD)	mg/L	<10.0	38	<10.0	100	32	45	53	96	17	32	53
TOC (Total Organic Carbon)	mg/L	0.98J	9.30	0.40J	5.60	5.70	4.60	11.00	7.90	3.00	4.20	12.00
Nitrate as N	mg/L	0.18J	7.8J	0.066J	0.170J	0.13J	0.076J	0.078J	0.056J	0.086J	0.093J	0.13J
Sulfide	mg/L	<0.01	<0.01	<0.01	<0.01	0.015J	<0.01	<0.01	<0.01	0.014J	<0.01	<0.01
Total Dissolved Solids (TDS)	mg/L	160	210	130	580	450	340	540	560	250	470	290
Iron	mg/L	3.79	0.243J	6.15	169	22.90	175	11.80	42.9	5.06	28.70	55
Manganese	mg/L	0.0881	0.00781J	0.136	34.5D	0.233	0.331	0.105	38.7D	0.147	8.40	0.444
Carbon Dioxide	mg/L	69.4	164D	28.2	844D	227D	677D	1,310D	816D	101	269D	561D
Ethane	mg/L	<0.001	<0.001	<0.001	0.00216	<0.001	<0.001	<0.001	0.00186J	<0.001	0.00168J	<0.001
Ethene	mg/L	<0.0023	<0.0023	<0.0023	0.00597	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023
Methane	mg/L	0.00188	0.0131	0.00487	0.689D	2.35D	7.98D	0.26D	1.27D	0.392D	1.60D	19.30D
Lactic Acid (Volatile Fatty Acid)***	mg/L	0.27J	<0.110	0.170J	0.410J	<0.110	<0.110	<0.110	<0.110	0.130J	0.290J	<0.110
Propionic Acid (Volatile Fatty Acid)***	mg/L	<0.170	<0.170	<0.170	<0.170	<0.170	<0.170	12.00	5.5	<0.170	<0.170	<0.170
Hydrogen****	nM	1.7	2.3	2.6	2.8	2.2	2.0	1.3	2.3	2.6	1.2	4.0

NOTES:
Samples were collected on July 27-28, 2011 and analyzed by Environmental Conservation Laboratories, Inc. (ENCO) or Microseeps, Inc. (Hydrogen Only). Detection limits are shown on laboratory reports.
Values which are **BOLD** indicate levels above laboratory detection limits.
* Several methods were used in the laboratory analysis for the geochemical parameters. These methods are listed in the laboratory report in **Appendix I** of the report.
** Parameter analyzed in the field by S&ME personnel. All other parameters analyzed by North Carolina certified laboratories (see **Appendix I** of this report).
***Groundwater samples were analyzed for several additional volatile fatty acids. No additional volatile fatty acids were detected in the groundwater samples.
****Groundwater samples were analyzed outside the recommended hold time of 14 days from collection for hydrogen.
J = Analyte detected, but below the laboratory reporting limit therefore the result is an estimated concentration.
D = The sample was analyzed at dilution.
B = The analyte was detected in the associated method blank.
Std = Standard Units
^{o}C = Degrees Celsius
mS/cm = Microsiemens per Centimeter
mV = Millivolt
mg/L = Millograms Per Liter
nM = Nanomolar

Table 4
Non-Detected Results Used to Select Statistical Tests
Laboratory Analytical Data from September 1994 to July 2011
Edgecombe County Landfill
S&ME Project No. 1054-07-238D

Parameters	Number of Detected Values	Total Number of Values	Number of NDs	Percent NDs	Selected Test
Appendix I Volatile Organic Compounds					
Benzene	47	255	208	82%	WRST
Chlorobenzene	58	255	197	77%	WRST
Chloroethane	34	255	221	87%	WRST
1,4-Dichlorobenzene	42	255	213	84%	WRST
1,1-Dichloroethane	63	255	192	75%	WRST
cis-1,2-Dichloroethene	67	255	188	74%	WRST
trans-1,2-Dichloroethene	27	255	228	89%	WRST
1,2-Dichloropropane	9	255	246	96%	WRST
Methylene Chloride	5	255	250	98%	WRST
Tetrachloroethene	21	255	234	92%	WRST
Toluene	9	255	246	96%	WRST
Trichloroethene	36	255	219	86%	WRST
Vinyl chloride	49	255	206	81%	WRST
Appendix I Inorganic Compounds					
Antimony	13	203	190	94%	WRST
Barium	65	216	151	70%	WRST
Cobalt	106	253	147	58%	WRST
Nickel	49	216	167	77%	WRST
Silver	16	216	200	93%	WRST

Notes:
1. NDs = Non-detected Results
2. WRST = Wilcoxon Rank Sum Test

Table 5
Summary of Statistical Analyses
Wilcoxon Rank Sum Test (Interwell Comparisons)
Laboratory Analytical Data January 1994 to July 2011
Edgecombe County Landfill
S&ME Project No. 1054-07-238D

Parameters	Evidence of Release MW-5	Evidence of Release MW-6	Evidence of Release MW-7A	Evidence of Release MW-12	Evidence of Release MW-13	Evidence of Release MW-14	Evidence of Release MW-15	Evidence of Release MW-16
Appendix I Volatile Organic Compounds								
Benzene	**YES**	no	**YES**	**YES**	**YES**	no	**YES**	no
Chlorobenzene	**YES**	no	**YES**	**YES**	**YES**	no	**YES**	no
Chloroethane	**YES**	no	**YES**	**YES**	**YES**	no	**YES**	no
1,4-Dichlorobenzene	**YES**	no	**YES**	**YES**	**YES**	no	no	no
1,1-Dichloroethane	**YES**	**YES**	no	**YES**	**YES**	no	**YES**	no
cis-1,2-Dichloroethene	**YES**	**YES**	**YES**	**YES**	**YES**	no	**YES**	no
trans-1,2-Dichloroethene	**YES**	no	no	no	**YES**	no	**YES**	no
1,2-Dichloropropane	**YES**	no	no	no	no	no	**YES**	no
Methylene chloride	**YES**	no	no	no	no	no	no	no
Tetrachloroethene	**YES**	no	no	no	no	no	no	no
Toluene	no	no	no	no	no	no	no	no
Trichloroethene	**YES**	no	no	no	**YES**	no	**YES**	no
Vinyl chloride	**YES**	no	**YES**	**YES**	**YES**	no	**YES**	no
Appendix I Inorganic Compounds								
Antimony	no	no	no	no	no	no	no	no
Barium	no	no	no	**YES**	**YES**	**YES**	**YES**	**YES**
Cobalt	**YES**	no	no	**YES**	**YES**	no	**YES**	no
Nickel	**YES**	no	no	**YES**	**YES**	no	**YES**	**YES**
Silver	**YES**	no	**YES**	no	**YES**	no	**YES**	no

Notes:

1. Tests compared at the 1% significance level.
2. Statistcal analysis of data was performed using the ChemStat® statistical software by Starpoint Software.

Table 6
Two-Way Test of Proportions
Non-Parametric Comparison of 95% Confidence Level to Applicable Standard
September 1994 to July 2011
Edgecombe County Landfill
S&ME Project No. 1054-07-238D

Parameters	Applicable Groundwater Quality Standard (µg/l)	Significant Evidence of Contamination at the 95% CL
Appendix I Volatile Organic Compounds		
Benzene	**1**	**YES**
Chlorobenzene	50	no
Chloroethane	3,000	no
1,4-Dichlorobenzene	**6**	**YES**
1,1-Dichloroethane	**6**	**YES**
cis-1,2-Dichloroethene	**70**	**YES**
trans-1,2-Dichloroethene	100	no
1,2-Dichloropropane	0.6	no
Methylene chloride	5	no
Tetrachloroethene	0.7	no
Toluene	600	no
Trichloroethene	**3**	**YES**
Vinyl chloride	**0.03**	**YES**
Appendix I Inorganic Compounds		
Antimony	1*	no
Barium	700	no
Cobalt	1*	no
Nickel	**100**	**YES**
Silver	20	no

Notes:
1. CL = Confidence Level
2. Statistcal analysis of data was performed using the ChemStat® statistical software by Starpoint Software.
3. 2L STANDARD = North Carolina groundwater standards as promulgated by 15A North Carolina Administrative Code, Subchapter 2L.
4. *Indicates there is currently no 2L Standard. The target analyte was compared to the Solid Waste Groundwater Protection Standard (GWPST).

Table 7
Trend Analyses (Mann-Kendall Trend Analyses / Sen's Slope Analyses)
for Significant Findings 1994 thru July 2011
Edgecombe County Landfill
S&ME Project No. 1054-07-238D

Parameters	**MW-5**	**MW-6**	**MW-7A**	**MW-12**	**MW-13**	**MW-14**	**MW-15**	**MW-16**
Appendix I Volatile Organic Compounds								
Benzene	**No Trend / Downward Trend**	NA	No Trend / No Trend	No Trend / No Trend	No Trend / No Trend	NA	No Trend / No Trend	NA
1,4-Dichlorobenzene	No Trend / No Trend	NA	No Trend / No Trend	No Trend / No Trend	No Trend / No Trend	NA	NA	NA
1,1-Dichloroethane	**No Trend / Downward Trend**	No Trend / No Trend	NA	**No Trend / Downward Trend**	No Trend / No Trend	NA	**No Trend / Downward Trend**	NA
cis-1,2-Dichloroethene	**Upward Trend / Upward Trend**	No Trend / No Trend	No Trend / No Trend	No Trend / No Trend	No Trend / No Trend	NA	**No Trend / Downward Trend**	NA
Trichloroethene	**No Trend / Downward Trend**	NA	NA	NA	No Trend / No Trend	NA	No Trend / No Trend	NA
Vinyl chloride	No Trend / No Trend	NA	No Trend / No Trend	No Trend / No Trend	No Trend / No Trend	NA	No Trend / No Trend	NA
Appendix I Inorganic Compounds								
Cobalt	**Upward Trend / Upward Trend**	NA	NA	No Trend / No Trend	No Trend / No Trend	NA	**Upward Trend / Upward Trend**	NA
Nickel	**No Trend / Downward Trend**	NA	NA	NA	--	NA	NA	NA

Notes:
1. NA = not analyzed b/c 95%UPL did not exceed applicable groundwater standard.
2. -- = insufficient number of data points to run analyses.
3. Data analysis was performed using the ChemStat® statistical software by Starpoint Software.

APPENDIX I

(REPORT OF LABORATORY ANALYSES)

Microseeps, Inc
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

August 19, 2011

Michelle Logut
S & ME
3118 Spring Forest Road
Raleigh, NC 27616

RE: **1054-07-238D EDGECOMBE COUNTY**

Microseeps Workorder: 2105

Dear Michelle Logut:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, August 02, 2011. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heather Hauser 08/19/2011
hhauser@microseeps.com

Enclosures

Total Number of Pages 17

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Microseeps, Inc.

3004.1.0.0

Microseeps, Inc
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	NELAP: State of Florida, Department of Health, Bureau of Laboratories
Accreditation ID:	E87832
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: State of Louisiana, Department of Environmental Quality
Accreditation ID:	04104
Scope:	Solid and Chemical Materials; Non-Potable Water
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, Microseeps is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

CERTIFICATE OF ANALYSIS

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Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID	Sample ID	Matrix	Date Collected	Date Received
21050001	MW-4	Bubble Strip	7/27/2011 09:58	8/2/2011 13:34
21050002	MW-3B	Bubble Strip	7/27/2011 10:52	8/2/2011 13:34
21050003	MW-9	Bubble Strip	7/27/2011 12:01	8/2/2011 13:34
21050004	MW-14	Bubble Strip	7/27/2011 14:14	8/2/2011 13:34
21050005	MW-6	Bubble Strip	7/27/2011 15:03	8/2/2011 13:34
21050006	MW-16	Bubble Strip	7/27/2011 16:02	8/2/2011 13:34
21050007	MW-7A	Bubble Strip	7/27/2011 16:55	8/2/2011 13:34
21050008	MW-15	Bubble Strip	7/28/2011 09:27	8/2/2011 13:34
21050009	MW-12	Bubble Strip	7/28/2011 10:25	8/2/2011 13:34
21050010	MW-13	Bubble Strip	7/28/2011 11:23	8/2/2011 13:34
21050011	MW-5	Bubble Strip	7/28/2011 13:30	8/2/2011 13:34

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PROJECT SUMMARY

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Workorder Comments

Samples 2105 (0001-0011) were analyzed outside the recommended hold time of 14 days from collection, for the hydrogen.

Because the bubble samples were collected using Microseeps procedure SM9; aqueous headspace equilibration technique, any effect to the vapor phase component concentrations due to the delay of the analysis is expected to be minimal.

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050001** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-4** Date Collected: 7/27/2011 09:58

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	2.3	nM	0.60	0.25	1			8/14/2011 14:38	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050002** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-3B** Date Collected: 7/27/2011 10:52

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	1.7	nM	0.60	0.25	1			8/14/2011 14:51	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050003** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-9** Date Collected: 7/27/2011 12:01

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	2.6	nM	0.60	0.25	1			8/14/2011 15:51	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050004** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-14** Date Collected: 7/27/2011 14:14

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	2.6	nM	0.60	0.25	1			8/14/2011 16:04	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050005** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-6** Date Collected: 7/27/2011 15:03

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	2.2	nM	0.60	0.25	1			8/14/2011 16:16	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050006** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-16** Date Collected: 7/27/2011 16:02

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	4.0	nM	0.60	0.25	1			8/14/2011 16:29	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050007** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-7A** Date Collected: 7/27/2011 16:55

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	2.0	nM	0.60	0.25	1			8/14/2011 16:41	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050008** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-15** Date Collected: 7/28/2011 09:27

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	1.2	nM	0.60	0.25	1			8/14/2011 16:57	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050009** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-12** Date Collected: 7/28/2011 10:25

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	1.3	nM	0.60	0.25	1			8/14/2011 17:10	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050010** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-13** Date Collected: 7/28/2011 11:23

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	2.3	nM	0.60	0.25	1			8/14/2011 17:27	SL		

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ANALYTICAL RESULTS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

Lab ID: **21050011** Date Received: 8/2/2011 13:34 Matrix: Bubble Strip

Sample ID: **MW-5** Date Collected: 7/28/2011 13:30

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	2.8	nM	0.60	0.25	1			8/16/2011 11:43	GT		

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 2105 1054-07-238D EDGECOMBE COUNTY

PARAMETER QUALIFIERS

U	Indicates the compound was analyzed for, but not detected.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (RDL).

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Microseeps Lab. Proj. # 2105

CHAIN - OF - CUSTODY RECORD

Microseeps COC cont. #

Phone: (412) 826-5245 | Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 | Fax No. : (412) 826-3433

Company : S&ME, INC.

Co. Address : 3201 SPRING FOREST RD, RALEIGH NC 27616

Phone # : 919-872-2660 Fax # : 919-876-3958

Proj. Manager : MICHELLE L. LOGUT

Proj. Name/Number : EDGECOMBE COUNTY LANDFILL 1054-07-238D

Sampler's signature : Michelle L. Logut

Cooler Temp.

Results to : MLOGUT@SMEINC.COM

Invoice to : MLOGUT@SMEINC.COM

Parameters Requested

	Sample ID	Sample Description	Sample Type Water	Vapor	Solid	Date	Time	# bottles	HYDROGEN										Remarks :
01	MW-4	VAPOR - BUBBLE SAMPLER		X		7/27/11	09:58	1	X										
02	MW-3B			X			10:52	1	X										
03	MW-9			X			12:01	1	X										
04	MW-14			X			14:14	1	X										
05	MW-6			X			15:03	1	X										
06	MW-16			X			16:02	1	X										
07	MW-7A			X			16:55	1	X										
08	MW-15			X		7/28/11	09:27	1	X										
09	MW-12			X			10:25	1	X										
10	MW-13			X			11:23	1	X										
11	MW-5			X			13:30	1	X										

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Michelle L. Logut	S&ME, INC.	7/29/11	8:00	C Washlaski	Microseeps	8/2/11	1329
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

Environmental Conservation Laboratories, Inc.
102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515
www.encolabs.com

Monday, August 22, 2011

S&ME, Inc. (SM001)

Attn: Michelle Logut

3201 Spring Forest Road

Raleigh, NC 27616

RE: Laboratory Results for
Project Number: 1054-07-238D, Project Name/Desc: Edgecombe County Landfill
ENCO Workorder: C109019

Dear Michelle Logut,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, July 28, 2011.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 137.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 3301-MW3B **Lab ID: C109019-01** **Sampled: 07/27/11 10:55** **Received: 07/28/11 10:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/24/11		08/08/11	07:01	8/8/2011 20:38
EPA 310.2	08/10/11		08/03/11	10:47	8/7/2011 18:21
EPA 353.2	04/21/14		08/08/11	12:28	8/8/2011 14:13
EPA 6010C	01/23/12		08/01/11	09:58	8/2/2011 12:02
EPA 6020A	01/23/12		07/29/11	10:07	8/10/2011 17:12
EPA 7470A	08/24/11		08/02/11	09:53	8/2/2011 15:46
EPA 8260B	08/10/11		08/04/11	11:14	8/5/2011 04:25
RSK-175	08/03/11		08/01/11	13:24	8/1/2011 14:42
SM 2540C	08/03/11		08/02/11	13:19	8/2/2011 13:19
SM 5210B	07/29/11	10:55	07/28/11	13:15	7/28/2011 13:15
SM 5220D	08/24/11		08/02/11	11:02	8/2/2011 16:58
SM18 4500-S D	08/03/11		07/29/11	12:40	7/29/2011 13:30
SM18 5310B	08/24/11		08/01/11	09:15	8/1/2011 17:59
VGC-13	08/10/11		08/01/11	13:00	8/2/2011 00:52

Client ID: 3301-MW4 **Lab ID: C109019-03** **Sampled: 07/27/11 10:00** **Received: 07/28/11 10:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/24/11		08/08/11	06:59	8/8/2011 12:23
EPA 310.2	08/10/11		08/03/11	10:47	8/7/2011 18:23
EPA 353.2	04/21/14		08/08/11	12:28	8/8/2011 14:13
EPA 6010C	01/23/12		08/01/11	09:58	8/2/2011 12:22
EPA 6020A	01/23/12		07/29/11	10:07	8/10/2011 17:23
EPA 7470A	08/24/11		08/02/11	09:53	8/2/2011 15:49
EPA 8260B	08/10/11		08/04/11	11:14	8/5/2011 04:55
RSK-175	08/03/11		08/01/11	13:24	8/1/2011 15:10
SM 2540C	08/03/11		08/02/11	13:19	8/2/2011 13:19
SM 5210B	07/29/11	10:00	07/28/11	13:15	7/28/2011 13:15
SM 5220D	08/24/11		08/02/11	11:02	8/2/2011 16:58
SM18 4500-S D	08/03/11		07/29/11	12:40	7/29/2011 13:30
SM18 5310B	08/24/11		08/01/11	09:15	8/1/2011 18:25
VGC-13	08/10/11		08/01/11	13:00	8/2/2011 01:54

Client ID: 3301-MW4 **Lab ID: C109019-03RE1** **Sampled: 07/27/11 10:00** **Received: 07/28/11 10:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
RSK-175	08/03/11		08/01/11	13:24	8/1/2011 20:22

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Client ID: 3301-MW6	Lab ID: C109019-05	Sampled: 07/27/11 15:05	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/24/11	08/08/11 06:59	8/8/2011 12:41
EPA 310.2	08/10/11	08/03/11 10:47	8/7/2011 18:24
EPA 353.2	04/21/14	08/08/11 12:28	8/8/2011 14:13
EPA 6010C	01/23/12	08/01/11 09:58	8/2/2011 12:24
EPA 6020A	01/23/12	07/29/11 10:07	8/10/2011 17:27
EPA 7470A	08/24/11	08/02/11 09:53	8/2/2011 15:52
EPA 8260B	08/10/11	08/04/11 11:14	8/5/2011 05:24
RSK-175	08/03/11	08/01/11 13:24	8/1/2011 15:35
SM 2540C	08/03/11	08/02/11 13:19	8/2/2011 13:19
SM 5210B	07/29/11 15:05	07/28/11 13:15	7/28/2011 13:15
SM 5220D	08/24/11	08/02/11 11:02	8/2/2011 16:58
SM18 4500-S D	08/03/11	07/29/11 12:40	7/29/2011 13:30
SM18 5310B	08/24/11	08/01/11 09:15	8/1/2011 18:51
VGC-13	08/10/11	08/01/11 13:00	8/2/2011 02:57

Client ID: 3301-MW6	Lab ID: C109019-05RE1	Sampled: 07/27/11 15:05	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	08/03/11	08/01/11 13:24	8/1/2011 20:40

Client ID: 3301-MW7A	Lab ID: C109019-07	Sampled: 07/27/11 17:00	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/24/11	08/08/11 06:59	8/8/2011 12:59
EPA 310.2	08/10/11	08/03/11 10:47	8/7/2011 18:25
EPA 353.2	04/21/14	08/08/11 12:28	8/8/2011 14:13
EPA 6010C	01/23/12	08/01/11 09:58	8/2/2011 12:26
EPA 6020A	01/23/12	07/29/11 10:07	8/10/2011 17:31
EPA 7470A	08/24/11	08/02/11 09:53	8/2/2011 15:55
EPA 8260B	08/10/11	08/04/11 11:14	8/5/2011 05:54
RSK-175	08/03/11	08/01/11 13:24	8/1/2011 15:57
SM 2540C	08/03/11	08/02/11 13:19	8/2/2011 13:19
SM 5210B	07/29/11 17:00	07/28/11 13:15	7/28/2011 13:15
SM 5220D	08/24/11	08/02/11 11:02	8/2/2011 16:58
SM18 4500-S D	08/03/11	07/29/11 12:40	7/29/2011 13:30
SM18 5310B	08/24/11	08/01/11 09:15	8/1/2011 19:15
VGC-13	08/10/11	08/01/11 13:00	8/2/2011 04:00

Client ID: 3301-MW7A	Lab ID: C109019-07RE1	Sampled: 07/27/11 17:00	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	08/03/11	08/01/11 13:24	8/1/2011 20:56

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Client ID: 3301-MW9	Lab ID: C109019-09	Sampled: 07/27/11 12:05	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/24/11	08/08/11 06:59	8/8/2011 13:16
EPA 310.2	08/10/11	08/03/11 10:47	8/7/2011 18:26
EPA 353.2	04/21/14	08/08/11 12:28	8/8/2011 14:13
EPA 6010C	01/23/12	08/01/11 09:58	8/2/2011 12:33
EPA 6020A	01/23/12	07/29/11 10:07	8/10/2011 17:35
EPA 7470A	08/24/11	08/02/11 09:53	8/2/2011 15:58
EPA 8260B	08/10/11	08/04/11 11:14	8/5/2011 06:23
RSK-175	08/03/11	08/01/11 13:24	8/1/2011 16:13
SM 2540C	08/03/11	08/02/11 13:19	8/2/2011 13:19
SM 5210B	07/29/11 12:05	07/28/11 13:15	7/28/2011 13:15
SM 5220D	08/24/11	08/02/11 11:02	8/2/2011 16:58
SM18 4500-S D	08/03/11	07/29/11 12:40	7/29/2011 13:30
SM18 5310B	08/24/11	08/01/11 09:15	8/1/2011 19:37
VGC-13	08/10/11	08/01/11 13:00	8/2/2011 05:03

Client ID: 3301-MW14	Lab ID: C109019-11	Sampled: 07/27/11 14:15	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/24/11	08/08/11 06:59	8/8/2011 13:34
EPA 310.2	08/10/11	08/03/11 10:47	8/7/2011 18:27
EPA 353.2	04/21/14	08/08/11 12:28	8/8/2011 14:13
EPA 6010C	01/23/12	08/01/11 09:58	8/2/2011 12:35
EPA 6020A	01/23/12	07/29/11 10:07	8/10/2011 17:38
EPA 7470A	08/24/11	08/02/11 09:53	8/2/2011 16:01
EPA 8260B	08/10/11	08/04/11 11:14	8/5/2011 06:53
RSK-175	08/03/11	08/01/11 13:24	8/1/2011 16:35
SM 2540C	08/03/11	08/02/11 13:19	8/2/2011 13:19
SM 5210B	07/29/11 14:15	07/28/11 13:15	7/28/2011 13:15
SM 5220D	08/24/11	08/02/11 11:02	8/2/2011 16:58
SM18 4500-S D	08/03/11	07/29/11 12:40	7/29/2011 13:30
SM18 5310B	08/24/11	08/01/11 09:15	8/1/2011 20:02
VGC-13	08/10/11	08/01/11 13:00	8/2/2011 06:06

Client ID: 3301-MW14	Lab ID: C109019-11RE1	Sampled: 07/27/11 14:15	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	08/03/11	08/01/11 13:24	8/1/2011 21:35

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Client ID: 3301-MW16	Lab ID: C109019-13	Sampled: 07/27/11 16:05	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/24/11	08/08/11 06:59	8/8/2011 13:52
EPA 310.2	08/10/11	08/03/11 10:47	8/7/2011 18:30
EPA 353.2	04/21/14	08/08/11 12:28	8/8/2011 14:13
EPA 6010C	01/23/12	08/01/11 09:58	8/2/2011 12:37
EPA 6020A	01/23/12	07/29/11 10:07	8/10/2011 17:42
EPA 7470A	08/24/11	08/02/11 09:53	8/2/2011 16:04
EPA 8260B	08/10/11	08/04/11 11:14	8/5/2011 07:22
RSK-175	08/03/11	08/01/11 13:24	8/1/2011 16:58
SM 2540C	08/03/11	08/02/11 13:19	8/2/2011 13:19
SM 5210B	07/29/11 16:05	07/28/11 13:15	7/28/2011 13:15
SM 5220D	08/24/11	08/02/11 11:02	8/2/2011 16:58
SM18 4500-S D	08/03/11	07/29/11 12:40	7/29/2011 13:30
SM18 5310B	08/24/11	08/01/11 09:15	8/1/2011 20:29
VGC-13	08/10/11	08/01/11 13:00	8/2/2011 07:08

Client ID: 3301-MW16	Lab ID: C109019-13RE1	Sampled: 07/27/11 16:05	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	08/03/11	08/01/11 13:24	8/1/2011 21:51

Client ID: 3301-MW16	Lab ID: C109019-13RE2	Sampled: 07/27/11 16:05	Received: 07/28/11 10:30

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	08/03/11	08/01/11 13:24	8/2/2011 10:38

Client ID: 3301-MW15	Lab ID: C109374-01	Sampled: 07/28/11 09:30	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/25/11	08/08/11 06:59	8/8/2011 18:17
EPA 310.2	08/11/11	08/03/11 10:47	8/7/2011 18:36
EPA 353.2	04/22/14	08/08/11 12:28	8/8/2011 14:13
EPA 6010C	01/24/12	08/01/11 09:58	8/2/2011 12:47
EPA 6020A	01/24/12	08/01/11 10:11	8/8/2011 16:54
EPA 7470A	08/25/11	08/02/11 09:56	8/2/2011 14:44
EPA 8260B	08/11/11	08/05/11 11:07	8/5/2011 16:36
RSK-175	08/04/11	08/01/11 13:24	8/1/2011 18:46
SM 2540C	08/04/11	08/03/11 14:49	8/3/2011 14:49
SM 5210B	07/30/11 09:30	07/29/11 17:24	7/29/2011 17:24
SM 5220D	08/25/11	08/02/11 11:02	8/2/2011 16:58
SM18 4500-S D	08/04/11	07/29/11 12:40	7/29/2011 13:30
SM18 5310B	08/25/11	08/02/11 08:53	8/2/2011 14:31
VGC-13	08/11/11	08/02/11 10:00	8/2/2011 11:16

Client ID: 3301-MW15	Lab ID: C109374-01RE1	Sampled: 07/28/11 09:30	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	08/04/11	08/01/11 13:24	8/2/2011 12:02

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Client ID: 3301-MW12	Lab ID: C109374-03	Sampled: 07/28/11 10:30	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/25/11		08/08/11	06:59	8/8/2011 18:34
EPA 310.2	08/11/11		08/03/11	10:47	8/7/2011 18:37
EPA 353.2	04/22/14		08/08/11	12:28	8/8/2011 14:13
EPA 6010C	01/24/12		08/01/11	09:58	8/2/2011 12:49
EPA 6020A	01/24/12		08/01/11	10:11	8/8/2011 16:58
EPA 7470A	08/25/11		08/02/11	09:56	8/2/2011 14:46
EPA 8260B	08/11/11		08/05/11	11:07	8/5/2011 17:07
RSK-175	08/04/11		08/01/11	13:24	8/1/2011 19:09
SM 2540C	08/04/11		08/03/11	14:49	8/3/2011 14:49
SM 5210B	07/30/11	10:30	07/29/11	17:24	7/29/2011 17:24
SM 5220D	08/25/11		08/02/11	11:02	8/2/2011 16:58
SM18 4500-S D	08/04/11		07/29/11	12:40	7/29/2011 13:30
SM18 5310B	08/25/11		08/02/11	08:53	8/2/2011 14:56
VGC-13	08/11/11		08/02/11	10:00	8/2/2011 12:18

Client ID: 3301-MW12	Lab ID: C109374-03RE1	Sampled: 07/28/11 10:30	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
RSK-175	08/04/11		08/01/11	13:24	8/2/2011 12:18

Client ID: 3301-MW13	Lab ID: C109374-05	Sampled: 07/28/11 11:40	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/25/11		08/08/11	06:59	8/8/2011 18:52
EPA 310.2	08/11/11		08/03/11	10:47	8/7/2011 18:38
EPA 353.2	04/22/14		08/08/11	12:28	8/8/2011 14:13
EPA 6010C	01/24/12		08/01/11	09:58	8/2/2011 12:51
EPA 6020A	01/24/12		08/01/11	10:11	8/8/2011 17:01
EPA 7470A	08/25/11		08/02/11	09:56	8/2/2011 14:49
EPA 8260B	08/11/11		08/05/11	11:07	8/5/2011 17:37
RSK-175	08/04/11		08/01/11	13:24	8/1/2011 19:25
SM 2540C	08/04/11		08/03/11	14:49	8/3/2011 14:49
SM 5210B	07/30/11	11:40	07/29/11	17:24	7/29/2011 17:24
SM 5220D	08/25/11		08/02/11	11:02	8/2/2011 16:58
SM18 4500-S D	08/04/11		07/29/11	12:40	7/29/2011 13:30
SM18 5310B	08/25/11		08/02/11	08:53	8/2/2011 15:22
VGC-13	08/11/11		08/02/11	10:00	8/2/2011 13:21

Client ID: 3301-MW13	Lab ID: C109374-05RE1	Sampled: 07/28/11 11:40	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/24/12		08/01/11	09:58	8/2/2011 13:09
RSK-175	08/04/11		08/01/11	13:24	8/2/2011 12:35

Client ID: 3301-MW13 Dissolved	Lab ID: C109374-06	Sampled: 07/28/11 11:40	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/24/12		08/16/11	14:30	8/17/2011 10:31
EPA 6020A	01/24/12		08/16/11	10:12	8/22/2011 10:13

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Client ID: 3301-MW5	Lab ID: C109374-07	Sampled: 07/28/11 13:35	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/25/11	08/08/11 06:59	8/8/2011 19:10
EPA 310.2	08/11/11	08/03/11 10:47	8/7/2011 18:40
EPA 353.2	04/22/14	08/08/11 12:28	8/8/2011 14:13
EPA 6010C	01/24/12	08/01/11 09:58	8/2/2011 13:11
EPA 6020A	01/24/12	08/01/11 10:11	8/8/2011 17:13
EPA 7470A	08/25/11	08/02/11 09:56	8/2/2011 14:52
EPA 8260B	08/11/11	08/05/11 11:07	8/5/2011 18:07
RSK-175	08/04/11	08/01/11 13:24	8/1/2011 19:43
SM 2540C	08/04/11	08/03/11 14:49	8/3/2011 14:49
SM 5210B	07/30/11 13:35	07/29/11 17:24	7/29/2011 17:24
SM 5220D	08/25/11	08/02/11 11:02	8/2/2011 16:58
SM18 4500-S D	08/04/11	07/29/11 12:40	7/29/2011 13:30
SM18 5310B	08/25/11	08/02/11 08:53	8/2/2011 15:47
VGC-13	08/11/11	08/02/11 10:00	8/2/2011 14:24

Client ID: 3301-MW5	Lab ID: C109374-07RE1	Sampled: 07/28/11 13:35	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/24/12	08/01/11 09:58	8/2/2011 13:24
RSK-175	08/04/11	08/01/11 13:24	8/2/2011 12:56

Client ID: 3301-Duplicate	Lab ID: C109374-09	Sampled: 07/28/11 12:00	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/24/12	08/01/11 09:58	8/2/2011 13:14
EPA 6020A	01/24/12	08/01/11 10:11	8/8/2011 17:16

Client ID: 3301-Duplicate	Lab ID: C109374-09RE1	Sampled: 07/28/11 12:00	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/24/12	08/01/11 09:58	8/2/2011 13:26
EPA 8260B	08/11/11	08/05/11 11:07	8/8/2011 21:55

Client ID: 3301-Equipment Blank	Lab ID: C109374-11	Sampled: 07/28/11 14:10	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/24/12	08/01/11 09:58	8/2/2011 13:07
EPA 6020A	01/24/12	08/01/11 10:11	8/8/2011 17:20
EPA 8260B	08/11/11	08/05/11 11:07	8/5/2011 19:07

Client ID: 3301-Trip Blank	Lab ID: C109374-12	Sampled: 07/28/11 14:10	Received: 07/29/11 09:55

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	08/11/11	08/05/11 11:07	8/5/2011 19:37

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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 3301-MW3B **Lab ID: C109019-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	112		1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total	1.68		1	0.100	1.00	1	ug/L	EPA 6010C	
Cadmium - Total	0.544	J	1	0.360	1.00	1	ug/L	EPA 6010C	
Carbon dioxide	69400		1	1300	2000	NE	ug/L	RSK-175	
Chloride	32000	B	1	47	5000	NE	ug/L	EPA 300.0	QB-01
Cobalt - Total	25.4		1	1.10	10.0	10	ug/L	EPA 6010C	
Iron - Total	3790		1	22.0	50.0	300	ug/L	EPA 6010C	
Lactic Acid	270	J	1	110	500	NE	ug/L	VGC-13	
Manganese - Total	88.1		1	1.10	10.0	50	ug/L	EPA 6010C	
Methane	1.88		1	0.720	1.00	NE	ug/L	RSK-175	
Nickel - Total	27.6	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	180	J	1	25	100	10000	ug/L	EPA 353.2	
Selenium - Total	1.37	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Sulfate as SO4	40000	J	1	20	5000	250000	ug/L	EPA 300.0	
Total Dissolved Solids	160000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	980	J	1	280	1000	NE	ug/L	SM18 5310B	
Zinc - Total	54.1		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 3301-MW4 **Lab ID: C109019-03**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	1.39	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total	56.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	38000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	6200	B	1	47	5000	NE	ug/L	EPA 300.0	J-01
Copper - Total	3.09	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Iron - Total	243	J	1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	7.81	J	1	1.10	10.0	50	ug/L	EPA 6010C	
Methane	13.1		1	0.720	1.00	NE	ug/L	RSK-175	
Nitrate as N	7800	J	1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO4	25000	JB	1	20	5000	250000	ug/L	EPA 300.0	QB-01
Total Alkalinity as CaCO3	56000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	210000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	9300		1	280	1000	NE	ug/L	SM18 5310B	
Vanadium - Total	1.65	J	1	1.40	10.0	25	ug/L	EPA 6010C	

Client ID: 3301-MW4 **Lab ID: C109019-03RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	164000	D	10	13000	20000	NE	ug/L	RSK-175	

Client ID: 3301-MW6 **Lab ID: C109019-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	0.62	J	1	0.080	1.0	5	ug/L	EPA 8260B	
Barium - Total	302		1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	32000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	94000	B	1	47	5000	NE	ug/L	EPA 300.0	QB-01
Chromium - Total	1.22	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	1.2	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	2.88	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Iron - Total	22900		1	22.0	50.0	300	ug/L	EPA 6010C	

Client ID: 3301-MW6 **Lab ID: C109019-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Manganese - Total	233		1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total	2.31	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	130	J	1	25	100	10000	ug/L	EPA 353.2	
Selenium - Total	4.61	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Sulfate as SO4	6900	JB	1	20	5000	250000	ug/L	EPA 300.0	J-01
Sulfide	15	J	1	10	100	1000	ug/L	SM18 4500-S D	
Total Alkalinity as CaCO3	150000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	450000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	5700		1	280	1000	NE	ug/L	SM18 5310B	

Client ID: 3301-MW6 **Lab ID: C109019-05RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	227000	D	100	130000	200000	NE	ug/L	RSK-175	
Methane	2350	D	100	72.0	100	NE	ug/L	RSK-175	

Client ID: 3301-MW7A **Lab ID: C109019-07**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	215		1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	1.5		1	0.68	1.0	1	ug/L	EPA 8260B	
Chemical Oxygen Demand	45000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	34000	B	1	47	5000	NE	ug/L	EPA 300.0	QB-01
Chlorobenzene	2.1	J	1	0.74	1.0	3	ug/L	EPA 8260B	
Chloroethane	2.0	J	1	0.75	1.0	10	ug/L	EPA 8260B	
Copper - Total	1.61	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Iron - Total	175000		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	331		1	1.10	10.0	50	ug/L	EPA 6010C	
Nitrate as N	76	J	1	25	100	10000	ug/L	EPA 353.2	
Selenium - Total	2.53	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Sulfate as SO4	2200	JB	1	20	5000	250000	ug/L	EPA 300.0	J-01
Total Alkalinity as CaCO3	170000	D	2	24000	30000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	340000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	4600		1	280	1000	NE	ug/L	SM18 5310B	
Zinc - Total	6.63	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 3301-MW7A **Lab ID: C109019-07RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	677000	D	100	130000	200000	NE	ug/L	RSK-175	
Methane	7980	D	100	72.0	100	NE	ug/L	RSK-175	

Client ID: 3301-MW9 **Lab ID: C109019-09**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	146		1	1.00	10.0	100	ug/L	EPA 6010C	
Carbon dioxide	28200		1	1300	2000	NE	ug/L	RSK-175	
Chloride	3200	JB	1	47	5000	NE	ug/L	EPA 300.0	J-01
Iron - Total	6150		1	22.0	50.0	300	ug/L	EPA 6010C	
Lactic Acid	170	J	1	110	500	NE	ug/L	VGC-13	
Manganese - Total	136		1	1.10	10.0	50	ug/L	EPA 6010C	
Methane	4.87		1	0.720	1.00	NE	ug/L	RSK-175	
Nitrate as N	66	J	1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO4	2900	JB	1	20	5000	250000	ug/L	EPA 300.0	J-01
Total Alkalinity as CaCO3	97000		1	12000	15000	NE	ug/L	EPA 310.2	

Client ID: 3301-MW9 **Lab ID: C109019-09**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Total Dissolved Solids	130000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	400	J	1	280	1000	NE	ug/L	SM18 5310B	

Client ID: 3301-MW14 **Lab ID: C109019-11**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	301		1	1.00	10.0	100	ug/L	EPA 6010C	
Carbon dioxide	101000		1	1300	2000	NE	ug/L	RSK-175	
Chemical Oxygen Demand	17000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	13000	B	1	47	5000	NE	ug/L	EPA 300.0	J-01
Chromium - Total	1.20	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Iron - Total	5060		1	22.0	50.0	300	ug/L	EPA 6010C	
Lactic Acid	130	J	1	110	500	NE	ug/L	VGC-13	
Manganese - Total	147		1	1.10	10.0	50	ug/L	EPA 6010C	
Nitrate as N	86	J	1	25	100	10000	ug/L	EPA 353.2	
Selenium - Total	1.04	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Sulfate as SO4	30000	JB	1	20	5000	250000	ug/L	EPA 300.0	QB-01
Sulfide	14	J	1	10	100	1000	ug/L	SM18 4500-S D	
Total Alkalinity as CaCO3	180000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	250000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	3000		1	280	1000	NE	ug/L	SM18 5310B	

Client ID: 3301-MW14 **Lab ID: C109019-11RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Methane	392	D	10	7.20	10.0	NE	ug/L	RSK-175	

Client ID: 3301-MW16 **Lab ID: C109019-13**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	337		1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	53000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	23000	B	1	47	5000	NE	ug/L	EPA 300.0	QB-01
Iron - Total	55000		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	444		1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total	2.47	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	130	J	1	25	100	10000	ug/L	EPA 353.2	
Selenium - Total	2.14	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Sulfate as SO4	2200	JB	1	20	5000	250000	ug/L	EPA 300.0	J-01
Total Alkalinity as CaCO3	220000	D	2	24000	30000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	290000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	12000		1	280	1000	NE	ug/L	SM18 5310B	

Client ID: 3301-MW16 **Lab ID: C109019-13RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Methane	19300	D	250	180	250	NE	ug/L	RSK-175	

Client ID: 3301-MW16 **Lab ID: C109019-13RE2**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	561000	D	20	26000	40000	NE	ug/L	RSK-175	

Client ID: 3301-MW15 **Lab ID: C109374-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	0.88	J	1	0.080	1.0	5	ug/L	EPA 8260B	

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Client ID: 3301-MW15				Lab ID: C109374-01					
Analyte	**Results**	**Flag**	**DF**	**MDL**	**MRL**	**NC SWSL**	**Units**	**Method**	**Notes**
1,2-Dichloropropane	2.0		1	0.59	1.0	1	ug/L	EPA 8260B	
Arsenic - Total	9.98	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	429		1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	32000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	14000	B	1	47	5000	NE	ug/L	EPA 300.0	J-01
Chlorobenzene	2.0	J	1	0.74	1.0	3	ug/L	EPA 8260B	
Chromium - Total	4.29	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	21		1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	14.1		1	1.10	10.0	10	ug/L	EPA 6010C	
Ethane	1.68	J	1	1.00	2.00	NE	ug/L	RSK-175	
Iron - Total	28700		1	22.0	50.0	300	ug/L	EPA 6010C	
Lactic Acid	290	J	1	110	500	NE	ug/L	VGC-13	
Manganese - Total	8400		1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total	10.8	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	93	J	1	25	100	10000	ug/L	EPA 353.2	
Selenium - Total	1.35	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Total	1.94	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Sulfate as SO4	13000	JB	1	20	5000	250000	ug/L	EPA 300.0	J-01
Total Alkalinity as CaCO3	340000	D	4	48000	60000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	470000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	4200		1	280	1000	NE	ug/L	SM18 5310B	
trans-1,2-Dichloroethene	0.62	J	1	0.12	1.0	5	ug/L	EPA 8260B	
Vinyl chloride	3.7		1	0.60	1.0	1	ug/L	EPA 8260B	
Zinc - Total	4.98	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 3301-MW15				Lab ID: C109374-01RE1					
Analyte	**Results**	**Flag**	**DF**	**MDL**	**MRL**	**NC SWSL**	**Units**	**Method**	**Notes**
Carbon dioxide	269000	D	100	130000	200000	NE	ug/L	RSK-175	
Methane	1600	D	100	72.0	100	NE	ug/L	RSK-175	

Client ID: 3301-MW12				Lab ID: C109374-03					
Analyte	**Results**	**Flag**	**DF**	**MDL**	**MRL**	**NC SWSL**	**Units**	**Method**	**Notes**
1,1-Dichloroethane	1.5	J	1	0.080	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	7.2		1	0.79	1.0	1	ug/L	EPA 8260B	
Barium - Total	322		1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	4.1		1	0.68	1.0	1	ug/L	EPA 8260B	
Beryllium - Total	0.528	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chemical Oxygen Demand	53000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	220000	BD	4	190	20000	NE	ug/L	EPA 300.0	QB-01
Chlorobenzene	5.1		1	0.74	1.0	3	ug/L	EPA 8260B	
Chloroethane	1.8	J	1	0.75	1.0	10	ug/L	EPA 8260B	
Chromium - Total	1.21	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	0.83	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	15.1		1	1.10	10.0	10	ug/L	EPA 6010C	
Iron - Total	11800		1	22.0	50.0	300	ug/L	EPA 6010C	
Lead - Total	1.91	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Manganese - Total	105		1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total	21.6	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	78	J	1	25	100	10000	ug/L	EPA 353.2	
Propionic Acid	12000		1	170	500	NE	ug/L	VGC-13	
Selenium - Total	15.9		1	0.830	1.00	10	ug/L	EPA 6020A	

Client ID: 3301-MW12 **Lab ID: C109374-03**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Sulfate as SO4	50000	JBD	4	80	20000	250000	ug/L	EPA 300.0	QB-01
Thallium - Total	0.213	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Total Dissolved Solids	540000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	11000		1	280	1000	NE	ug/L	SM18 5310B	
Zinc - Total	173		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 3301-MW12 **Lab ID: C109374-03RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	1310000	D	20	26000	40000	NE	ug/L	RSK-175	
Methane	260	D	20	14.4	20.0	NE	ug/L	RSK-175	

Client ID: 3301-MW13 **Lab ID: C109374-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	0.74	J	1	0.080	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	2.2		1	0.79	1.0	1	ug/L	EPA 8260B	
Barium - Total	202		1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	1.2		1	0.68	1.0	1	ug/L	EPA 8260B	
Chemical Oxygen Demand	96000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	120000	BD	2	94	10000	NE	ug/L	EPA 300.0	QB-01
Chlorobenzene	10		1	0.74	1.0	3	ug/L	EPA 8260B	
Chloroethane	0.76	J	1	0.75	1.0	10	ug/L	EPA 8260B	
Chromium - Total	10.3		1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	14		1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	1540		1	1.10	10.0	10	ug/L	EPA 6010C	
Ethane	1.86	J	1	1.00	2.00	NE	ug/L	RSK-175	
Iron - Total	42900		1	22.0	50.0	300	ug/L	EPA 6010C	
Nickel - Total	307		1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	56	J	1	25	100	10000	ug/L	EPA 353.2	
Propionic Acid	5500		1	170	500	NE	ug/L	VGC-13	
Selenium - Total	11.0		1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Total	5.61	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Sulfate as SO4	35000	JBD	2	40	10000	250000	ug/L	EPA 300.0	QB-01
Thallium - Total	1.27	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Total Alkalinity as CaCO3	230000	D	2	24000	30000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	560000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	7900		1	280	1000	NE	ug/L	SM18 5310B	
Trichloroethene	1.0		1	0.72	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	2.2		1	0.60	1.0	1	ug/L	EPA 8260B	
Zinc - Total	170		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 3301-MW13 **Lab ID: C109374-05RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	816000	D	100	130000	200000	NE	ug/L	RSK-175	
Manganese - Total	38700	D	5	5.50	50.0	50	ug/L	EPA 6010C	
Methane	1270	D	100	72.0	100	NE	ug/L	RSK-175	

Client ID: 3301-MW13 Dissolved **Lab ID: C109374-06**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Dissolved	3.74	JB	1	2.80	10.0	10	ug/L	EPA 6010C	J
Barium - Dissolved	161		1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Dissolved	11.0		1	1.00	10.0	10	ug/L	EPA 6010C	

Client ID: 3301-MW13 Dissolved **Lab ID: C109374-06**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Cobalt - Dissolved	1460		1	1.10	10.0	10	ug/L	EPA 6010C	
Nickel - Dissolved	292		1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Dissolved	8.64	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Dissolved	7.28	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Thallium - Dissolved	1.25	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Zinc - Dissolved	154		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 3301-MW5 **Lab ID: C109374-07**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	9.0	JD	10	0.80	10	5	ug/L	EPA 8260B	
Arsenic - Total	21.2		1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	230		1	1.00	10.0	100	ug/L	EPA 6010C	
Biochemical Oxygen Demand	5800		1	2000	2000	NE	ug/L	SM 5210B	
Chemical Oxygen Demand	100000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	12000	B	1	47	5000	NE	ug/L	EPA 300.0	J-01
Chlorobenzene	15	D	10	7.4	10	3	ug/L	EPA 8260B	
Chromium - Total	8.14	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	620	D	10	7.2	10	5	ug/L	EPA 8260B	
Cobalt - Total	230		1	1.10	10.0	10	ug/L	EPA 6010C	
Ethane	2.16		1	1.00	2.00	NE	ug/L	RSK-175	
Ethene	5.97		1	2.30	3.00	NE	ug/L	RSK-175	
Iron - Total	169000		1	22.0	50.0	300	ug/L	EPA 6010C	
Lactic Acid	410	J	1	110	500	NE	ug/L	VGC-13	
Nickel - Total	55.4		1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	170	J	1	25	100	10000	ug/L	EPA 353.2	
Silver - Total	2.19	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Sulfate as SO4	44000	JB	1	20	5000	250000	ug/L	EPA 300.0	QB-01
Total Alkalinity as CaCO3	400000	D	4	48000	60000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	580000		1	10000	10000	NE	ug/L	SM 2540C	
Total Organic Carbon	5600		1	280	1000	NE	ug/L	SM18 5310B	
Vinyl chloride	32	D	10	6.0	10	1	ug/L	EPA 8260B	
Zinc - Total	84.5		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 3301-MW5 **Lab ID: C109374-07RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	844000	D	20	26000	40000	NE	ug/L	RSK-175	
Manganese - Total	34500	D	5	5.50	50.0	50	ug/L	EPA 6010C	
Methane	689	D	20	14.4	20.0	NE	ug/L	RSK-175	

Client ID: 3301-Duplicate **Lab ID: C109374-09**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	24.7		1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	227		1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	7.61	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	227		1	1.10	10.0	10	ug/L	EPA 6010C	
Iron - Total	169000		1	22.0	50.0	300	ug/L	EPA 6010C	
Nickel - Total	54.1		1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Total	1.64	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Zinc - Total	83.5		1	3.80	10.0	10	ug/L	EPA 6010C	

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Client ID: 3301-Duplicate								Lab ID: C109374-09RE1	
Analyte	**Results**	**Flag**	**DF**	**MDL**	**MRL**	**NC SWSL**	**Units**	**Method**	**Notes**
1,1-Dichloroethane	9.1	JD	10	0.80	10	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	8.8	JD	10	7.9	10	1	ug/L	EPA 8260B	
Chlorobenzene	15	D	10	7.4	10	3	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	650	D	10	7.2	10	5	ug/L	EPA 8260B	
Manganese - Total	34300	D	5	5.50	50.0	50	ug/L	EPA 6010C	
Toluene	8.7	JD	10	8.5	10	1	ug/L	EPA 8260B	
trans-1,2-Dichloroethene	4.9	JD	10	1.2	10	5	ug/L	EPA 8260B	
Vinyl chloride	25	D	10	6.0	10	1	ug/L	EPA 8260B	

Client ID: 3301-Equipment Blank								Lab ID: C109374-11	
Analyte	**Results**	**Flag**	**DF**	**MDL**	**MRL**	**NC SWSL**	**Units**	**Method**	**Notes**
Copper - Total	2.16	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Manganese - Total	1.58	J	1	1.10	10.0	50	ug/L	EPA 6010C	
Methylene chloride	0.44	J	1	0.14	1.0	1	ug/L	EPA 8260B	O-01

Client ID: 3301-Trip Blank								Lab ID: C109374-12	
Analyte	**Results**	**Flag**	**DF**	**MDL**	**MRL**	**NC SWSL**	**Units**	**Method**	**Notes**
Methylene chloride	0.44	J	1	0.14	1.0	1	ug/L	EPA 8260B	O-01

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ANALYTICAL RESULTS

Description: 3301-MW3B
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-01
Sampled: 07/27/11 10:55
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 04:25	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 04:25	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 04:25	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 04:25	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 04:25	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 04:25	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 04:25	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 04:25	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 04:25	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 04:25	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 04:25	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 04:25	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 04:25	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 04:25	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 04:25	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 04:25	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 04:25	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 04:25	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 04:25	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 04:25	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 04:25	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 04:25	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 04:25	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 04:25	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 04:25	JKG	

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Description: 3301-MW3B
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-01
Sampled: 07/27/11 10:55
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 04:25	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 04:25	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 04:25	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*100 %*	*51-122*	*1H04025*	*EPA 8260B*	*08/05/11 04:25*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*101 %*	*68-117*	*1H04025*	*EPA 8260B*	*08/05/11 04:25*	*JKG*	
Toluene-d8	*47*	*1*	*50.0*	*95 %*	*69-110*	*1H04025*	*EPA 8260B*	*08/05/11 04:25*	*JKG*	

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Description:	3301-MW3B	**Lab Sample ID:**	C109019-01	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 10:55	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 15:46	NLH	

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Description: 3301-MW3B
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-01
Sampled: 07/27/11 10:55
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/11 17:12	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:02	JDH	
Barium [7440-39-3] ^	**112**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:02	JDH	
Beryllium [7440-41-7] ^	**1.68**		ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:02	JDH	
Cadmium [7440-43-9] ^	**0.544**	J	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:02	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:02	JDH	
Cobalt [7440-48-4] ^	**25.4**		ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:02	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:02	JDH	
Iron [7439-89-6] ^	**3790**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:02	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:02	JDH	
Manganese [7439-96-5] ^	**88.1**		ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 12:02	JDH	
Nickel [7440-02-0] ^	**27.6**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:02	JDH	
Selenium [7782-49-2] ^	**1.37**	J	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/11 17:12	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:02	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/11 17:12	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:02	JDH	
Zinc [7440-66-6] ^	**54.1**		ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:02	JDH	

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Description: 3301-MW3B
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-01
Sampled: 07/27/11 10:55
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	07/28/11 13:15	JOC	
Chemical Oxygen Demand [ECL-0035] ^	10000	U	ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**32000**	B	ug/L	1	47	5000	NE	EPA 300.0	08/08/11 20:38	CCB	QB-01
Nitrate as N [14797-55-8] ^	**180**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**40000**	J	ug/L	1	20	5000	250000	EPA 300.0	08/08/11 20:38	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	12000	U	ug/L	1	12000	15000	NE	EPA 310.2	08/07/11 18:21	CCB	
Total Dissolved Solids [ECL-0156] ^	**160000**		ug/L	1	10000	10000	NE	SM 2540C	08/02/11 13:19	KER	

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Description: 3301-MW3B
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-01
Sampled: 07/27/11 10:55
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**69400**		ug/L	1	1300	2000	NE	RSK-175	08/01/11 14:42	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 14:42	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 14:42	JDB	
Methane [74-82-8]	**1.88**		ug/L	1	0.720	1.00	NE	RSK-175	08/01/11 14:42	JDB	

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Description: 3301-MW3B
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-01
Sampled: 07/27/11 10:55
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 00:52	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 00:52	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 00:52	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 00:52	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 00:52	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 00:52	JWJ	
Lactic Acid [50-21-5]	**270**	J	ug/L	1	110	500	NE	VGC-13	08/02/11 00:52	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 00:52	JWJ	
Propionic Acid [79-09-4]	170	U	ug/L	1	170	500	NE	VGC-13	08/02/11 00:52	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 00:52	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*20000*	*1*	*20000*	*99 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 00:52*	*JWJ*	

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Description:	3301-MW3B	**Lab Sample ID:**	C109019-01	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 10:55	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**980**	J	ug/L	1	280	1000	NE	SM18 5310B	08/01/11 17:59	JSW	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-MW4 | **Lab Sample ID:** C109019-03 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 10:00 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 04:55	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 04:55	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 04:55	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 04:55	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 04:55	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 04:55	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 04:55	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 04:55	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 04:55	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 04:55	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 04:55	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 04:55	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 04:55	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 04:55	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 04:55	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 04:55	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 04:55	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 04:55	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 04:55	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 04:55	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 04:55	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 04:55	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 04:55	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 04:55	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 04:55	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 04:55	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 04:55	JKG	

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Description: 3301-MW4 | **Lab Sample ID:** C109019-03 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 10:00 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 04:55	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*97 %*	*51-122*	*1H04025*	*EPA 8260B*	*08/05/11 04:55*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*101 %*	*68-117*	*1H04025*	*EPA 8260B*	*08/05/11 04:55*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*97 %*	*69-110*	*1H04025*	*EPA 8260B*	*08/05/11 04:55*	*JKG*	

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Description: 3301-MW4 | **Lab Sample ID:** C109019-03 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 10:00 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 15:49	NLH	

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Description: 3301-MW4 | **Lab Sample ID:** C109019-03 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 10:00 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	**1.39**	J	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/11 17:23	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:22	JDH	
Barium [7440-39-3] ^	**56.7**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:22	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:22	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:22	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:22	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:22	JDH	
Copper [7440-50-8] ^	**3.09**	J	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:22	JDH	
Iron [7439-89-6] ^	**243**	J	ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:22	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:22	JDH	
Manganese [7439-96-5] ^	**7.81**	J	ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 12:22	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:22	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/11 17:23	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:22	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/11 17:23	VLO	
Vanadium [7440-62-2] ^	**1.65**	J	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:22	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:22	JDH	

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Description: 3301-MW4 | **Lab Sample ID:** C109019-03 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 10:00 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	07/28/11 13:15	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**38000**		ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**6200**	B	ug/L	1	47	5000	NE	EPA 300.0	08/08/11 12:23	CCB	J-01
Nitrate as N [14797-55-8] ^	**7800**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**25000**	JB	ug/L	1	20	5000	250000	EPA 300.0	08/08/11 12:23	CCB	QB-01
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**56000**		ug/L	1	12000	15000	NE	EPA 310.2	08/07/11 18:23	CCB	
Total Dissolved Solids [ECL-0156] ^	**210000**		ug/L	1	10000	10000	NE	SM 2540C	08/02/11 13:19	KER	

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Description: 3301-MW4 | **Lab Sample ID:** C109019-03 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 10:00 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**164000**	D	ug/L	10	13000	20000	NE	RSK-175	08/01/11 20:22	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 15:10	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 15:10	JDB	
Methane [74-82-8]	**13.1**		ug/L	1	0.720	1.00	NE	RSK-175	08/01/11 15:10	JDB	

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Description: 3301-MW4 | **Lab Sample ID:** C109019-03 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 10:00 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 01:54	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 01:54	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 01:54	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 01:54	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 01:54	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 01:54	JWJ	
Lactic Acid [50-21-5]	110	U	ug/L	1	110	500	NE	VGC-13	08/02/11 01:54	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 01:54	JWJ	
Propionic Acid [79-09-4]	170	U	ug/L	1	170	500	NE	VGC-13	08/02/11 01:54	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 01:54	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*19000*	*1*	*20000*	*95 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 01:54*	*JWJ*	

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Description: 3301-MW4 | **Lab Sample ID:** C109019-03 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 10:00 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**9300**		ug/L	1	280	1000	NE	SM18 5310B	08/01/11 18:25	JSW	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-MW6 | **Lab Sample ID:** C109019-05 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 15:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 05:24	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 05:24	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
1,1-Dichloroethane [75-34-3] ^	**0.62**	J	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 05:24	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 05:24	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 05:24	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 05:24	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 05:24	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 05:24	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 05:24	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 05:24	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 05:24	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 05:24	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 05:24	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 05:24	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 05:24	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 05:24	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 05:24	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 05:24	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**1.2**	J	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 05:24	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 05:24	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 05:24	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 05:24	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 05:24	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 05:24	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 05:24	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 05:24	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 05:24	JKG	

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Description: 3301-MW6 | **Lab Sample ID:** C109019-05 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 15:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 05:24	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*100 %*	*51-122*	*1H04025*	*EPA 8260B*	*08/05/11 05:24*	*JKG*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*68-117*	*1H04025*	*EPA 8260B*	*08/05/11 05:24*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*97 %*	*69-110*	*1H04025*	*EPA 8260B*	*08/05/11 05:24*	*JKG*	

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Description:	3301-MW6	**Lab Sample ID:**	C109019-05	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 15:05	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 15:52	NLH	

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Description: 3301-MW6 | **Lab Sample ID:** C109019-05 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 15:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/11 17:27	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:24	JDH	
Barium [7440-39-3] ^	**302**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:24	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:24	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:24	JDH	
Chromium [7440-47-3] ^	**1.22**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:24	JDH	
Cobalt [7440-48-4] ^	**2.88**	J	ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:24	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:24	JDH	
Iron [7439-89-6] ^	**22900**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:24	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:24	JDH	
Manganese [7439-96-5] ^	**233**		ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 12:24	JDH	
Nickel [7440-02-0] ^	**2.31**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:24	JDH	
Selenium [7782-49-2] ^	**4.61**	J	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/11 17:27	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:24	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/11 17:27	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:24	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:24	JDH	

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Description: 3301-MW6
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-05
Sampled: 07/27/11 15:05
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	07/28/11 13:15	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**32000**		ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**94000**	B	ug/L	1	47	5000	NE	EPA 300.0	08/08/11 12:41	CCB	QB-01
Nitrate as N [14797-55-8] ^	**130**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**6900**	JB	ug/L	1	20	5000	250000	EPA 300.0	08/08/11 12:41	CCB	J-01
Sulfide [18496-25-8] ^	**15**	J	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**150000**		ug/L	1	12000	15000	NE	EPA 310.2	08/07/11 18:24	CCB	
Total Dissolved Solids [ECL-0156] ^	**450000**		ug/L	1	10000	10000	NE	SM 2540C	08/02/11 13:19	KER	

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Description: 3301-MW6
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-05
Sampled: 07/27/11 15:05
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**227000**	D	ug/L	100	130000	200000	NE	RSK-175	08/01/11 20:40	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 15:35	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 15:35	JDB	
Methane [74-82-8]	**2350**	D	ug/L	100	72.0	100	NE	RSK-175	08/01/11 20:40	JDB	

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Description: 3301-MW6 | **Lab Sample ID:** C109019-05 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 15:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 02:57	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 02:57	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 02:57	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 02:57	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 02:57	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 02:57	JWJ	
Lactic Acid [50-21-5]	110	U	ug/L	1	110	500	NE	VGC-13	08/02/11 02:57	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 02:57	JWJ	
Propionic Acid [79-09-4]	170	U	ug/L	1	170	500	NE	VGC-13	08/02/11 02:57	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 02:57	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*20000*	*1*	*20000*	*98 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 02:57*	*JWJ*	

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Description:	3301-MW6	**Lab Sample ID:**	C109019-05	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 15:05	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**5700**		ug/L	1	280	1000	NE	SM18 5310B	08/01/11 18:51	JSW	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-MW7A
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-07
Sampled: 07/27/11 17:00
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 05:54	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 05:54	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 05:54	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 05:54	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 05:54	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 05:54	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 05:54	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 05:54	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 05:54	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 05:54	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 05:54	JKG	
Benzene [71-43-2] ^	**1.5**		ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 05:54	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 05:54	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 05:54	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 05:54	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Chlorobenzene [108-90-7] ^	**2.1**	J	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 05:54	JKG	
Chloroethane [75-00-3] ^	**2.0**	J	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 05:54	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 05:54	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 05:54	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 05:54	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 05:54	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 05:54	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 05:54	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 05:54	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 05:54	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 05:54	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 05:54	JKG	

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Description: 3301-MW7A
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-07
Sampled: 07/27/11 17:00
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 05:54	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1H04025*	*EPA 8260B*	*08/05/11 05:54*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*68-117*	*1H04025*	*EPA 8260B*	*08/05/11 05:54*	*JKG*	
Toluene-d8	*46*	*1*	*50.0*	*91 %*	*69-110*	*1H04025*	*EPA 8260B*	*08/05/11 05:54*	*JKG*	

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Description: 3301-MW7A
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-07
Sampled: 07/27/11 17:00
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 15:55	NLH	

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Description: 3301-MW7A
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-07
Sampled: 07/27/11 17:00
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/11 17:31	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:26	JDH	
Barium [7440-39-3] ^	**215**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:26	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:26	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:26	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:26	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:26	JDH	
Copper [7440-50-8] ^	**1.61**	J	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:26	JDH	
Iron [7439-89-6] ^	**175000**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:26	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:26	JDH	
Manganese [7439-96-5] ^	**331**		ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 12:26	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:26	JDH	
Selenium [7782-49-2] ^	**2.53**	J	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/11 17:31	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:26	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/11 17:31	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:26	JDH	
Zinc [7440-66-6] ^	**6.63**	J	ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:26	JDH	

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Description: 3301-MW7A
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-07
Sampled: 07/27/11 17:00
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	6000	U	ug/L	1	6000	6000	NE	SM 5210B	07/28/11 13:15	JOC	B-01
Chemical Oxygen Demand [ECL-0035] ^	**45000**		ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**34000**	B	ug/L	1	47	5000	NE	EPA 300.0	08/08/11 12:59	CCB	QB-01
Nitrate as N [14797-55-8] ^	**76**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**2200**	JB	ug/L	1	20	5000	250000	EPA 300.0	08/08/11 12:59	CCB	J-01
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**170000**	D	ug/L	2	24000	30000	NE	EPA 310.2	08/07/11 18:25	CCB	
Total Dissolved Solids [ECL-0156] ^	**340000**		ug/L	1	10000	10000	NE	SM 2540C	08/02/11 13:19	KER	

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Description: 3301-MW7A
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-07
Sampled: 07/27/11 17:00
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**677000**	D	ug/L	100	130000	200000	NE	RSK-175	08/01/11 20:56	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 15:57	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 15:57	JDB	
Methane [74-82-8]	**7980**	D	ug/L	100	72.0	100	NE	RSK-175	08/01/11 20:56	JDB	

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Description: 3301-MW7A
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-07
Sampled: 07/27/11 17:00
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 04:00	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 04:00	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 04:00	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 04:00	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 04:00	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 04:00	JWJ	
Lactic Acid [50-21-5]	110	U	ug/L	1	110	500	NE	VGC-13	08/02/11 04:00	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 04:00	JWJ	
Propionic Acid [79-09-4]	170	U	ug/L	1	170	500	NE	VGC-13	08/02/11 04:00	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 04:00	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*20000*	*1*	*20000*	*100 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 04:00*	*JWJ*	

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Description:	3301-MW7A	**Lab Sample ID:**	C109019-07	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 17:00	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**4600**		ug/L	1	280	1000	NE	SM18 5310B	08/01/11 19:15	JSW	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-MW9 | **Lab Sample ID:** C109019-09 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 12:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 06:23	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 06:23	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 06:23	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 06:23	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 06:23	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 06:23	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 06:23	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 06:23	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 06:23	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 06:23	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 06:23	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 06:23	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 06:23	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 06:23	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 06:23	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 06:23	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 06:23	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 06:23	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 06:23	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 06:23	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 06:23	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 06:23	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 06:23	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 06:23	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 06:23	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 06:23	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 06:23	JKG	

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Description: 3301-MW9 | **Lab Sample ID:** C109019-09 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 12:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 06:23	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1H04025*	*EPA 8260B*	*08/05/11 06:23*	*JKG*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*68-117*	*1H04025*	*EPA 8260B*	*08/05/11 06:23*	*JKG*	
Toluene-d8	*47*	*1*	*50.0*	*93 %*	*69-110*	*1H04025*	*EPA 8260B*	*08/05/11 06:23*	*JKG*	

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Description:	3301-MW9	**Lab Sample ID:**	C109019-09	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 12:05	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 15:58	NLH	

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Description: 3301-MW9 | **Lab Sample ID:** C109019-09 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 12:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/11 17:35	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:33	JDH	
Barium [7440-39-3] ^	**146**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:33	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:33	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:33	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:33	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:33	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:33	JDH	
Iron [7439-89-6] ^	**6150**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:33	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:33	JDH	
Manganese [7439-96-5] ^	**136**		ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 12:33	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:33	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/11 17:35	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:33	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/11 17:35	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:33	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:33	JDH	

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Description: 3301-MW9 | **Lab Sample ID:** C109019-09 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 12:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	07/28/11 13:15	JOC	
Chemical Oxygen Demand [ECL-0035] ^	10000	U	ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**3200**	JB	ug/L	1	47	5000	NE	EPA 300.0	08/08/11 13:16	CCB	J-01
Nitrate as N [14797-55-8] ^	**66**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**2900**	JB	ug/L	1	20	5000	250000	EPA 300.0	08/08/11 13:16	CCB	J-01
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**97000**		ug/L	1	12000	15000	NE	EPA 310.2	08/07/11 18:26	CCB	
Total Dissolved Solids [ECL-0156] ^	**130000**		ug/L	1	10000	10000	NE	SM 2540C	08/02/11 13:19	KER	

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Description: 3301-MW9 | **Lab Sample ID:** C109019-09 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 12:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**28200**		ug/L	1	1300	2000	NE	RSK-175	08/01/11 16:13	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 16:13	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 16:13	JDB	
Methane [74-82-8]	**4.87**		ug/L	1	0.720	1.00	NE	RSK-175	08/01/11 16:13	JDB	

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Description: 3301-MW9 | **Lab Sample ID:** C109019-09 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 12:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 05:03	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 05:03	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 05:03	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 05:03	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 05:03	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 05:03	JWJ	
Lactic Acid [50-21-5]	**170**	J	ug/L	1	110	500	NE	VGC-13	08/02/11 05:03	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 05:03	JWJ	
Propionic Acid [79-09-4]	170	U	ug/L	1	170	500	NE	VGC-13	08/02/11 05:03	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 05:03	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*20000*	*1*	*20000*	*99 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 05:03*	*JWJ*	

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Description:	3301-MW9	**Lab Sample ID:**	C109019-09	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 12:05	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**400**	J	ug/L	1	280	1000	NE	SM18 5310B	08/01/11 19:37	JSW	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-MW14 | **Lab Sample ID:** C109019-11 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 14:15 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 06:53	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 06:53	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 06:53	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 06:53	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 06:53	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 06:53	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 06:53	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 06:53	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 06:53	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 06:53	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 06:53	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 06:53	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 06:53	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 06:53	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 06:53	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 06:53	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 06:53	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 06:53	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 06:53	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 06:53	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 06:53	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 06:53	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 06:53	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 06:53	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 06:53	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 06:53	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 06:53	JKG	

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Description: 3301-MW14 | **Lab Sample ID:** C109019-11 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 14:15 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 06:53	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*51-122*	*1H04025*	*EPA 8260B*	*08/05/11 06:53*	*JKG*	
Dibromofluoromethane	*51*	*1*	*50.0*	*101 %*	*68-117*	*1H04025*	*EPA 8260B*	*08/05/11 06:53*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*95 %*	*69-110*	*1H04025*	*EPA 8260B*	*08/05/11 06:53*	*JKG*	

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Description:	3301-MW14	**Lab Sample ID:**	C109019-11	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 14:15	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 16:01	NLH	

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Description: 3301-MW14 | **Lab Sample ID:** C109019-11 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 14:15 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/11 17:38	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:35	JDH	
Barium [7440-39-3] ^	**301**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:35	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:35	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:35	JDH	
Chromium [7440-47-3] ^	**1.20**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:35	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:35	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:35	JDH	
Iron [7439-89-6] ^	**5060**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:35	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:35	JDH	
Manganese [7439-96-5] ^	**147**		ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 12:35	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:35	JDH	
Selenium [7782-49-2] ^	**1.04**	J	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/11 17:38	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:35	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/11 17:38	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:35	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:35	JDH	

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Description: 3301-MW14 | **Lab Sample ID:** C109019-11 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 14:15 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	07/28/11 13:15	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**17000**		ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**13000**	B	ug/L	1	47	5000	NE	EPA 300.0	08/08/11 13:34	CCB	J-01
Nitrate as N [14797-55-8] ^	**86**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**30000**	JB	ug/L	1	20	5000	250000	EPA 300.0	08/08/11 13:34	CCB	QB-01
Sulfide [18496-25-8] ^	**14**	J	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**180000**		ug/L	1	12000	15000	NE	EPA 310.2	08/07/11 18:27	CCB	
Total Dissolved Solids [ECL-0156] ^	**250000**		ug/L	1	10000	10000	NE	SM 2540C	08/02/11 13:19	KER	

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Description: 3301-MW14
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-11
Sampled: 07/27/11 14:15
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**101000**		ug/L	1	1300	2000	NE	RSK-175	08/01/11 16:35	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 16:35	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 16:35	JDB	
Methane [74-82-8]	**392**	D	ug/L	10	7.20	10.0	NE	RSK-175	08/01/11 21:35	JDB	

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Description: 3301-MW14 | **Lab Sample ID:** C109019-11 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 14:15 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 06:06	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 06:06	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 06:06	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 06:06	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 06:06	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 06:06	JWJ	
Lactic Acid [50-21-5]	**130**	J	ug/L	1	110	500	NE	VGC-13	08/02/11 06:06	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 06:06	JWJ	
Propionic Acid [79-09-4]	170	U	ug/L	1	170	500	NE	VGC-13	08/02/11 06:06	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 06:06	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*20000*	*1*	*20000*	*98 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 06:06*	*JWJ*	

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Description:	3301-MW14	**Lab Sample ID:**	C109019-11	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 14:15	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**3000**		ug/L	1	280	1000	NE	SM18 5310B	08/01/11 20:02	JSW	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-MW16 | **Lab Sample ID:** C109019-13 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 16:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 07:22	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 07:22	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 07:22	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 07:22	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 07:22	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 07:22	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 07:22	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 07:22	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 07:22	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 07:22	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 07:22	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 07:22	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 07:22	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 07:22	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 07:22	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 07:22	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 07:22	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 07:22	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 07:22	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 07:22	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 07:22	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 07:22	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 07:22	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 07:22	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 07:22	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 07:22	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 07:22	JKG	

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Description:	3301-MW16	**Lab Sample ID:**	C109019-13	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 16:05	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 07:22	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*97 %*	*51-122*	*1H04025*	*EPA 8260B*	*08/05/11 07:22*	*JKG*	
Dibromofluoromethane	*51*	*1*	*50.0*	*101 %*	*68-117*	*1H04025*	*EPA 8260B*	*08/05/11 07:22*	*JKG*	
Toluene-d8	*46*	*1*	*50.0*	*93 %*	*69-110*	*1H04025*	*EPA 8260B*	*08/05/11 07:22*	*JKG*	

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Description: 3301-MW16 | **Lab Sample ID:** C109019-13 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 16:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 16:04	NLH	

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Description: 3301-MW16 | **Lab Sample ID:** C109019-13 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 16:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/10/11 17:42	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:37	JDH	
Barium [7440-39-3] ^	**337**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:37	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:37	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:37	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:37	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:37	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:37	JDH	
Iron [7439-89-6] ^	**55000**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:37	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:37	JDH	
Manganese [7439-96-5] ^	**444**		ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 12:37	JDH	
Nickel [7440-02-0] ^	**2.47**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:37	JDH	
Selenium [7782-49-2] ^	**2.14**	J	ug/L	1	0.830	1.00	10	EPA 6020A	08/10/11 17:42	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:37	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/10/11 17:42	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:37	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:37	JDH	

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Description: 3301-MW16 | **Lab Sample ID:** C109019-13 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 16:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	07/28/11 13:15	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**53000**		ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**23000**	B	ug/L	1	47	5000	NE	EPA 300.0	08/08/11 13:52	CCB	QB-01
Nitrate as N [14797-55-8] ^	**130**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**2200**	JB	ug/L	1	20	5000	250000	EPA 300.0	08/08/11 13:52	CCB	J-01
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**220000**	D	ug/L	2	24000	30000	NE	EPA 310.2	08/07/11 18:30	CCB	
Total Dissolved Solids [ECL-0156] ^	**290000**		ug/L	1	10000	10000	NE	SM 2540C	08/02/11 13:19	KER	

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Description: 3301-MW16
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109019-13
Sampled: 07/27/11 16:05
Sampled By: Michelle Logut, Jerry Paul

Received: 07/28/11 10:30
Work Order: C109019

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**561000**	D	ug/L	20	26000	40000	NE	RSK-175	08/02/11 10:38	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 16:58	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 16:58	JDB	
Methane [74-82-8]	**19300**	D	ug/L	250	180	250	NE	RSK-175	08/01/11 21:51	JDB	

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Description: 3301-MW16 | **Lab Sample ID:** C109019-13 | **Received:** 07/28/11 10:30

Matrix: Ground Water | **Sampled:** 07/27/11 16:05 | **Work Order:** C109019

Project: Edgecombe County Landfill | **Sampled By:** Michelle Logut, Jerry Paul

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 07:08	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 07:08	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 07:08	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 07:08	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 07:08	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 07:08	JWJ	
Lactic Acid [50-21-5]	110	U	ug/L	1	110	500	NE	VGC-13	08/02/11 07:08	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 07:08	JWJ	
Propionic Acid [79-09-4]	170	U	ug/L	1	170	500	NE	VGC-13	08/02/11 07:08	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 07:08	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*20000*	*1*	*20000*	*98 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 07:08*	*JWJ*	

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Description:	3301-MW16	**Lab Sample ID:**	C109019-13	**Received:**	07/28/11 10:30
Matrix:	Ground Water	**Sampled:**	07/27/11 16:05	**Work Order:**	C109019
Project:	Edgecombe County Landfill	**Sampled By:**	Michelle Logut, Jerry Paul		

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**12000**		ug/L	1	280	1000	NE	SM18 5310B	08/01/11 20:29	JSW	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-MW15 | **Lab Sample ID:** C109374-01 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 09:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 16:36	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 16:36	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
1,1-Dichloroethane [75-34-3] ^	**0.88**	J	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 16:36	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 16:36	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 16:36	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 16:36	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
1,2-Dichloropropane [78-87-5] ^	**2.0**		ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 16:36	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 16:36	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 16:36	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 16:36	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 16:36	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 16:36	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 16:36	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 16:36	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 16:36	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Chlorobenzene [108-90-7] ^	**2.0**	J	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 16:36	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 16:36	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 16:36	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**21**		ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 16:36	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 16:36	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 16:36	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 16:36	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	**0.62**	J	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 16:36	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 16:36	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 16:36	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 16:36	JKG	
Vinyl chloride [75-01-4] ^	**3.7**		ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 16:36	JKG	

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Description: 3301-MW15 | **Lab Sample ID:** C109374-01 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 09:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 16:36	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*101 %*	*51-122*	*1H05015*	*EPA 8260B*	*08/05/11 16:36*	*JKG*	
Dibromofluoromethane	*51*	*1*	*50.0*	*101 %*	*68-117*	*1H05015*	*EPA 8260B*	*08/05/11 16:36*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*96 %*	*69-110*	*1H05015*	*EPA 8260B*	*08/05/11 16:36*	*JKG*	

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Description:	3301-MW15	**Lab Sample ID:**	C109374-01	**Received:**	07/29/11 09:55
Matrix:	Ground Water	**Sampled:**	07/28/11 09:30	**Work Order:**	C109374
Project:	Edgecombe County Landfill	**Sampled By:**	Jerry Paul/Bob Bryant		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 14:44	NLH	

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Description: 3301-MW15 | **Lab Sample ID:** C109374-01 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 09:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/08/11 16:54	VLO	
Arsenic [7440-38-2] ^	**9.98**	J	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:47	JDH	
Barium [7440-39-3] ^	**429**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:47	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:47	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:47	JDH	
Chromium [7440-47-3] ^	**4.29**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:47	JDH	
Cobalt [7440-48-4] ^	**14.1**		ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:47	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:47	JDH	
Iron [7439-89-6] ^	**28700**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:47	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:47	JDH	
Manganese [7439-96-5] ^	**8400**		ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 12:47	JDH	
Nickel [7440-02-0] ^	**10.8**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:47	JDH	
Selenium [7782-49-2] ^	**1.35**	J	ug/L	1	0.830	1.00	10	EPA 6020A	08/08/11 16:54	VLO	
Silver [7440-22-4] ^	**1.94**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:47	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/08/11 16:54	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:47	JDH	
Zinc [7440-66-6] ^	**4.98**	J	ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:47	JDH	

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Description: 3301-MW15 | **Lab Sample ID:** C109374-01 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 09:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	07/29/11 17:24	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**32000**		ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**14000**	B	ug/L	1	47	5000	NE	EPA 300.0	08/08/11 18:17	CCB	J-01
Nitrate as N [14797-55-8] ^	**93**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**13000**	JB	ug/L	1	20	5000	250000	EPA 300.0	08/08/11 18:17	CCB	J-01
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**340000**	D	ug/L	4	48000	60000	NE	EPA 310.2	08/07/11 18:36	CCB	
Total Dissolved Solids [ECL-0156] ^	**470000**		ug/L	1	10000	10000	NE	SM 2540C	08/03/11 14:49	KER	

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Description: 3301-MW15
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-01
Sampled: 07/28/11 09:30
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**269000**	D	ug/L	100	130000	200000	NE	RSK-175	08/02/11 12:02	JDB	
Ethane [74-84-0]	**1.68**	J	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 18:46	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 18:46	JDB	
Methane [74-82-8]	**1600**	D	ug/L	100	72.0	100	NE	RSK-175	08/02/11 12:02	JDB	

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Description: 3301-MW15 | **Lab Sample ID:** C109374-01 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 09:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 11:16	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 11:16	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 11:16	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 11:16	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 11:16	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 11:16	JWJ	
Lactic Acid [50-21-5]	**290**	J	ug/L	1	110	500	NE	VGC-13	08/02/11 11:16	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 11:16	JWJ	
Propionic Acid [79-09-4]	170	U	ug/L	1	170	500	NE	VGC-13	08/02/11 11:16	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 11:16	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*20000*	*1*	*20000*	*100 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 11:16*	*JWJ*	

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Description: 3301-MW15 | **Lab Sample ID:** C109374-01 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 09:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**4200**		ug/L	1	280	1000	NE	SM18 5310B	08/02/11 14:31	JSW	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-MW12 | **Lab Sample ID:** C109374-03 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 10:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 17:07	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 17:07	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
1,1-Dichloroethane [75-34-3] ^	**1.5**	J	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 17:07	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 17:07	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 17:07	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 17:07	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**7.2**		ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 17:07	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 17:07	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 17:07	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 17:07	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 17:07	JKG	
Benzene [71-43-2] ^	**4.1**		ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 17:07	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 17:07	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 17:07	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 17:07	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Chlorobenzene [108-90-7] ^	**5.1**		ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 17:07	JKG	
Chloroethane [75-00-3] ^	**1.8**	J	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 17:07	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 17:07	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**0.83**	J	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 17:07	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 17:07	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 17:07	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 17:07	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 17:07	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 17:07	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 17:07	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 17:07	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 17:07	JKG	

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Description: 3301-MW12 | **Lab Sample ID:** C109374-03 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 10:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 17:07	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*51-122*	*1H05015*	*EPA 8260B*	*08/05/11 17:07*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*101 %*	*68-117*	*1H05015*	*EPA 8260B*	*08/05/11 17:07*	*JKG*	
Toluene-d8	*47*	*1*	*50.0*	*93 %*	*69-110*	*1H05015*	*EPA 8260B*	*08/05/11 17:07*	*JKG*	

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Description: 3301-MW12 | **Lab Sample ID:** C109374-03 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 10:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 14:46	NLH	

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Description: 3301-MW12 | **Lab Sample ID:** C109374-03 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 10:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/08/11 16:58	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:49	JDH	
Barium [7440-39-3] ^	**322**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:49	JDH	
Beryllium [7440-41-7] ^	**0.528**	J	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:49	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:49	JDH	
Chromium [7440-47-3] ^	**1.21**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:49	JDH	
Cobalt [7440-48-4] ^	**15.1**		ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:49	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:49	JDH	
Iron [7439-89-6] ^	**11800**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:49	JDH	
Lead [7439-92-1] ^	**1.91**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:49	JDH	
Manganese [7439-96-5] ^	**105**		ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 12:49	JDH	
Nickel [7440-02-0] ^	**21.6**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:49	JDH	
Selenium [7782-49-2] ^	**15.9**		ug/L	1	0.830	1.00	10	EPA 6020A	08/08/11 16:58	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:49	JDH	
Thallium [7440-28-0] ^	**0.213**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/08/11 16:58	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:49	JDH	
Zinc [7440-66-6] ^	**173**		ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:49	JDH	

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Description: 3301-MW12 | **Lab Sample ID:** C109374-03 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 10:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	07/29/11 17:24	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**53000**		ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**220000**	BD	ug/L	4	190	20000	NE	EPA 300.0	08/08/11 18:34	CCB	QB-01
Nitrate as N [14797-55-8] ^	**78**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**50000**	JBD	ug/L	4	80	20000	250000	EPA 300.0	08/08/11 18:34	CCB	QB-01
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	12000	U	ug/L	1	12000	15000	NE	EPA 310.2	08/07/11 18:37	CCB	
Total Dissolved Solids [ECL-0156] ^	**540000**		ug/L	1	10000	10000	NE	SM 2540C	08/03/11 14:49	KER	

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Description: 3301-MW12
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-03
Sampled: 07/28/11 10:30
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**1310000**	D	ug/L	20	26000	40000	NE	RSK-175	08/02/11 12:18	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 19:09	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 19:09	JDB	
Methane [74-82-8]	**260**	D	ug/L	20	14.4	20.0	NE	RSK-175	08/02/11 12:18	JDB	

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Description: 3301-MW12 | **Lab Sample ID:** C109374-03 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 10:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 12:18	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 12:18	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 12:18	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 12:18	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 12:18	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 12:18	JWJ	
Lactic Acid [50-21-5]	110	U	ug/L	1	110	500	NE	VGC-13	08/02/11 12:18	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 12:18	JWJ	
Propionic Acid [79-09-4]	**12000**		ug/L	1	170	500	NE	VGC-13	08/02/11 12:18	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 12:18	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*19000*	*1*	*20000*	*97 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 12:18*	*JWJ*	

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Description: 3301-MW12 | **Lab Sample ID:** C109374-03 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 10:30 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**11000**		ug/L	1	280	1000	NE	SM18 5310B	08/02/11 14:56	JSW	

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Description: 3301-MW13 | **Lab Sample ID:** C109374-05 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 11:40 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 17:37	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 17:37	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
1,1-Dichloroethane [75-34-3] ^	**0.74**	J	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 17:37	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 17:37	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 17:37	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 17:37	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**2.2**		ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 17:37	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 17:37	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 17:37	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 17:37	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 17:37	JKG	
Benzene [71-43-2] ^	**1.2**		ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 17:37	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 17:37	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 17:37	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 17:37	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Chlorobenzene [108-90-7] ^	**10**		ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 17:37	JKG	
Chloroethane [75-00-3] ^	**0.76**	J	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 17:37	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 17:37	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**14**		ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 17:37	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 17:37	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 17:37	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 17:37	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 17:37	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 17:37	JKG	
Trichloroethene [79-01-6] ^	**1.0**		ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 17:37	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 17:37	JKG	
Vinyl chloride [75-01-4] ^	**2.2**		ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 17:37	JKG	

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Description: 3301-MW13 | **Lab Sample ID:** C109374-05 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 11:40 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 17:37	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*99 %*	*51-122*	*1H05015*	*EPA 8260B*	*08/05/11 17:37*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*99 %*	*68-117*	*1H05015*	*EPA 8260B*	*08/05/11 17:37*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*96 %*	*69-110*	*1H05015*	*EPA 8260B*	*08/05/11 17:37*	*JKG*	

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Description: 3301-MW13 | **Lab Sample ID:** C109374-05 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 11:40 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 14:49	NLH	

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Description: 3301-MW13 | **Lab Sample ID:** C109374-05 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 11:40 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/08/11 17:01	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 12:51	JDH	
Barium [7440-39-3] ^	**202**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 12:51	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 12:51	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 12:51	JDH	
Chromium [7440-47-3] ^	**10.3**		ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 12:51	JDH	
Cobalt [7440-48-4] ^	**1540**		ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 12:51	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 12:51	JDH	
Iron [7439-89-6] ^	**42900**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 12:51	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:51	JDH	
Manganese [7439-96-5] ^	**38700**	D	ug/L	5	5.50	50.0	50	EPA 6010C	08/02/11 13:09	JDH	
Nickel [7440-02-0] ^	**307**		ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 12:51	JDH	
Selenium [7782-49-2] ^	**11.0**		ug/L	1	0.830	1.00	10	EPA 6020A	08/08/11 17:01	VLO	
Silver [7440-22-4] ^	**5.61**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 12:51	JDH	
Thallium [7440-28-0] ^	**1.27**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/08/11 17:01	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 12:51	JDH	
Zinc [7440-66-6] ^	**170**		ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 12:51	JDH	

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Description: 3301-MW13 | **Lab Sample ID:** C109374-05 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 11:40 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	07/29/11 17:24	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**96000**		ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**120000**	BD	ug/L	2	94	10000	NE	EPA 300.0	08/08/11 18:52	CCB	QB-01
Nitrate as N [14797-55-8] ^	**56**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**35000**	JBD	ug/L	2	40	10000	250000	EPA 300.0	08/08/11 18:52	CCB	QB-01
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**230000**	D	ug/L	2	24000	30000	NE	EPA 310.2	08/07/11 18:38	CCB	
Total Dissolved Solids [ECL-0156] ^	**560000**		ug/L	1	10000	10000	NE	SM 2540C	08/03/11 14:49	KER	

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Description: 3301-MW13
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-05
Sampled: 07/28/11 11:40
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**816000**	D	ug/L	100	130000	200000	NE	RSK-175	08/02/11 12:35	JDB	
Ethane [74-84-0]	**1.86**	J	ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 19:25	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 19:25	JDB	
Methane [74-82-8]	**1270**	D	ug/L	100	72.0	100	NE	RSK-175	08/02/11 12:35	JDB	

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Description: 3301-MW13 | **Lab Sample ID:** C109374-05 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 11:40 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 13:21	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 13:21	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 13:21	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 13:21	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 13:21	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 13:21	JWJ	
Lactic Acid [50-21-5]	110	U	ug/L	1	110	500	NE	VGC-13	08/02/11 13:21	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 13:21	JWJ	
Propionic Acid [79-09-4]	**5500**		ug/L	1	170	500	NE	VGC-13	08/02/11 13:21	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 13:21	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*18000*	*1*	*20000*	*90 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 13:21*	*JWJ*	

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Description:	3301-MW13	**Lab Sample ID:**	C109374-05	**Received:**	07/29/11 09:55
Matrix:	Ground Water	**Sampled:**	07/28/11 11:40	**Work Order:**	C109374
Project:	Edgecombe County Landfill	**Sampled By:**	Jerry Paul/Bob Bryant		

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**7900**		ug/L	1	280	1000	NE	SM18 5310B	08/02/11 15:22	JSW	

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Description: 3301-MW13 Dissolved
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-06
Sampled: 07/28/11 11:40
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Metals (Dissolved) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/22/11 10:13	VLO	
Arsenic [7440-38-2] ^	**3.74**	JB	ug/L	1	2.80	10.0	10	EPA 6010C	08/17/11 10:31	JDH	J
Barium [7440-39-3] ^	**161**		ug/L	1	1.00	10.0	100	EPA 6010C	08/17/11 10:31	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/17/11 10:31	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/17/11 10:31	JDH	
Chromium [7440-47-3] ^	**11.0**		ug/L	1	1.00	10.0	10	EPA 6010C	08/17/11 10:31	JDH	
Cobalt [7440-48-4] ^	**1460**		ug/L	1	1.10	10.0	10	EPA 6010C	08/17/11 10:31	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/17/11 10:31	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/17/11 10:31	JDH	
Nickel [7440-02-0] ^	**292**		ug/L	1	1.80	10.0	50	EPA 6010C	08/17/11 10:31	JDH	
Selenium [7782-49-2] ^	**8.64**	J	ug/L	1	0.830	1.00	10	EPA 6020A	08/22/11 10:13	VLO	
Silver [7440-22-4] ^	**7.28**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/17/11 10:31	JDH	
Thallium [7440-28-0] ^	**1.25**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/22/11 10:13	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/17/11 10:31	JDH	
Zinc [7440-66-6] ^	**154**		ug/L	1	3.80	10.0	10	EPA 6010C	08/17/11 10:31	JDH	

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Description: 3301-MW5 | **Lab Sample ID:** C109374-07 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 13:35 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	9.0	UD	ug/L	10	9.0	10	5	EPA 8260B	08/05/11 18:07	JKG	
1,1,1-Trichloroethane [71-55-6] ^	6.5	UD	ug/L	10	6.5	10	1	EPA 8260B	08/05/11 18:07	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	7.5	UD	ug/L	10	7.5	10	3	EPA 8260B	08/05/11 18:07	JKG	
1,1,2-Trichloroethane [79-00-5] ^	6.6	UD	ug/L	10	6.6	10	1	EPA 8260B	08/05/11 18:07	JKG	
1,1-Dichloroethane [75-34-3] ^	**9.0**	JD	ug/L	10	0.80	10	5	EPA 8260B	08/05/11 18:07	JKG	
1,1-Dichloroethene [75-35-4] ^	6.0	UD	ug/L	10	6.0	10	5	EPA 8260B	08/05/11 18:07	JKG	
1,2,3-Trichloropropane [96-18-4] ^	7.2	UD	ug/L	10	7.2	10	1	EPA 8260B	08/05/11 18:07	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	4.8	UD	ug/L	10	4.8	10	13	EPA 8260B	08/05/11 18:07	JKG	
1,2-Dibromoethane [106-93-4] ^	6.6	UD	ug/L	10	6.6	10	1	EPA 8260B	08/05/11 18:07	JKG	
1,2-Dichlorobenzene [95-50-1] ^	1.1	UD	ug/L	10	1.1	10	5	EPA 8260B	08/05/11 18:07	JKG	
1,2-Dichloroethane [107-06-2] ^	4.7	UD	ug/L	10	4.7	10	1	EPA 8260B	08/05/11 18:07	JKG	
1,2-Dichloropropane [78-87-5] ^	5.9	UD	ug/L	10	5.9	10	1	EPA 8260B	08/05/11 18:07	JKG	
1,4-Dichlorobenzene [106-46-7] ^	7.9	UD	ug/L	10	7.9	10	1	EPA 8260B	08/05/11 18:07	JKG	
2-Butanone [78-93-3] ^	13	UD	ug/L	10	13	50	100	EPA 8260B	08/05/11 18:07	JKG	
2-Hexanone [591-78-6] ^	8.8	UD	ug/L	10	8.8	50	50	EPA 8260B	08/05/11 18:07	JKG	
4-Methyl-2-pentanone [108-10-1] ^	11	UD	ug/L	10	11	50	100	EPA 8260B	08/05/11 18:07	JKG	
Acetone [67-64-1] ^	12	UD	ug/L	10	12	50	100	EPA 8260B	08/05/11 18:07	JKG	
Acrylonitrile [107-13-1] ^	35	UD	ug/L	10	35	100	200	EPA 8260B	08/05/11 18:07	JKG	
Benzene [71-43-2] ^	6.8	UD	ug/L	10	6.8	10	1	EPA 8260B	08/05/11 18:07	JKG	
Bromochloromethane [74-97-5] ^	8.7	UD	ug/L	10	8.7	10	3	EPA 8260B	08/05/11 18:07	JKG	
Bromodichloromethane [75-27-4] ^	7.5	UD	ug/L	10	7.5	10	1	EPA 8260B	08/05/11 18:07	JKG	
Bromoform [75-25-2] ^	6.8	UD	ug/L	10	6.8	10	3	EPA 8260B	08/05/11 18:07	JKG	
Bromomethane [74-83-9] ^	5.8	UD	ug/L	10	5.8	10	10	EPA 8260B	08/05/11 18:07	JKG	
Carbon disulfide [75-15-0] ^	15	UD	ug/L	10	15	50	100	EPA 8260B	08/05/11 18:07	JKG	
Carbon tetrachloride [56-23-5] ^	6.9	UD	ug/L	10	6.9	10	1	EPA 8260B	08/05/11 18:07	JKG	
Chlorobenzene [108-90-7] ^	**15**	D	ug/L	10	7.4	10	3	EPA 8260B	08/05/11 18:07	JKG	
Chloroethane [75-00-3] ^	7.5	UD	ug/L	10	7.5	10	10	EPA 8260B	08/05/11 18:07	JKG	
Chloroform [67-66-3] ^	7.0	UD	ug/L	10	7.0	10	5	EPA 8260B	08/05/11 18:07	JKG	
Chloromethane [74-87-3] ^	5.5	UD	ug/L	10	5.5	10	1	EPA 8260B	08/05/11 18:07	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**620**	D	ug/L	10	7.2	10	5	EPA 8260B	08/05/11 18:07	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.75	UD	ug/L	10	0.75	10	1	EPA 8260B	08/05/11 18:07	JKG	
Dibromochloromethane [124-48-1] ^	6.3	UD	ug/L	10	6.3	10	3	EPA 8260B	08/05/11 18:07	JKG	
Dibromomethane [74-95-3] ^	9.0	UD	ug/L	10	9.0	10	10	EPA 8260B	08/05/11 18:07	JKG	
Ethylbenzene [100-41-4] ^	6.2	UD	ug/L	10	6.2	10	1	EPA 8260B	08/05/11 18:07	JKG	
Iodomethane [74-88-4] ^	17	UD	ug/L	10	17	50	10	EPA 8260B	08/05/11 18:07	JKG	
Methylene chloride [75-09-2] ^	1.4	UD	ug/L	10	1.4	10	1	EPA 8260B	08/05/11 18:07	JKG	
Styrene [100-42-5] ^	0.53	UD	ug/L	10	0.53	10	1	EPA 8260B	08/05/11 18:07	JKG	
Tetrachloroethene [127-18-4] ^	7.3	UD	ug/L	10	7.3	10	1	EPA 8260B	08/05/11 18:07	JKG	
Toluene [108-88-3] ^	8.5	UD	ug/L	10	8.5	10	1	EPA 8260B	08/05/11 18:07	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	1.2	UD	ug/L	10	1.2	10	5	EPA 8260B	08/05/11 18:07	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	5.0	UD	ug/L	10	5.0	10	1	EPA 8260B	08/05/11 18:07	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	7.0	UD	ug/L	10	7.0	10	100	EPA 8260B	08/05/11 18:07	JKG	
Trichloroethene [79-01-6] ^	7.2	UD	ug/L	10	7.2	10	1	EPA 8260B	08/05/11 18:07	JKG	
Trichlorofluoromethane [75-69-4] ^	6.6	UD	ug/L	10	6.6	10	1	EPA 8260B	08/05/11 18:07	JKG	
Vinyl acetate [108-05-4] ^	9.5	UD	ug/L	10	9.5	50	50	EPA 8260B	08/05/11 18:07	JKG	
Vinyl chloride [75-01-4] ^	**32**	D	ug/L	10	6.0	10	1	EPA 8260B	08/05/11 18:07	JKG	

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Description: 3301-MW5 | **Lab Sample ID:** C109374-07 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 13:35 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	21	UD	ug/L	10	21	30	5	EPA 8260B	08/05/11 18:07	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*100 %*	*51-122*	*1H05015*	*EPA 8260B*	*08/05/11 18:07*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*98 %*	*68-117*	*1H05015*	*EPA 8260B*	*08/05/11 18:07*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*97 %*	*69-110*	*1H05015*	*EPA 8260B*	*08/05/11 18:07*	*JKG*	

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Description: 3301-MW5 | **Lab Sample ID:** C109374-07 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 13:35 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/02/11 14:52	NLH	

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Description: 3301-MW5 | **Lab Sample ID:** C109374-07 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 13:35 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/08/11 17:13	VLO	
Arsenic [7440-38-2] ^	**21.2**		ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 13:11	JDH	
Barium [7440-39-3] ^	**230**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 13:11	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 13:11	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 13:11	JDH	
Chromium [7440-47-3] ^	**8.14**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 13:11	JDH	
Cobalt [7440-48-4] ^	**230**		ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 13:11	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 13:11	JDH	
Iron [7439-89-6] ^	**169000**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 13:11	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 13:11	JDH	
Manganese [7439-96-5] ^	**34500**	D	ug/L	5	5.50	50.0	50	EPA 6010C	08/02/11 13:24	JDH	
Nickel [7440-02-0] ^	**55.4**		ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 13:11	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	08/08/11 17:13	VLO	
Silver [7440-22-4] ^	**2.19**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 13:11	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/08/11 17:13	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 13:11	JDH	
Zinc [7440-66-6] ^	**84.5**		ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 13:11	JDH	

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Description: 3301-MW5 | **Lab Sample ID:** C109374-07 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 13:35 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	**5800**		ug/L	1	2000	2000	NE	SM 5210B	07/29/11 17:24	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**100000**		ug/L	1	10000	10000	NE	SM 5220D	08/02/11 16:58	JOC	
Chloride [16887-00-6] ^	**12000**	B	ug/L	1	47	5000	NE	EPA 300.0	08/08/11 19:10	CCB	J-01
Nitrate as N [14797-55-8] ^	**170**	J	ug/L	1	25	100	10000	EPA 353.2	08/08/11 14:13	AJB	
Sulfate as SO4 [14808-79-8] ^	**44000**	JB	ug/L	1	20	5000	250000	EPA 300.0	08/08/11 19:10	CCB	QB-01
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/29/11 13:30	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**400000**	D	ug/L	4	48000	60000	NE	EPA 310.2	08/07/11 18:40	CCB	
Total Dissolved Solids [ECL-0156] ^	**580000**		ug/L	1	10000	10000	NE	SM 2540C	08/03/11 14:49	KER	

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Description: 3301-MW5
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-07
Sampled: 07/28/11 13:35
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**844000**	D	ug/L	20	26000	40000	NE	RSK-175	08/02/11 12:56	JDB	
Ethane [74-84-0]	**2.16**		ug/L	1	1.00	2.00	NE	RSK-175	08/01/11 19:43	JDB	
Ethene [74-85-1]	**5.97**		ug/L	1	2.30	3.00	NE	RSK-175	08/01/11 19:43	JDB	
Methane [74-82-8]	**689**	D	ug/L	20	14.4	20.0	NE	RSK-175	08/02/11 12:56	JDB	

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Description: 3301-MW5 | **Lab Sample ID:** C109374-07 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 13:35 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	200	U	ug/L	1	200	500	NE	VGC-13	08/02/11 14:24	JWJ	
Butyric Acid [107-92-6]	300	U	ug/L	1	300	500	NE	VGC-13	08/02/11 14:24	JWJ	
Hexanoic Acid [142-62-1]	430	U	ug/L	1	430	1000		VGC-13	08/02/11 14:24	JWJ	
HIBA (2-Hydroxyisobutyric Acid) [594-61-6]	79	U	ug/L	1	79	500		VGC-13	08/02/11 14:24	JWJ	
iso-Hexanoic Acid [646-07-1]	790	U	ug/L	1	790	1000		VGC-13	08/02/11 14:24	JWJ	
iso-Pentanoic Acid [503-74-2]	280	U	ug/L	1	280	500		VGC-13	08/02/11 14:24	JWJ	
Lactic Acid [50-21-5]	**410**	J	ug/L	1	110	500	NE	VGC-13	08/02/11 14:24	JWJ	
Pentanoic Acid [109-52-4]	240	U	ug/L	1	240	500		VGC-13	08/02/11 14:24	JWJ	
Propionic Acid [79-09-4]	170	U	ug/L	1	170	500	NE	VGC-13	08/02/11 14:24	JWJ	
Pyruvic Acid [127-17-3]	67	U	ug/L	1	67	500	NE	VGC-13	08/02/11 14:24	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*20000*	*1*	*20000*	*99 %*	*80-124*	*1H01012*	*VGC-13*	*08/02/11 14:24*	*JWJ*	

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Description: 3301-MW5 | **Lab Sample ID:** C109374-07 | **Received:** 07/29/11 09:55

Matrix: Ground Water | **Sampled:** 07/28/11 13:35 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**5600**		ug/L	1	280	1000	NE	SM18 5310B	08/02/11 15:47	JSW	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-Duplicate
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-09
Sampled: 07/28/11 12:00
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	9.0	UD	ug/L	10	9.0	10	5	EPA 8260B	08/08/11 21:55	jkg	
1,1,1-Trichloroethane [71-55-6] ^	6.5	UD	ug/L	10	6.5	10	1	EPA 8260B	08/08/11 21:55	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	7.5	UD	ug/L	10	7.5	10	3	EPA 8260B	08/08/11 21:55	jkg	
1,1,2-Trichloroethane [79-00-5] ^	6.6	UD	ug/L	10	6.6	10	1	EPA 8260B	08/08/11 21:55	jkg	
1,1-Dichloroethane [75-34-3] ^	**9.1**	JD	ug/L	10	0.80	10	5	EPA 8260B	08/08/11 21:55	jkg	
1,1-Dichloroethene [75-35-4] ^	6.0	UD	ug/L	10	6.0	10	5	EPA 8260B	08/08/11 21:55	jkg	
1,2,3-Trichloropropane [96-18-4] ^	7.2	UD	ug/L	10	7.2	10	1	EPA 8260B	08/08/11 21:55	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	4.8	UD	ug/L	10	4.8	10	13	EPA 8260B	08/08/11 21:55	jkg	
1,2-Dibromoethane [106-93-4] ^	6.6	UD	ug/L	10	6.6	10	1	EPA 8260B	08/08/11 21:55	jkg	
1,2-Dichlorobenzene [95-50-1] ^	1.1	UD	ug/L	10	1.1	10	5	EPA 8260B	08/08/11 21:55	jkg	
1,2-Dichloroethane [107-06-2] ^	4.7	UD	ug/L	10	4.7	10	1	EPA 8260B	08/08/11 21:55	jkg	
1,2-Dichloropropane [78-87-5] ^	5.9	UD	ug/L	10	5.9	10	1	EPA 8260B	08/08/11 21:55	jkg	
1,4-Dichlorobenzene [106-46-7] ^	**8.8**	JD	ug/L	10	7.9	10	1	EPA 8260B	08/08/11 21:55	jkg	
2-Butanone [78-93-3] ^	13	UD	ug/L	10	13	50	100	EPA 8260B	08/08/11 21:55	jkg	
2-Hexanone [591-78-6] ^	8.8	UD	ug/L	10	8.8	50	50	EPA 8260B	08/08/11 21:55	jkg	
4-Methyl-2-pentanone [108-10-1] ^	11	UD	ug/L	10	11	50	100	EPA 8260B	08/08/11 21:55	jkg	
Acetone [67-64-1] ^	12	UD	ug/L	10	12	50	100	EPA 8260B	08/08/11 21:55	jkg	
Acrylonitrile [107-13-1] ^	35	UD	ug/L	10	35	100	200	EPA 8260B	08/08/11 21:55	jkg	
Benzene [71-43-2] ^	6.8	UD	ug/L	10	6.8	10	1	EPA 8260B	08/08/11 21:55	jkg	
Bromochloromethane [74-97-5] ^	8.7	UD	ug/L	10	8.7	10	3	EPA 8260B	08/08/11 21:55	jkg	
Bromodichloromethane [75-27-4] ^	7.5	UD	ug/L	10	7.5	10	1	EPA 8260B	08/08/11 21:55	jkg	
Bromoform [75-25-2] ^	6.8	UD	ug/L	10	6.8	10	3	EPA 8260B	08/08/11 21:55	jkg	
Bromomethane [74-83-9] ^	5.8	UD	ug/L	10	5.8	10	10	EPA 8260B	08/08/11 21:55	jkg	
Carbon disulfide [75-15-0] ^	15	UD	ug/L	10	15	50	100	EPA 8260B	08/08/11 21:55	jkg	
Carbon tetrachloride [56-23-5] ^	6.9	UD	ug/L	10	6.9	10	1	EPA 8260B	08/08/11 21:55	jkg	
Chlorobenzene [108-90-7] ^	**15**	D	ug/L	10	7.4	10	3	EPA 8260B	08/08/11 21:55	jkg	
Chloroethane [75-00-3] ^	7.5	UD	ug/L	10	7.5	10	10	EPA 8260B	08/08/11 21:55	jkg	
Chloroform [67-66-3] ^	7.0	UD	ug/L	10	7.0	10	5	EPA 8260B	08/08/11 21:55	jkg	
Chloromethane [74-87-3] ^	5.5	UD	ug/L	10	5.5	10	1	EPA 8260B	08/08/11 21:55	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	**650**	D	ug/L	10	7.2	10	5	EPA 8260B	08/08/11 21:55	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.75	UD	ug/L	10	0.75	10	1	EPA 8260B	08/08/11 21:55	jkg	
Dibromochloromethane [124-48-1] ^	6.3	UD	ug/L	10	6.3	10	3	EPA 8260B	08/08/11 21:55	jkg	
Dibromomethane [74-95-3] ^	9.0	UD	ug/L	10	9.0	10	10	EPA 8260B	08/08/11 21:55	jkg	
Ethylbenzene [100-41-4] ^	6.2	UD	ug/L	10	6.2	10	1	EPA 8260B	08/08/11 21:55	jkg	
Iodomethane [74-88-4] ^	17	UD	ug/L	10	17	50	10	EPA 8260B	08/08/11 21:55	jkg	
Methylene chloride [75-09-2] ^	1.4	UD	ug/L	10	1.4	10	1	EPA 8260B	08/08/11 21:55	jkg	
Styrene [100-42-5] ^	0.53	UD	ug/L	10	0.53	10	1	EPA 8260B	08/08/11 21:55	jkg	
Tetrachloroethene [127-18-4] ^	7.3	UD	ug/L	10	7.3	10	1	EPA 8260B	08/08/11 21:55	jkg	
Toluene [108-88-3] ^	**8.7**	JD	ug/L	10	8.5	10	1	EPA 8260B	08/08/11 21:55	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	**4.9**	JD	ug/L	10	1.2	10	5	EPA 8260B	08/08/11 21:55	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	5.0	UD	ug/L	10	5.0	10	1	EPA 8260B	08/08/11 21:55	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	7.0	UD	ug/L	10	7.0	10	100	EPA 8260B	08/08/11 21:55	jkg	
Trichloroethene [79-01-6] ^	7.2	UD	ug/L	10	7.2	10	1	EPA 8260B	08/08/11 21:55	jkg	
Trichlorofluoromethane [75-69-4] ^	6.6	UD	ug/L	10	6.6	10	1	EPA 8260B	08/08/11 21:55	jkg	
Vinyl acetate [108-05-4] ^	9.5	UD	ug/L	10	9.5	50	50	EPA 8260B	08/08/11 21:55	jkg	
Vinyl chloride [75-01-4] ^	**25**	D	ug/L	10	6.0	10	1	EPA 8260B	08/08/11 21:55	jkg	

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Description: 3301-Duplicate
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-09
Sampled: 07/28/11 12:00
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	21	UD	ug/L	10	21	30	5	EPA 8260B	08/08/11 21:55	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*54*	*1*	*50.0*	*108 %*	*51-122*	*1H08006*	*EPA 8260B*	*08/08/11 21:55*	*jkg*	
Dibromofluoromethane	*47*	*1*	*50.0*	*95 %*	*68-117*	*1H08006*	*EPA 8260B*	*08/08/11 21:55*	*jkg*	
Toluene-d8	*53*	*1*	*50.0*	*106 %*	*69-110*	*1H08006*	*EPA 8260B*	*08/08/11 21:55*	*jkg*	

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Description: 3301-Duplicate
Matrix: Ground Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-09
Sampled: 07/28/11 12:00
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/08/11 17:16	VLO	
Arsenic [7440-38-2] ^	**24.7**		ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 13:14	JDH	
Barium [7440-39-3] ^	**227**		ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 13:14	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 13:14	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 13:14	JDH	
Chromium [7440-47-3] ^	**7.61**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 13:14	JDH	
Cobalt [7440-48-4] ^	**227**		ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 13:14	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 13:14	JDH	
Iron [7439-89-6] ^	**169000**		ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 13:14	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 13:14	JDH	
Manganese [7439-96-5] ^	**34300**	D	ug/L	5	5.50	50.0	50	EPA 6010C	08/02/11 13:26	JDH	
Nickel [7440-02-0] ^	**54.1**		ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 13:14	JDH	
Selenium [7782-49-2] ^	**1.64**	J	ug/L	1	0.830	1.00	10	EPA 6020A	08/08/11 17:16	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 13:14	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/08/11 17:16	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 13:14	JDH	
Zinc [7440-66-6] ^	**83.5**		ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 13:14	JDH	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-Equipment Blank | **Lab Sample ID:** C109374-11 | **Received:** 07/29/11 09:55

Matrix: Water | **Sampled:** 07/28/11 14:10 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** Jerry Paul/Bob Bryant

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 19:07	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 19:07	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 19:07	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 19:07	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 19:07	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 19:07	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 19:07	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 19:07	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 19:07	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 19:07	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 19:07	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 19:07	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 19:07	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 19:07	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 19:07	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 19:07	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 19:07	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 19:07	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 19:07	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 19:07	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 19:07	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 19:07	JKG	
Methylene chloride [75-09-2] ^	**0.44**	J	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 19:07	JKG	O-01
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 19:07	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 19:07	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 19:07	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 19:07	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 19:07	JKG	

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Description: 3301-Equipment Blank
Matrix: Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-11
Sampled: 07/28/11 14:10
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 19:07	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*101 %*	*51-122*	*1H05015*	*EPA 8260B*	*08/05/11 19:07*	*JKG*	
Dibromofluoromethane	*53*	*1*	*50.0*	*106 %*	*68-117*	*1H05015*	*EPA 8260B*	*08/05/11 19:07*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*97 %*	*69-110*	*1H05015*	*EPA 8260B*	*08/05/11 19:07*	*JKG*	

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Description: 3301-Equipment Blank
Matrix: Water
Project: Edgecombe County Landfill

Lab Sample ID: C109374-11
Sampled: 07/28/11 14:10
Sampled By: Jerry Paul/Bob Bryant

Received: 07/29/11 09:55
Work Order: C109374

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	08/08/11 17:20	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/02/11 13:07	JDH	
Barium [7440-39-3] ^	1.00	U	ug/L	1	1.00	10.0	100	EPA 6010C	08/02/11 13:07	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/02/11 13:07	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/02/11 13:07	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/02/11 13:07	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/02/11 13:07	JDH	
Copper [7440-50-8] ^	**2.16**	J	ug/L	1	1.60	10.0	10	EPA 6010C	08/02/11 13:07	JDH	
Iron [7439-89-6] ^	22.0	U	ug/L	1	22.0	50.0	300	EPA 6010C	08/02/11 13:07	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 13:07	JDH	
Manganese [7439-96-5] ^	**1.58**	J	ug/L	1	1.10	10.0	50	EPA 6010C	08/02/11 13:07	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/02/11 13:07	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	08/08/11 17:20	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/02/11 13:07	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	08/08/11 17:20	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/02/11 13:07	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/02/11 13:07	JDH	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: 3301-Trip Blank | **Lab Sample ID:** C109374-12 | **Received:** 07/29/11 09:55

Matrix: Water | **Sampled:** 07/28/11 14:10 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	08/05/11 19:37	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	08/05/11 19:37	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	08/05/11 19:37	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	08/05/11 19:37	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	08/05/11 19:37	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	08/05/11 19:37	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	08/05/11 19:37	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	08/05/11 19:37	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	08/05/11 19:37	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	08/05/11 19:37	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	08/05/11 19:37	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	08/05/11 19:37	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	08/05/11 19:37	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	08/05/11 19:37	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	08/05/11 19:37	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	08/05/11 19:37	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	08/05/11 19:37	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	08/05/11 19:37	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	08/05/11 19:37	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	08/05/11 19:37	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	08/05/11 19:37	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	08/05/11 19:37	JKG	
Methylene chloride [75-09-2] ^	**0.44**	J	ug/L	1	0.14	1.0	1	EPA 8260B	08/05/11 19:37	JKG	O-01
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	08/05/11 19:37	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	08/05/11 19:37	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	08/05/11 19:37	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	08/05/11 19:37	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	08/05/11 19:37	JKG	

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Description: 3301-Trip Blank | **Lab Sample ID:** C109374-12 | **Received:** 07/29/11 09:55

Matrix: Water | **Sampled:** 07/28/11 14:10 | **Work Order:** C109374

Project: Edgecombe County Landfill | **Sampled By:** ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	08/05/11 19:37	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*51-122*	*1H05015*	*EPA 8260B*	*08/05/11 19:37*	*JKG*	
Dibromofluoromethane	*52*	*1*	*50.0*	*105 %*	*68-117*	*1H05015*	*EPA 8260B*	*08/05/11 19:37*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*95 %*	*69-110*	*1H05015*	*EPA 8260B*	*08/05/11 19:37*	*JKG*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1H04025 - EPA 5030B_MS

Blank (1H04025-BLK1) Prepared: 08/04/2011 11:14 Analyzed: 08/04/2011 23:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Ethylbenzene	0.62	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.14	U	1.0	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*50*			*ug/L*	*50.0*		*99*	*51-122*			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1H04025 - EPA 5030B_MS

Blank (1H04025-BLK1) Continued Prepared: 08/04/2011 11:14 Analyzed: 08/04/2011 23:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	*49*			*ug/L*	*50.0*		*99*	*68-117*			
Surrogate: Toluene-d8	*47*			*ug/L*	*50.0*		*94*	*69-110*			

LCS (1H04025-BS1) Prepared: 08/04/2011 11:14 Analyzed: 08/05/2011 00:29

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0		114	75-133			
Benzene	20		1.0	ug/L	20.0		102	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		100	83-117			
Toluene	23		1.0	ug/L	20.0		113	71-118			
Trichloroethene	19		1.0	ug/L	20.0		96	75-115			

Matrix Spike (1H04025-MS1) Prepared: 08/04/2011 11:14 Analyzed: 08/04/2011 23:30

Source: C109568-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.60 U	114	75-133			
Benzene	21		1.0	ug/L	20.0	0.68 U	106	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	105	83-117			
Toluene	24		1.0	ug/L	20.0	0.85 U	118	71-118			
Trichloroethene	19		1.0	ug/L	20.0	0.72 U	96	75-115			

Matrix Spike Dup (1H04025-MSD1) Prepared: 08/04/2011 11:14 Analyzed: 08/04/2011 23:59

Source: C109568-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.60 U	114	75-133	0.4	20	
Benzene	21		1.0	ug/L	20.0	0.68 U	106	81-134	0.2	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	103	83-117	2	16	
Toluene	24		1.0	ug/L	20.0	0.85 U	118	71-118	0.5	17	
Trichloroethene	20		1.0	ug/L	20.0	0.72 U	99	75-115	3	18	

Batch 1H05015 - EPA 5030B_MS

Blank (1H05015-BLK1) Prepared: 08/05/2011 11:07 Analyzed: 08/05/2011 13:38

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1H05015 - EPA 5030B_MS

Blank (1H05015-BLK1) Continued Prepared: 08/05/2011 11:07 Analyzed: 08/05/2011 13:38

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Ethylbenzene	0.62	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.14	U	1.0	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*68-117*			
Surrogate: Toluene-d8	*47*			*ug/L*	*50.0*		*93*	*69-110*			

LCS (1H05015-BS1) Prepared: 08/05/2011 11:07 Analyzed: 08/05/2011 14:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0		96	75-133			
Benzene	19		1.0	ug/L	20.0		97	81-134			
Chlorobenzene	19		1.0	ug/L	20.0		95	83-117			
Toluene	22		1.0	ug/L	20.0		108	71-118			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1H05015 - EPA 5030B_MS

LCS (1H05015-BS1) Continued Prepared: 08/05/2011 11:07 Analyzed: 08/05/2011 14:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	18		1.0	ug/L	20.0		91	75-115			

Matrix Spike (1H05015-MS1) Prepared: 08/05/2011 11:07 Analyzed: 08/05/2011 14:49

Source: C109568-11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	17		1.0	ug/L	20.0	0.60 U	84	75-133			
Benzene	18		1.0	ug/L	20.0	0.68 U	92	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.74 U	96	83-117			
Toluene	22		1.0	ug/L	20.0	0.85 U	108	71-118			
Trichloroethene	17		1.0	ug/L	20.0	0.72 U	85	75-115			

Matrix Spike Dup (1H05015-MSD1) Prepared: 08/05/2011 11:07 Analyzed: 08/05/2011 15:35

Source: C109568-11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0	0.60 U	92	75-133	9	20	
Benzene	20		1.0	ug/L	20.0	0.68 U	100	81-134	9	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.74 U	99	83-117	3	16	
Toluene	22		1.0	ug/L	20.0	0.85 U	112	71-118	3	17	
Trichloroethene	19		1.0	ug/L	20.0	0.72 U	96	75-115	12	18	

Batch 1H08006 - EPA 5030B_MS

Blank (1H08006-BLK1) Prepared: 08/08/2011 09:07 Analyzed: 08/08/2011 13:57

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1H08006 - EPA 5030B_MS

Blank (1H08006-BLK1) Continued Prepared: 08/08/2011 09:07 Analyzed: 08/08/2011 13:57

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Ethylbenzene	0.62	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.14	U	1.0	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*54*			*ug/L*	*50.0*		*109*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*95*	*68-117*			
Surrogate: Toluene-d8	*52*			*ug/L*	*50.0*		*105*	*69-110*			

LCS (1H08006-BS1) Prepared: 08/08/2011 09:07 Analyzed: 08/08/2011 14:27

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	24		1.0	ug/L	20.0		121	75-133			
Benzene	24		1.0	ug/L	20.0		118	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		101	83-117			
Toluene	24		1.0	ug/L	20.0		118	71-118			
Trichloroethene	18		1.0	ug/L	20.0		90	75-115			

Matrix Spike (1H08006-MS1) Prepared: 08/08/2011 09:07 Analyzed: 08/08/2011 14:57

Source: C109747-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	24		1.0	ug/L	20.0	0.60 U	120	75-133			
Benzene	24		1.0	ug/L	20.0	0.68 U	118	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	107	83-117			
Toluene	24		1.0	ug/L	20.0	0.85 U	121	71-118			QM-07
Trichloroethene	19		1.0	ug/L	20.0	0.72 U	95	75-115			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1H08006 - EPA 5030B_MS

Matrix Spike Dup (1H08006-MSD1) Prepared: 08/08/2011 09:07 Analyzed: 08/08/2011 15:27

Source: C109747-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.60 U	112	75-133	7	20	
Benzene	22		1.0	ug/L	20.0	0.68 U	109	81-134	9	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.74 U	98	83-117	8	16	
Toluene	22		1.0	ug/L	20.0	0.85 U	112	71-118	7	17	
Trichloroethene	18		1.0	ug/L	20.0	0.72 U	89	75-115	6	18	

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1H02010 - EPA 245.1

Blank (1H02010-BLK1) Prepared: 08/02/2011 09:53 Analyzed: 08/02/2011 14:55

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.170	U	0.200	ug/L							

LCS (1H02010-BS1) Prepared: 08/02/2011 09:53 Analyzed: 08/02/2011 14:58

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.82		0.200	ug/L	5.00		96	85-115			

Matrix Spike (1H02010-MS1) Prepared: 08/02/2011 09:53 Analyzed: 08/02/2011 15:10

Source: C108145-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.86		0.200	ug/L	5.00	0.170 U	97	85-115			

Matrix Spike Dup (1H02010-MSD1) Prepared: 08/02/2011 09:53 Analyzed: 08/02/2011 15:13

Source: C108145-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.91		0.200	ug/L	5.00	0.170 U	98	85-115	1	15	

Batch 1H02011 - EPA 245.1

Blank (1H02011-BLK1) Prepared: 08/02/2011 09:56 Analyzed: 08/02/2011 14:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.170	U	0.200	ug/L							

LCS (1H02011-BS1) Prepared: 08/02/2011 09:56 Analyzed: 08/02/2011 14:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.99		0.200	ug/L	5.00		100	85-115			

Matrix Spike (1H02011-MS1) Prepared: 08/02/2011 09:56 Analyzed: 08/02/2011 14:11

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1H02011 - EPA 245.1

Matrix Spike (1H02011-MS1) Continued Prepared: 08/02/2011 09:56 Analyzed: 08/02/2011 14:11

Source: C107179-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.45		0.200	ug/L	5.00	0.170 U	89	85-115			

Matrix Spike Dup (1H02011-MSD1) Prepared: 08/02/2011 09:56 Analyzed: 08/02/2011 14:14

Source: C107179-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.43		0.200	ug/L	5.00	0.170 U	89	85-115	0.5	15	

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1G29015 - EPA 3005A

Blank (1G29015-BLK1) Prepared: 07/29/2011 10:07 Analyzed: 08/10/2011 15:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (1G29015-BS1) Prepared: 07/29/2011 10:07 Analyzed: 08/10/2011 15:58

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	22.6		2.00	ug/L	25.0		90	80-120			
Selenium	22.7		1.00	ug/L	25.0		91	80-120			
Thallium	24.2		1.00	ug/L	25.0		97	80-120			

Matrix Spike (1G29015-MS1) Prepared: 07/29/2011 10:07 Analyzed: 08/10/2011 16:05

Source: C107178-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	23.0		2.00	ug/L	25.0	0.220 U	92	75-125			
Selenium	23.4		1.00	ug/L	25.0	0.830 U	94	75-125			
Thallium	23.2		1.00	ug/L	25.0	0.110 U	93	75-125			

Matrix Spike Dup (1G29015-MSD1) Prepared: 07/29/2011 10:07 Analyzed: 08/10/2011 16:09

Source: C107178-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	22.4		2.00	ug/L	25.0	0.220 U	90	75-125	3	20	
Selenium	21.4		1.00	ug/L	25.0	0.830 U	86	75-125	9	20	
Thallium	22.5		1.00	ug/L	25.0	0.110 U	90	75-125	3	20	

Post Spike (1G29015-PS1) Prepared: 07/29/2011 10:07 Analyzed: 08/10/2011 16:13

Source: C107178-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1G29015 - EPA 3005A

Post Spike (1G29015-PS1) Continued Prepared: 07/29/2011 10:07 Analyzed: 08/10/2011 16:13

Source: C107178-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	24.0		2.00	ug/L	25.0	0.0150	96	80-120			
Selenium	25.1		1.00	ug/L	25.0	0.121	100	80-120			
Thallium	24.2		1.00	ug/L	25.0	0.0260	97	80-120			

Batch 1H01014 - EPA 3005A

Blank (1H01014-BLK1) Prepared: 08/01/2011 09:58 Analyzed: 08/02/2011 11:56

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Iron	22.0	U	50.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Manganese	1.10	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (1H01014-BS1) Prepared: 08/01/2011 09:58 Analyzed: 08/02/2011 11:59

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	530		10.0	ug/L	500		106	80-120			
Barium	547		10.0	ug/L	500		109	80-120			
Beryllium	265		1.00	ug/L	250		106	80-120			
Cadmium	268		1.00	ug/L	250		107	80-120			
Chromium	518		10.0	ug/L	500		104	80-120			
Cobalt	566		10.0	ug/L	500		113	80-120			
Copper	256		10.0	ug/L	250		102	80-120			
Iron	5370		50.0	ug/L	5000		107	80-120			
Lead	546		10.0	ug/L	500		109	80-120			
Manganese	265		10.0	ug/L	250		106	80-120			
Nickel	525		10.0	ug/L	500		105	80-120			
Silver	249		10.0	ug/L	250		100	80-120			
Vanadium	260		10.0	ug/L	250		104	80-120			
Zinc	536		10.0	ug/L	500		107	80-120			

Matrix Spike (1H01014-MS1) Prepared: 08/01/2011 09:58 Analyzed: 08/02/2011 12:09

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	516		10.0	ug/L	500	2.80 U	103	75-125			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1H01014 - EPA 3005A

Matrix Spike (1H01014-MS1) Continued Prepared: 08/01/2011 09:58 Analyzed: 08/02/2011 12:09

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Barium	653		10.0	ug/L	500	112	108	75-125			
Beryllium	266		1.00	ug/L	250	1.68	106	75-125			
Cadmium	266		1.00	ug/L	250	0.544	106	75-125			
Chromium	514		10.0	ug/L	500	1.00 U	103	75-125			
Cobalt	572		10.0	ug/L	500	25.4	109	75-125			
Copper	254		10.0	ug/L	250	1.60 U	102	75-125			
Iron	9130		50.0	ug/L	5000	3790	107	75-125			
Lead	530		10.0	ug/L	500	1.90 U	106	75-125			
Manganese	351		10.0	ug/L	250	88.1	105	75-125			
Nickel	545		10.0	ug/L	500	27.6	103	75-125			
Silver	248		10.0	ug/L	250	1.90 U	99	75-125			
Vanadium	260		10.0	ug/L	250	1.40 U	104	75-125			
Zinc	581		10.0	ug/L	500	54.1	105	75-125			

Matrix Spike Dup (1H01014-MSD1) Prepared: 08/01/2011 09:58 Analyzed: 08/02/2011 12:11

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	520		10.0	ug/L	500	2.80 U	104	75-125	0.9	20	
Barium	651		10.0	ug/L	500	112	108	75-125	0.3	20	
Beryllium	268		1.00	ug/L	250	1.68	107	75-125	0.7	20	
Cadmium	267		1.00	ug/L	250	0.544	106	75-125	0.1	20	
Chromium	517		10.0	ug/L	500	1.00 U	103	75-125	0.6	20	
Cobalt	577		10.0	ug/L	500	25.4	110	75-125	0.8	20	
Copper	255		10.0	ug/L	250	1.60 U	102	75-125	0.2	20	
Iron	9120		50.0	ug/L	5000	3790	107	75-125	0.06	20	
Lead	535		10.0	ug/L	500	1.90 U	107	75-125	0.9	20	
Manganese	351		10.0	ug/L	250	88.1	105	75-125	0.07	20	
Nickel	546		10.0	ug/L	500	27.6	104	75-125	0.3	20	
Silver	251		10.0	ug/L	250	1.90 U	100	75-125	1	20	
Vanadium	261		10.0	ug/L	250	1.40 U	105	75-125	0.6	20	
Zinc	580		10.0	ug/L	500	54.1	105	75-125	0.1	20	

Post Spike (1H01014-PS1) Prepared: 08/01/2011 09:58 Analyzed: 08/02/2011 12:13

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	1.01		0.0100	mg/L	1.00	-0.000468	101	80-120			
Barium	1.15		0.0100	mg/L	1.00	0.112	104	80-120			
Beryllium	0.510		0.00100	mg/L	0.500	0.00168	102	80-120			
Cadmium	0.519		0.00100	mg/L	0.500	0.000544	104	80-120			
Chromium	1.02		0.0100	mg/L	1.00	0.000356	102	80-120			
Cobalt	1.04		0.0100	mg/L	1.00	0.0254	101	80-120			
Copper	0.506		0.0100	mg/L	0.500	0.000200	101	80-120			
Iron	14.2		0.0500	mg/L	10.0	3.79	104	80-120			
Lead	1.01		0.0100	mg/L	1.00	0.00186	101	80-120			
Manganese	0.602		0.0100	mg/L	0.500	0.0881	103	80-120			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1H01014 - EPA 3005A

Post Spike (1H01014-PS1) Continued Prepared: 08/01/2011 09:58 Analyzed: 08/02/2011 12:13

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nickel	1.03		0.0100	mg/L	1.00	0.0276	100	80-120			
Silver	0.491		0.0100	mg/L	0.500	0.000440	98	80-120			
Vanadium	0.515		0.0100	mg/L	0.500	0.000171	103	80-120			
Zinc	1.08		0.0100	mg/L	1.00	0.0541	102	80-120			

Batch 1H01018 - EPA 3005A

Blank (1H01018-BLK1) Prepared: 08/01/2011 10:11 Analyzed: 08/08/2011 16:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (1H01018-BS1) Prepared: 08/01/2011 10:11 Analyzed: 08/08/2011 16:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.1		2.00	ug/L	25.0		100	80-120			
Selenium	25.5		1.00	ug/L	25.0		102	80-120			
Thallium	25.6		1.00	ug/L	25.0		102	80-120			

Matrix Spike (1H01018-MS1) Prepared: 08/01/2011 10:11 Analyzed: 08/08/2011 16:15

Source: C109355-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	26.2		2.00	ug/L	25.0	0.257	104	75-125			
Selenium	27.1		1.00	ug/L	25.0	0.830 U	108	75-125			
Thallium	23.3		1.00	ug/L	25.0	0.110 U	93	75-125			

Matrix Spike Dup (1H01018-MSD1) Prepared: 08/01/2011 10:11 Analyzed: 08/08/2011 16:28

Source: C109355-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	26.3		2.00	ug/L	25.0	0.257	104	75-125	0.6	20	
Selenium	28.6		1.00	ug/L	25.0	0.830 U	114	75-125	5	20	
Thallium	23.4		1.00	ug/L	25.0	0.110 U	94	75-125	0.6	20	

Post Spike (1H01018-PS1) Prepared: 08/01/2011 10:11 Analyzed: 08/08/2011 16:32

Source: C109355-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	26.9		2.00	ug/L	25.0	0.257	107	80-120			
Selenium	29.4		1.00	ug/L	25.0	0.677	115	80-120			
Thallium	24.6		1.00	ug/L	25.0	0.0160	98	80-120			

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QUALITY CONTROL

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Batch 1H16009 - EPA 3005A

Blank (1H16009-BLK1) Prepared: 08/16/2011 14:30 Analyzed: 08/17/2011 10:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	**3.42**	**J**	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (1H16009-BS1) Prepared: 08/16/2011 14:30 Analyzed: 08/17/2011 10:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	201	B	10.0	ug/L	200		100	80-120			
Barium	209		10.0	ug/L	200		104	80-120			
Beryllium	19.8		1.00	ug/L	20.0		99	80-120			
Cadmium	20.9		1.00	ug/L	20.0		105	80-120			
Chromium	200		10.0	ug/L	200		100	80-120			
Cobalt	206		10.0	ug/L	200		103	80-120			
Copper	198		10.0	ug/L	200		99	80-120			
Lead	203		10.0	ug/L	200		101	80-120			
Nickel	207		10.0	ug/L	200		104	80-120			
Silver	205		10.0	ug/L	200		102	80-120			
Vanadium	201		10.0	ug/L	200		101	80-120			
Zinc	206		10.0	ug/L	200		103	80-120			

Matrix Spike (1H16009-MS1) Prepared: 08/16/2011 14:30 Analyzed: 08/17/2011 10:12

Source: C109337-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	199	B	10.0	ug/L	200	5.98	96	75-125			
Barium	245		10.0	ug/L	200	41.5	102	75-125			
Beryllium	19.8		1.00	ug/L	20.0	0.100 U	99	75-125			
Cadmium	20.6		1.00	ug/L	20.0	0.360 U	103	75-125			
Chromium	198		10.0	ug/L	200	1.00 U	99	75-125			
Cobalt	201		10.0	ug/L	200	1.10 U	101	75-125			
Copper	204		10.0	ug/L	200	7.60	98	75-125			
Lead	196		10.0	ug/L	200	1.90 U	98	75-125			
Nickel	203		10.0	ug/L	200	2.14	100	75-125			
Silver	202		10.0	ug/L	200	1.90 U	101	75-125			
Vanadium	203		10.0	ug/L	200	1.40 U	101	75-125			
Zinc	585		10.0	ug/L	200	384	101	75-125			

Matrix Spike Dup (1H16009-MSD1) Prepared: 08/16/2011 14:30 Analyzed: 08/17/2011 10:14

Source: C109337-01

QUALITY CONTROL

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Batch 1H16009 - EPA 3005A

Matrix Spike Dup (1H16009-MSD1) Continued Prepared: 08/16/2011 14:30 Analyzed: 08/17/2011 10:14

Source: C109337-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	202	B	10.0	ug/L	200	5.98	98	75-125	1	20	
Barium	249		10.0	ug/L	200	41.5	104	75-125	2	20	
Beryllium	19.8		1.00	ug/L	20.0	0.100 U	99	75-125	0.2	20	
Cadmium	21.0		1.00	ug/L	20.0	0.360 U	105	75-125	2	20	
Chromium	199		10.0	ug/L	200	1.00 U	99	75-125	0.5	20	
Cobalt	204		10.0	ug/L	200	1.10 U	102	75-125	2	20	
Copper	205		10.0	ug/L	200	7.60	99	75-125	0.9	20	
Lead	199		10.0	ug/L	200	1.90 U	99	75-125	1	20	
Nickel	206		10.0	ug/L	200	2.14	102	75-125	2	20	
Silver	203		10.0	ug/L	200	1.90 U	101	75-125	0.5	20	
Vanadium	204		10.0	ug/L	200	1.40 U	102	75-125	0.7	20	
Zinc	587		10.0	ug/L	200	384	101	75-125	0.3	20	

Post Spike (1H16009-PS1) Prepared: 08/16/2011 14:30 Analyzed: 08/17/2011 10:16

Source: C109327-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.196	B	0.0100	mg/L	0.200	0.00299	97	80-120			
Barium	0.253		0.0100	mg/L	0.200	0.0540	100	80-120			
Beryllium	0.0194		0.00100	mg/L	0.0200	-2.43E-5	97	80-120			
Cadmium	0.0203		0.00100	mg/L	0.0200	9.23E-5	101	80-120			
Chromium	0.194		0.0100	mg/L	0.200	0.000191	97	80-120			
Cobalt	0.198		0.0100	mg/L	0.200	0.000344	99	80-120			
Copper	0.206		0.0100	mg/L	0.200	0.0129	96	80-120			
Lead	0.195		0.0100	mg/L	0.200	-0.000881	98	80-120			
Nickel	0.200		0.0100	mg/L	0.200	0.00233	99	80-120			
Silver	0.178		0.0100	mg/L	0.200	0.000212	89	80-120			
Vanadium	0.200		0.0100	mg/L	0.200	0.00104	99	80-120			
Zinc	0.824		0.0100	mg/L	0.200	0.639	92	80-120			

Batch 1H16012 - EPA 3005A

Blank (1H16012-BLK1) Prepared: 08/16/2011 10:12 Analyzed: 08/22/2011 10:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (1H16012-BS1) Prepared: 08/16/2011 10:12 Analyzed: 08/22/2011 10:06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.5		2.00	ug/L	25.0		102	80-120			
Selenium	23.3		1.00	ug/L	25.0		93	80-120			
Thallium	26.1		1.00	ug/L	25.0		104	80-120			

QUALITY CONTROL

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Batch 1H16012 - EPA 3005A

LCS Dup (1H16012-BSD1) Prepared: 08/16/2011 10:12 Analyzed: 08/22/2011 10:10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.9		2.00	ug/L	25.0		104	80-120	2	20	
Selenium	25.3		1.00	ug/L	25.0		101	80-120	8	20	
Thallium	25.8		1.00	ug/L	25.0		103	80-120	1	20	

Classical Chemistry Parameters - Quality Control

Batch 1G28012 - NO PREP

Blank (1G28012-BLK1) Prepared & Analyzed: 07/28/2011 13:15

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	2000	U	2000	ug/L							

LCS (1G28012-BS1) Prepared & Analyzed: 07/28/2011 13:15

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	210		2.0	mg/L	198		106	85-115			

Duplicate (1G28012-DUP1) Prepared & Analyzed: 07/28/2011 13:15

Source: C108532-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	42000		2000	ug/L		56000			29	25	QR-04

Batch 1G28029 - NO PREP

LCS (1G28029-BS1) Prepared: 07/28/2011 13:53 Analyzed: 07/28/2011 14:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1.0		0.10	mg/L	1.00		104	90-110			

Matrix Spike (1G28029-MS1) Prepared: 07/28/2011 13:53 Analyzed: 07/28/2011 14:49

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	0.99		0.10	mg/L	1.00	0.0073	98	90-110			

Matrix Spike Dup (1G28029-MSD1) Prepared: 07/28/2011 13:53 Analyzed: 07/28/2011 14:50

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1.0		0.10	mg/L	1.00	0.0073	101	90-110	3	10	

Batch 1G29008 - NO PREP

Blank (1G29008-BLK1) Prepared: 07/29/2011 12:40 Analyzed: 07/29/2011 13:30

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1G29008 - NO PREP

Blank (1G29008-BLK1) Continued Prepared: 07/29/2011 12:40 Analyzed: 07/29/2011 13:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	10	U	100	ug/L							

LCS (1G29008-BS1) Prepared: 07/29/2011 12:40 Analyzed: 07/29/2011 13:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.39		0.10	mg/L	0.401		96	80-120			

Matrix Spike (1G29008-MS1) Prepared: 07/29/2011 12:40 Analyzed: 07/29/2011 13:30

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.40		0.10	mg/L	0.401	-0.030	106	80-120			

Matrix Spike Dup (1G29008-MSD1) Prepared: 07/29/2011 12:40 Analyzed: 07/29/2011 13:30

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.39		0.10	mg/L	0.401	-0.030	105	80-120	0.9	25	

Batch 1G29011 - NO PREP

Blank (1G29011-BLK1) Prepared & Analyzed: 07/29/2011 17:24

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	2000	U	2000	ug/L							

LCS (1G29011-BS1) Prepared & Analyzed: 07/29/2011 17:24

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	210		2.0	mg/L	198		107	85-115			

Duplicate (1G29011-DUP1) Prepared & Analyzed: 07/29/2011 17:24

Source: C108728-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	2000	U	2000	ug/L		2000 U				25	

Batch 1G29019 - NO PREP

LCS (1G29019-BS1) Prepared: 07/29/2011 14:37 Analyzed: 07/29/2011 14:37

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1.0		0.10	mg/L	1.00		102	90-110			

Matrix Spike (1G29019-MS1) Prepared: 07/29/2011 14:39 Analyzed: 07/29/2011 14:39

Source: C109374-01

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1G29019 - NO PREP

Matrix Spike (1G29019-MS1) Continued Prepared: 07/29/2011 14:39 Analyzed: 07/29/2011 14:39

Source: C109374-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	0.92		0.10	mg/L	1.00	0.0067	92	90-110			

Matrix Spike Dup (1G29019-MSD1) Prepared: 07/29/2011 14:40 Analyzed: 07/29/2011 14:40

Source: C109374-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	0.94		0.10	mg/L	1.00	0.0067	93	90-110	2	10	

Batch 1H02007 - Same

Blank (1H02007-BLK1) Prepared: 08/02/2011 11:02 Analyzed: 08/02/2011 16:58

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	10000	U	10000	ug/L							

LCS (1H02007-BS1) Prepared: 08/02/2011 11:02 Analyzed: 08/02/2011 16:58

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	520		10	mg/L	500		103	90-110			

Matrix Spike (1H02007-MS1) Prepared: 08/02/2011 11:02 Analyzed: 08/02/2011 16:58

Source: C108747-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	620		10	mg/L	500	110	102	90-110			

Matrix Spike Dup (1H02007-MSD1) Prepared: 08/02/2011 11:02 Analyzed: 08/02/2011 16:58

Source: C108747-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	640		10	mg/L	500	110	105	90-110	2	10	

Batch 1H02018 - NO PREP

Blank (1H02018-BLK1) Prepared & Analyzed: 08/02/2011 13:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	10000	U	10000	ug/L							

LCS (1H02018-BS1) Prepared & Analyzed: 08/02/2011 13:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	290		10	mg/L	300		98	90-110			

Duplicate (1H02018-DUP1) Prepared & Analyzed: 08/02/2011 13:19

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1H02018 - NO PREP

Duplicate (1H02018-DUP1) Continued Prepared & Analyzed: 08/02/2011 13:19

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	180000		10000	ug/L		160000			8	10	

Batch 1H03004 - NO PREP

Blank (1H03004-BLK1) Prepared & Analyzed: 08/03/2011 14:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	10000	U	10000	ug/L							

LCS (1H03004-BS1) Prepared & Analyzed: 08/03/2011 14:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	320		10	mg/L	300		108	90-110			

Duplicate (1H03004-DUP1) Prepared & Analyzed: 08/03/2011 14:49

Source: C109178-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	790000		10000	ug/L		770000			3	10	

Batch 1H03018 - NO PREP

Blank (1H03018-BLK1) Prepared: 08/03/2011 10:47 Analyzed: 08/07/2011 18:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	12000	U	15000	ug/L							

LCS (1H03018-BS1) Prepared: 08/03/2011 10:47 Analyzed: 08/07/2011 18:20

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	99		15	mg/L	100		99	80-120			

Matrix Spike (1H03018-MS1) Prepared: 08/03/2011 10:47 Analyzed: 08/07/2011 18:21

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	31		15	mg/L	40.5	12 U	78	80-120			QM-05

Matrix Spike Dup (1H03018-MSD1) Prepared: 08/03/2011 10:47 Analyzed: 08/07/2011 18:22

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	33		15	mg/L	40.5	12 U	81	80-120	5	25	

Batch 1H04003 - NO PREP

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

LCS (1H04003-BS1) Prepared: 08/04/2011 06:31 Analyzed: 08/04/2011 08:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	1.2		0.10	mg/L	1.25		95	90-110			

Matrix Spike (1H04003-MS1) Prepared: 08/04/2011 06:31 Analyzed: 08/04/2011 08:58

Source: C106364-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	0.51		0.10	mg/L	0.513	0.055	88	90-110			QM-05

Matrix Spike Dup (1H04003-MSD1) Prepared: 08/04/2011 06:31 Analyzed: 08/04/2011 09:00

Source: C106364-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	0.50		0.10	mg/L	0.513	0.055	86	90-110	2	10	QM-05

Batch 1H04004 - NO PREP

LCS (1H04004-BS1) Prepared: 08/04/2011 06:33 Analyzed: 08/04/2011 10:20

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	1.3		0.10	mg/L	1.25		103	90-110			

Matrix Spike (1H04004-MS1) Prepared: 08/04/2011 06:33 Analyzed: 08/04/2011 10:24

Source: C109019-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	0.64		0.10	mg/L	0.513	0.13	100	90-110			

Matrix Spike Dup (1H04004-MSD1) Prepared: 08/04/2011 06:33 Analyzed: 08/04/2011 10:27

Source: C109019-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	0.63		0.10	mg/L	0.513	0.13	98	90-110	2	10	

Batch 1H08003 - NO PREP

Blank (1H08003-BLK1) Prepared: 08/08/2011 06:59 Analyzed: 08/08/2011 11:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	**1500**	**J**	5000	ug/L							
Sulfate as SO4	**2000**	**J**	5000	ug/L							

LCS (1H08003-BS1) Prepared: 08/08/2011 06:59 Analyzed: 08/08/2011 11:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	48	B	5.0	mg/L	50.0		96	90-110			
Sulfate as SO4	46	B	5.0	mg/L	50.0		93	90-110			

Matrix Spike (1H08003-MS1) Prepared: 08/08/2011 06:59 Analyzed: 08/08/2011 11:48

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1H08003 - NO PREP

Matrix Spike (1H08003-MS1) Continued Prepared: 08/08/2011 06:59 Analyzed: 08/08/2011 11:48

Source: C109019-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	24	B	5.0	mg/L	20.0	6.2	89	90-110			QM-05
Sulfate as SO4	44	B	5.0	mg/L	20.0	25	97	90-110			

Matrix Spike Dup (1H08003-MSD1) Prepared: 08/08/2011 06:59 Analyzed: 08/08/2011 12:06

Source: C109019-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	24	B	5.0	mg/L	20.0	6.2	90	90-110	1	10	
Sulfate as SO4	44	B	5.0	mg/L	20.0	25	98	90-110	0.3	10	

Batch 1H08004 - NO PREP

Blank (1H08004-BLK1) Prepared: 08/08/2011 07:01 Analyzed: 08/08/2011 19:27

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	**1600**	**J**	5000	ug/L							
Sulfate as SO4	20	U	5000	ug/L							

LCS (1H08004-BS1) Prepared: 08/08/2011 07:01 Analyzed: 08/08/2011 19:45

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	48	B	5.0	mg/L	50.0		97	90-110			
Sulfate as SO4	47		5.0	mg/L	50.0		94	90-110			

Matrix Spike (1H08004-MS1) Prepared: 08/08/2011 07:01 Analyzed: 08/08/2011 20:03

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	53	B	5.0	mg/L	20.0	32	104	90-110			
Sulfate as SO4	60		5.0	mg/L	20.0	40	102	90-110			

Matrix Spike Dup (1H08004-MSD1) Prepared: 08/08/2011 07:01 Analyzed: 08/08/2011 20:20

Source: C109019-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	53	B	5.0	mg/L	20.0	32	105	90-110	0.5	10	
Sulfate as SO4	61		5.0	mg/L	20.0	40	104	90-110	0.6	10	

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 1H01014 - Same

Blank (1H01014-BLK1) Prepared: 08/01/2011 13:24 Analyzed: 08/01/2011 13:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 1H01014 - Same

Blank (1H01014-BLK1) Continued Prepared: 08/01/2011 13:24 Analyzed: 08/01/2011 13:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	1300	U	2000	ug/L							
Ethane	1.00	U	2.00	ug/L							
Ethene	2.30	U	3.00	ug/L							
Methane	0.720	U	1.00	ug/L							

LCS (1H01014-BS1) Prepared: 08/01/2011 13:24 Analyzed: 08/01/2011 13:57

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	23400		2.00	mg/L	25400		92	71-119			
Ethane	472		0.00200	mg/L	500		94	75-123			
Ethene	458		0.00300	mg/L	500		92	72-131			
Methane	461		0.00100	mg/L	500		92	74-116			

LCS Dup (1H01014-BSD1) Prepared: 08/01/2011 13:24 Analyzed: 08/01/2011 14:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	25200		2.00	mg/L	25400		99	71-119	8	10	
Ethane	517		0.00200	mg/L	500		103	75-123	9	14	
Ethene	506		0.00300	mg/L	500		101	72-131	10	12	
Methane	503		0.00100	mg/L	500		101	74-116	9	18	

Duplicate (1H01014-DUP1) Prepared: 08/01/2011 13:24 Analyzed: 08/01/2011 21:12

Source: C109019-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	26800		2000	ug/L		28200			5	200	
Ethane	1.00	U	2.00	ug/L		1.00 U				200	
Ethene	2.30	U	3.00	ug/L		2.30 U				200	
Methane	4.45		1.00	ug/L		4.87			9	200	

Volatile Fatty Acids by HPLC - Quality Control

Batch 1H01012 - NO PREP

Blank (1H01012-BLK1) Prepared: 08/01/2011 13:00 Analyzed: 08/01/2011 14:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	200	U	500	ug/L							
Butyric Acid	300	U	500	ug/L							
Hexanoic Acid	430	U	1000	ug/L							
HIBA (2-Hydroxyisobutyric Acid)	79	U	500	ug/L							
iso-Hexanoic Acid	790	U	1000	ug/L							
iso-Pentanoic Acid	280	U	500	ug/L							
Lactic Acid	110	U	500	ug/L							
Pentanoic Acid	240	U	500	ug/L							
Propionic Acid	170	U	500	ug/L							
Pyruvic Acid	67	U	500	ug/L							
Surrogate: Trimethylacetic acid	*20000*			*ug/L*	*20000*		*101*	*80-124*			

QUALITY CONTROL

Volatile Fatty Acids by HPLC - Quality Control

Batch 1H01012 - NO PREP

LCS (1H01012-BS1) Prepared: 08/01/2011 13:00 Analyzed: 08/01/2011 14:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	20000		500	ug/L	20000		98	73-125			
Butyric Acid	20000		500	ug/L	20000		98	80-120			
Hexanoic Acid	17000		1000	ug/L	20000		86	78-120			
HIBA (2-Hydroxyisobutyric Acid)	23000		500	ug/L	20000		117	80-120			
iso-Hexanoic Acid	18000		1000	ug/L	20000		89	80-120			
iso-Pentanoic Acid	19000		500	ug/L	20000		96	78-120			
Lactic Acid	12000		500	ug/L	20000		60	56-154			
Pentanoic Acid	19000		500	ug/L	20000		93	77-120			
Propionic Acid	18000		500	ug/L	20000		90	80-120			
Pyruvic Acid	21000		500	ug/L	20000		104	37-142			
Surrogate: Trimethylacetic acid	*20000*			*ug/L*	*20000*		*100*	*80-124*			

Matrix Spike (1H01012-MS1) Prepared: 08/01/2011 13:00 Analyzed: 08/01/2011 16:09

Source: B103635-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	21000		500	ug/L	20000	200 U	104	73-125			
Butyric Acid	21000		500	ug/L	20000	300 U	103	80-120			
Hexanoic Acid	18000		1000	ug/L	20000	430 U	91	78-120			
HIBA (2-Hydroxyisobutyric Acid)	24000		500	ug/L	20000	79 U	122	80-120			QM-07
iso-Hexanoic Acid	18000		1000	ug/L	20000	790 U	92	80-120			
iso-Pentanoic Acid	20000		500	ug/L	20000	280 U	102	78-120			
Lactic Acid	13000		500	ug/L	20000	280	65	56-154			
Pentanoic Acid	19000		500	ug/L	20000	240 U	97	77-120			
Propionic Acid	19000		500	ug/L	20000	170 U	96	80-120			
Pyruvic Acid	22000		500	ug/L	20000	67 U	110	37-142			
Surrogate: Trimethylacetic acid	*21000*			*ug/L*	*20000*		*105*	*80-124*			

Matrix Spike Dup (1H01012-MSD1) Prepared: 08/01/2011 13:00 Analyzed: 08/01/2011 17:14

Source: B103635-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	20000		500	ug/L	20000	200 U	102	73-125	2	10	
Butyric Acid	20000		500	ug/L	20000	300 U	102	80-120	1	10	
Hexanoic Acid	18000		1000	ug/L	20000	430 U	91	78-120	0.9	34	
HIBA (2-Hydroxyisobutyric Acid)	24000		500	ug/L	20000	79 U	120	80-120	1	15	
iso-Hexanoic Acid	18000		1000	ug/L	20000	790 U	92	80-120	0.1	15	
iso-Pentanoic Acid	20000		500	ug/L	20000	280 U	101	78-120	0.8	15	
Lactic Acid	13000		500	ug/L	20000	280	64	56-154	2	19	
Pentanoic Acid	19000		500	ug/L	20000	240 U	96	77-120	0.8	10	
Propionic Acid	19000		500	ug/L	20000	170 U	94	80-120	2	10	
Pyruvic Acid	22000		500	ug/L	20000	67 U	109	37-142	1	10	
Surrogate: Trimethylacetic acid	*21000*			*ug/L*	*20000*		*104*	*80-124*			

Classical Chemistry Parameters - Quality Control

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1H01004 - NO PREP

Blank (1H01004-BLK1) Prepared: 08/01/2011 09:15 Analyzed: 08/01/2011 13:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	280	U	1000	ug/L							

LCS (1H01004-BS1) Prepared: 08/01/2011 09:15 Analyzed: 08/01/2011 13:38

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	38000		1000	ug/L	40000		96	80-120			

LCS Dup (1H01004-BSD1) Prepared: 08/01/2011 09:15 Analyzed: 08/01/2011 14:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	39000		1000	ug/L	40000		97	80-120	2	25	

Batch 1H02005 - NO PREP

Blank (1H02005-BLK1) Prepared: 08/02/2011 08:53 Analyzed: 08/02/2011 12:48

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	280	U	1000	ug/L							

LCS (1H02005-BS1) Prepared: 08/02/2011 08:53 Analyzed: 08/02/2011 13:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	38000		1000	ug/L	40000		95	80-120			

LCS Dup (1H02005-BSD1) Prepared: 08/02/2011 08:53 Analyzed: 08/02/2011 13:39

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	37000		1000	ug/L	40000		92	80-120	3	25	

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
B-01	The sample dilutions set-up for the analysis did not meet the oxygen depletion criteria of at least 2 mg/l dissolved oxygen depletion. Therefore the reported result is an estimated value only.
J-01	Result is estimated due to positive results in the associated method blank.
O-01	This compound is a common laboratory contaminant.
QB-01	The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QR-04	Duplicate precision outside acceptance limits due to low analyte concentration.

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Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

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Page 1 of 2

Client Name: S&ME, Inc. (SM001)	Project Number: 1054-07-238D
Address: 3201 Spring Forest Road	Project Name/Desc: Edgecombe County Landfill
City/ST/Zip: Raleigh, NC 27616	PO # / Billing Info
Tel: (919) 872-2660 Fax: (919) 876-3958	Reporting Contact: Michelle Logut
Sampler(s) Name, Affiliation (Print): MICHELLE LOGUT / JERRY PAUL	Billing Contact: Accounts Payable
Sampler(s) Signature: Michelle L Logut	Site Location / Time Zone

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: C109019

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B Appendix 1	Ag/F,As/F,Ba/F,Be/F,Cd/F,Co/F,Cr/F,Cu/F,Ni/F,Pb/F,Sb/F,Se/F,Ti/F,V/F,Zn/F	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Ti,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Ti,V,Zn	Alkalinity 310.2,Chloride SM4500-Cl E,Nitrite as N 353.2,TDS SM2540C	BOD SM5210B	COD SM5220D	Fatty Acids	Hg	Nitrate Calc 353.2	Sample Comments
	3301-MW3B	7/27/11	10:55	GRAB	GW	16	X	X	X		X	X	X	X	X	X	
	3301-MW-4	↓	10:00	↓	GW	16	X	X	X		X	X	X	X	X	X	
	~~3301-MW5~~				~~GW~~	~~16~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	
	3301-MW6	7/27/11	15:05	GRAB	GW	16	X	X	X		X	X	X	X	X	X	
	3301-MW7A	↓	17:00	↓	GW	16	X	X	X		X	X	X	X	X	X	
	3301-MW9	↓	12:05	↓	GW	16	X	X	X		X	X	X	X	X	X	
	~~3301-MW12~~				~~GW~~	~~16~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	
	~~3301-MW13~~				~~GW~~	~~16~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	
	3301-MW14	7/27/11	14:15	GRAB	GW	16	X	X	X		X	X	X	X	X	X	
	~~3301-MW15~~				~~GW~~	~~16~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	
	3301-MW16	7/27/11	16:05	GRAB	GW	16	X	X	X		X	X	X	X	X	X	
	~~3301-SW1~~				~~GW~~	~~5~~	~~X~~	~~X~~		~~X~~							
						<-- Total # of Containers											

Sample Kit Prepared By: JK	Date/Time: 7-22-11	Relinquished By: Michelle L Logut	Date/Time: 7/24/11 19:20	Received By: Briana Gregory	Date/Time: 7/28/11 10:30
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: C-2 C-326 3.3°C C-622 1.9°C C-722		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) **Preservation:** I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

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102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

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Client Name: S&ME, Inc. (SM001)	Project Number: 1054-07-238D
Address: 3201 Spring Forest Road	Project Name/Desc: Edgecombe County Landfill
City/ST/Zip: Raleigh, NC 27616	PO # / Billing Info:
Tel: (919) 872-2660 Fax: (919) 876-3958	Reporting Contact: Michelle Logut
Sampler(s) Name, Affiliation (Print): MICHELLE LOGUT / JERRY PAUL	Billing Contact: Accounts Payable
Sampler(s) Signature: Michelle J. Logut	Site Location / Time Zone:

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: C109019

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	NOX 353.2	RSK 175 + CO2	Sulfate 300	Sulfide SM4500-S D	TOC SM5310B						Sample Comments
	3301-MW3B	7/27/11	10:55	GRAB	GW	16	X	X	X	X	X						HOLD ALL
	3301-MW-4	↓	10:00	↓	GW	16	X	X	X	X	X						DISSOLVED
	~~3301-MW5~~				GW	16	X	X	X	X	X						METALS
	3301-MW6	7/27/11	15:05	GRAB	GW	16	X	X	X	X	X						
	3301-MW7A	↓	17:00	↓	GW	16	X	X	X	X	X						
	3301-MW9	↓	12:05	↓	GW	16	X	X	X	X	X						
	~~3301-MW12~~				GW	16	X	X	X	X	X						
	~~3301-MW13~~				GW	16	X	X	X	X	X						
	3301-MW14	7/27/11	14:15	GRAB	GW	16	X	X	X	X	X						
	~~3301-MW15~~				GW	16	X	X	X	X	X						
	3301-MW16	7/27/11	16:05	GRAB	GW	16	X	X	X	X	X						
	~~3301-SW1~~				GW	5											

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
JK	7-22-11	Michelle J. Logut	7/24/11 19:20	Briana Gregory	7/28/11 10:30
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time

Cooler #'s & Temps on Receipt: C-2 C-326 3.3°C C-622 1.9°C C-722

Condition Upon Receipt: X Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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Page 1 of 2

Client Name: STME, INC. (SM001)	Project Number: 1054-07-238D
Address: 3201 SPRING FOREST RD	Project Name/Desc: EDGECOMBE COUNTY LANDFILL
City/ST/Zip: RALEIGH, NC 27616	PO # / Billing Info:
Tel: 919-872-2660 Fax: 919-876-3958	Reporting Contact: MICHELLE LOGUT
Sampler(s) Name, Affiliation (Print): JERRY PAUL / BOB BRYANT	Billing Contact: ACCOUNTS PAYABLE
Sampler(s) Signature:	Facility # (if required):

Requested Analyses

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: C109374

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B APPENDIX 1	AG/F, AS/F, BA/F, BE/F, CD/F, CO/F, CR/F, CU/F, NI/F, PB/F, SB/F, SE/F, TL/F, V/F, ZN/F	AG/AS/BA/BE/CD/CO/CR/CU/FE/MN/NI/PB/SB/SE/TL/V/ZN	ALKALINITY 310.2, CHLORIDE SM4500-CL-E, NITRATE-A 353.2, TDS SM2540C	BOD SM5210B	COD SM5220D	FATTY ACIDS	Sample Comments
	MW-15	7/28/11	09:30	GRAB	GW	16	X	X	X	X	X	X	X	X	X	X	HOLD ALL
	MW-12		10:30				X	X	X	X	X	X	X	X	X	X	DISSOLVED
	MW-13		11:40				X	X	X	X	X	X	X	X	X	X	METALS
	MW-5		13:35				X	X	X	X	X	X	X	X	X	X	
	DUPLICATE		—			5	X	X	X	X	X						
	EQUIPMENT BLANK		14:10			4	X			X	X						
	TRIP BLANK	-	-	-	-	-	X										

Preservation (See Codes) (Combine as necessary)

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
JK	5-17-10	Michelle J. Logut	7/29/11 08:28	John Kay	7-29-11 8:28
Comments		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
				John Kay	7-29-11 09:55

Cooler #'s & Temps on Receipt: Green C-2 2.6°C C-722 2.4°C

Condition Upon Receipt: X Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: SAME, INC (SM001)	Project Number: 1054-07-238D
Address: 3201 SPRING FOREST RD	Project Name/Desc: EDGECOMBE COUNTY LANDFILL
City/ST/Zip: RALEIGH NC 27616	PO # / Billing Info:
Tel: 919-872-2660 Fax: 919-876-3958	Reporting Contact: MICHELLE LOGUT
Sampler(s) Name, Affiliation (Print): JERRY PAUL/ BOB BRYANT	Billing Contact: ACCOUNTS PAYABLE
Sampler(s) Signature:	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: C109374

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	HG	NITRATE CALC 353.2	NOX 353.2	RSK 175 + CO2	SULFATE 300	SULFIDE SM4500-S	TOC SM5310B				Sample Comments
	MW-15	7/28/11	09:30	GRAB	GW	16	X	X	X	X	X	X	X				HOLD ALL
	MW-12	↓	10:30	↓	↓	↓	X	X	X	X	X	X	X				DISSOLVED
	MW-13		11:40				X	X	X	X	X	X	X				METALS
	MW-5		13:35			↓	X	X	X	X	X	X	X				↓
	DUPLICATE		—			5											
	EQUIPMENT BLANK	↓	14:10	↓	↓	4											
	TRIP BLANK	—	—	—	—	—											

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
		Michelle J. Logut	7/29/11 08:28	[signature]	7-29-11 8:28
Comments		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
				[signature]	7-29-11 09:55

Cooler #'s & Temps on Receipt: C-2 2.6°C C-722 2.4°C

Condition Upon Receipt: X Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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APPENDIX II

[COMPACT DISK WITH ELECTRONIC COPY OF TABLE 1 (.XLS), ELECTRONIC COPY OF THIS REPORT (.PDF), AND ELECTRONIC COPY OF STATISTICAL ANALYSES (.PDF)]

APPENDIX III

(GROUNDWATER VELOCITY CALCULATIONS)

S&ME

JOB NO.	1054-07-238D
SHEET NO.	1 of 1
DATE	9/9/2011
COMPUTED BY	MLL
CHECKED BY	SPW

JOB NAME Edgecombe County Landfill
SUBJECT Hydraulic Gradient

PURPOSE:

To determine the average true hydraulic gradient.

GIVEN:

Well	GW Elev
MW-3B	70.17
MW-5	39.35
MW-7A	52.45
P-1	64.39

CALCULATION:

Calculate the average of three point solutions using wells MW-5, MW-7A, MW-3B or P-1.

GRADIENT:

$$i = \frac{h_1 - h_2}{L}$$

Where: i = Hydraulic Gradient (ft/ft)
$h_1 - h_2$ = Difference in Hydraulic Head (ft)
L = Distance Along Flow Path (ft)

Where distance between h_1 and h_2 is parallel to flow, determined by projection from 3 point problem.

$$i_1 = \frac{\text{MW-3B} - \text{MW-5}}{L_1} = \frac{70.17 - 39.35}{1{,}485} = \mathbf{0.02075} \quad \mathbf{ft/ft}$$

Use Elevation of Groundwater at MW-7A to establish 52.45' elevation between MW-3B and MW-5.

$$\frac{\text{MW-3B - MW-7A}}{\text{gradient (MW-3B and MW-5)}} = \frac{70.17 - 52.45}{0.02075} = 853.80 \quad \text{ft}$$

Draw line from MW-7A to point located 853.80 feet from MW-3B to MW-5.

Measure new distance between MW-3B and MW-5 perpendicular to line plotted for 52.45' contour. Recalculate Gradient.

$$i_1 = \frac{\text{MW-3B} - \text{MW-5}}{\text{New } L_1} = \frac{70.17 - 39.35}{1{,}475} = \mathbf{0.02089} \quad \mathbf{ft/ft}$$

True Hydraulic Gradient, i_1 = 0.02089 ft/ft

$$i_2 = \frac{\text{P-1} - \text{MW-5}}{L_2} = \frac{64.39 - 39.35}{1{,}320} = \mathbf{0.01897} \quad \mathbf{ft/ft}$$

Use Elevation of Groundwater at MW-7A to establish 52.45' elevation between P-1 and MW-5.

$$\frac{\text{P-1 - MW-7A}}{\text{gradient (P-1 and MW-5)}} = \frac{64.39 - 52.45}{0.018970} = 629.42 \quad \text{ft}$$

Draw line from MW-7A to point located 629.42 feet from P-1 to MW-5.

Measure new distance between P-1 and MW-5 perpendicular to line plotted for 52.45' contour. Recalculate Gradient.

$$i_2 = \frac{\text{P-1} - \text{MW-5}}{\text{New } L_2} = \frac{64.39 - 39.35}{1{,}185} = \mathbf{0.02113} \quad \mathbf{ft/ft}$$

True Hydraulic Gradient, i_2 = 0.02113 ft/ft

AVERAGE TRUE HYDRAULIC GRADIENT, i_{AVG} = 0.0210 ft/ft

CONCLUSION:

The Average True Hydraulic gradient, i_{AVG} equals **0.0210 ft/ft**.

JOB NAME	Edgecombe County Landfill	JOB NO.	1054-07-238D
SUBJECT	Velocity Calculation	SHEET NO.	1 of 1
		DATE	9/9/2011
		COMPUTED BY	MLL
		CHECKED BY	SPW

PURPOSE:

To determine the average groundwater flow velocity.

CALCULATION:

$$V = \frac{Ki}{n}$$

Where:

V = Average Linear Groundwater Flow Velocity (feet/year = ft/yr)
K = Hydraulic Conductivity (ft/yr)
i = Average True Hydraulic Gradient (ft/ft)
n = Effective Soil Porosity (percent)

$K_{A\ ZONE}$ =	**5.95E-05**	cm/sec		
Convert $K_{A\ ZONE}$ from cm/sec to ft/min =	**5.95E-05**	*	1.9685	
=	0.00011713	ft/min		
Convert $K_{A\ ZONE}$ from ft/min to ft/yr =	0.00011713	ft/min *	1440	min/day
=	0.16866108	ft/day *	365	day/yr
=	**61.561**	**ft/year**		

Average True Gradient, i_{AVG} (MW-3B to MW-5):	**0.0210**	**ft/ft**
n:	**15%**	

$$V = \frac{K_{A\ ZONE}\, i}{n}$$

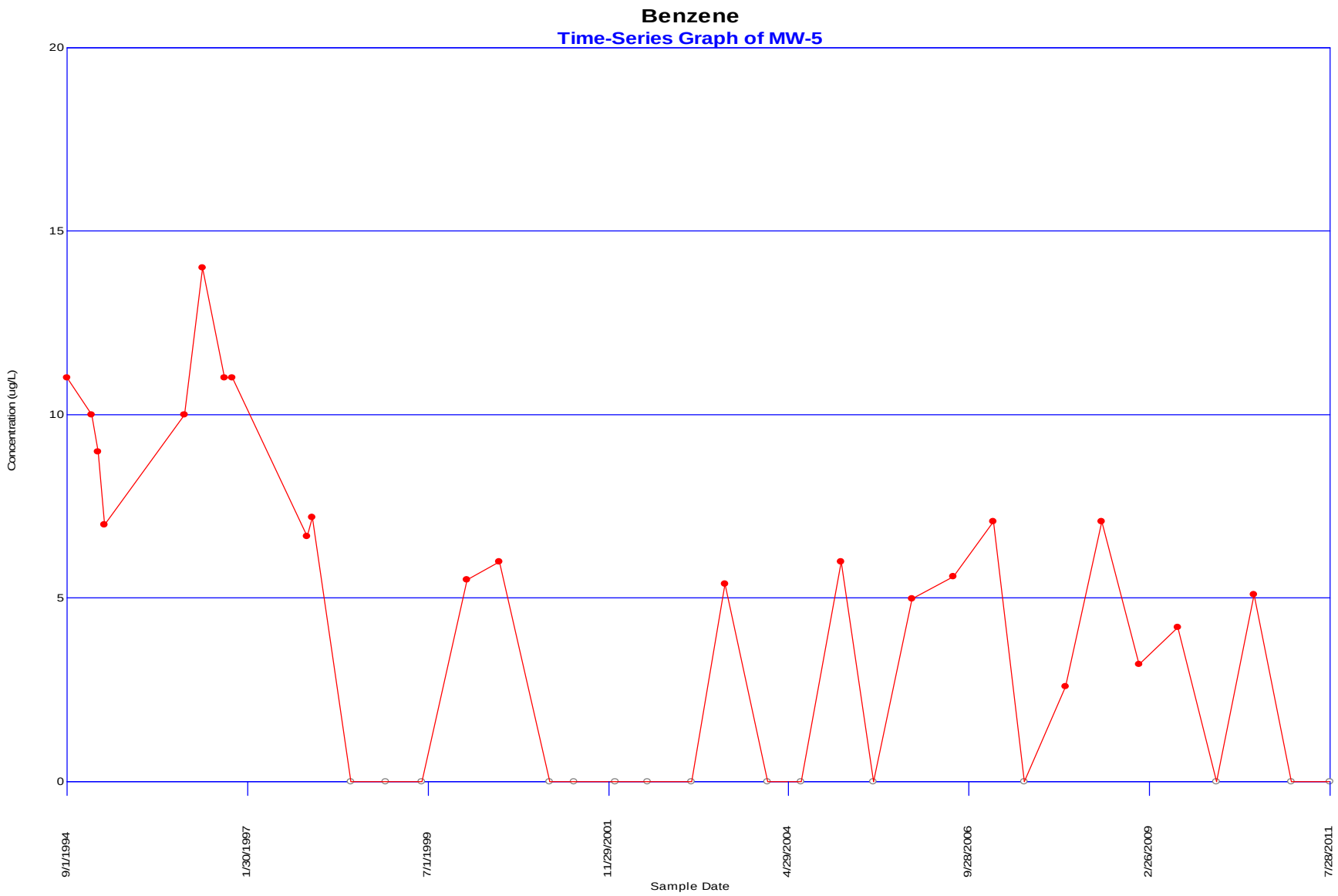
$$V = \frac{61.561\ ft/yr * 0.0210\ ft/ft}{0.15} = 8.6186\ ft/yr$$

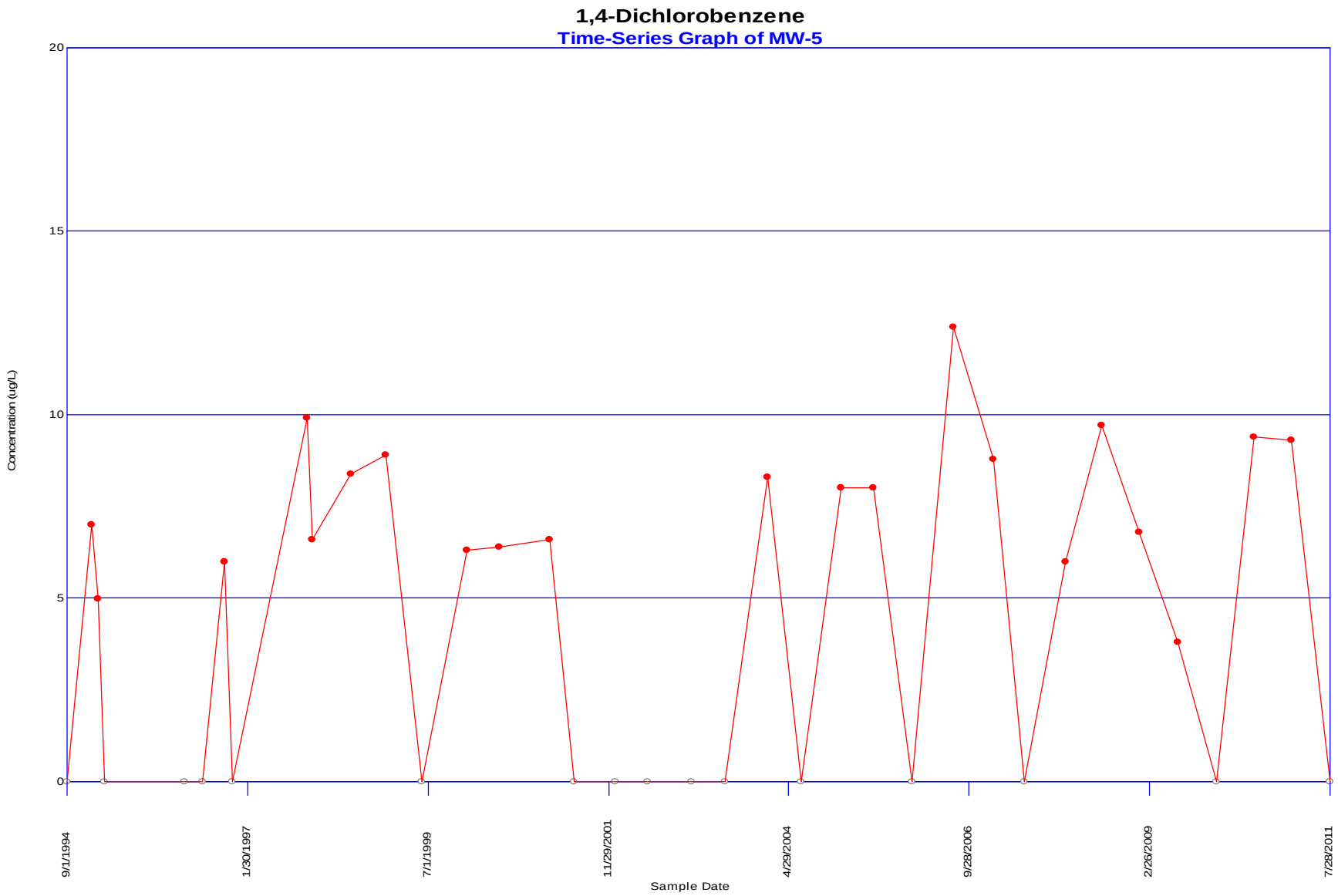
CONCLUSION:

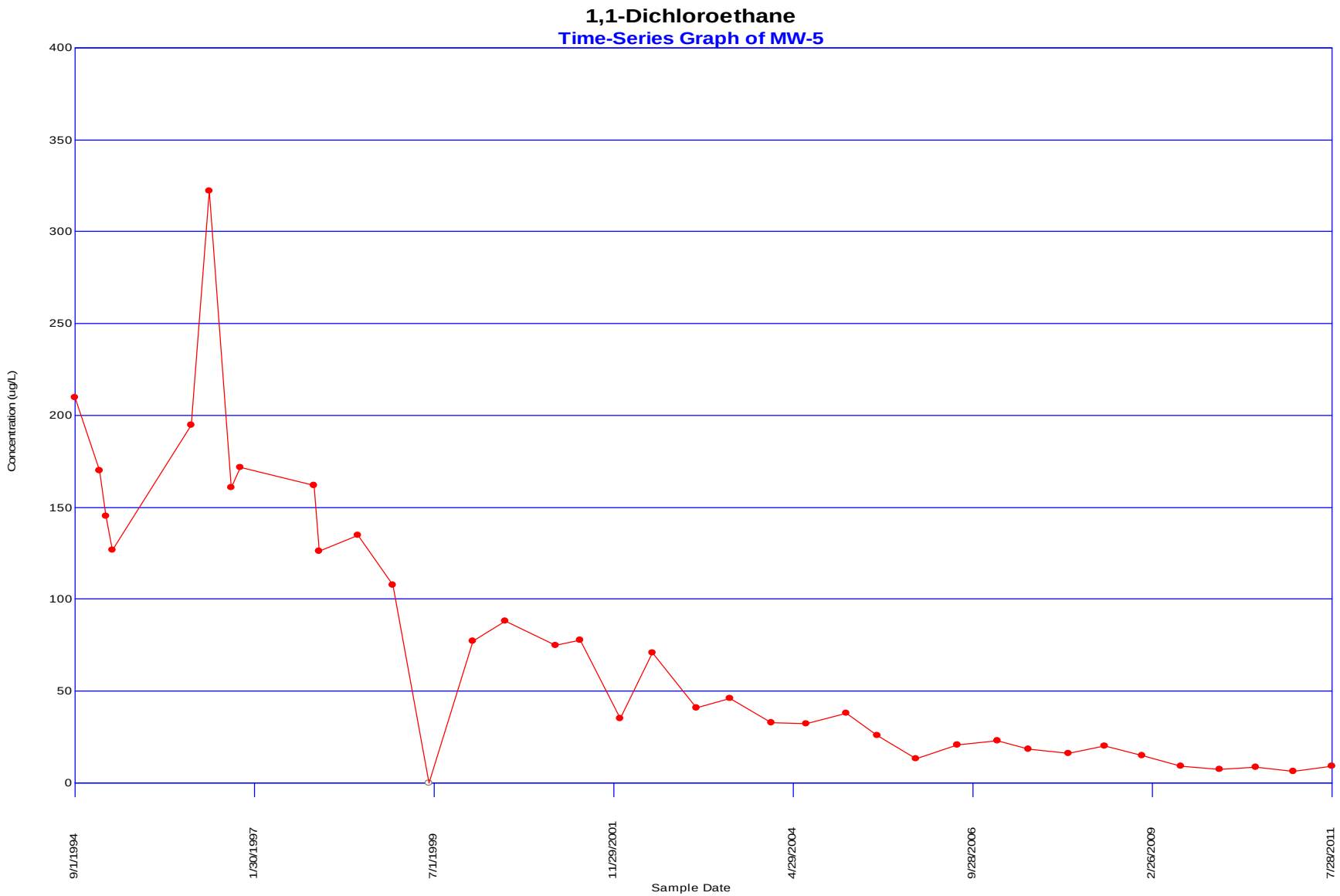
The average groundwater flow velocity, V, equals **8.62 ft/yr**.

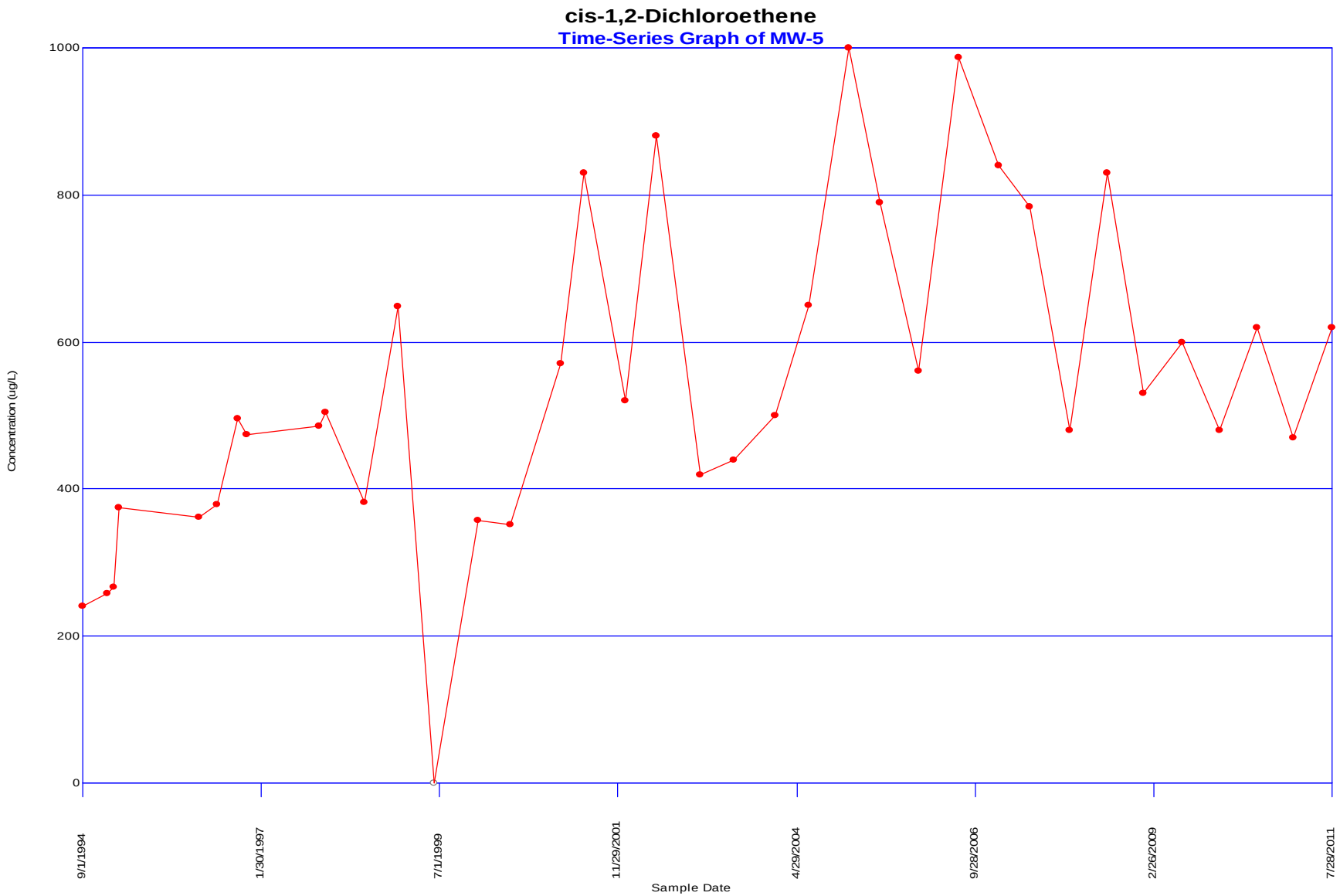
APPENDIX IV

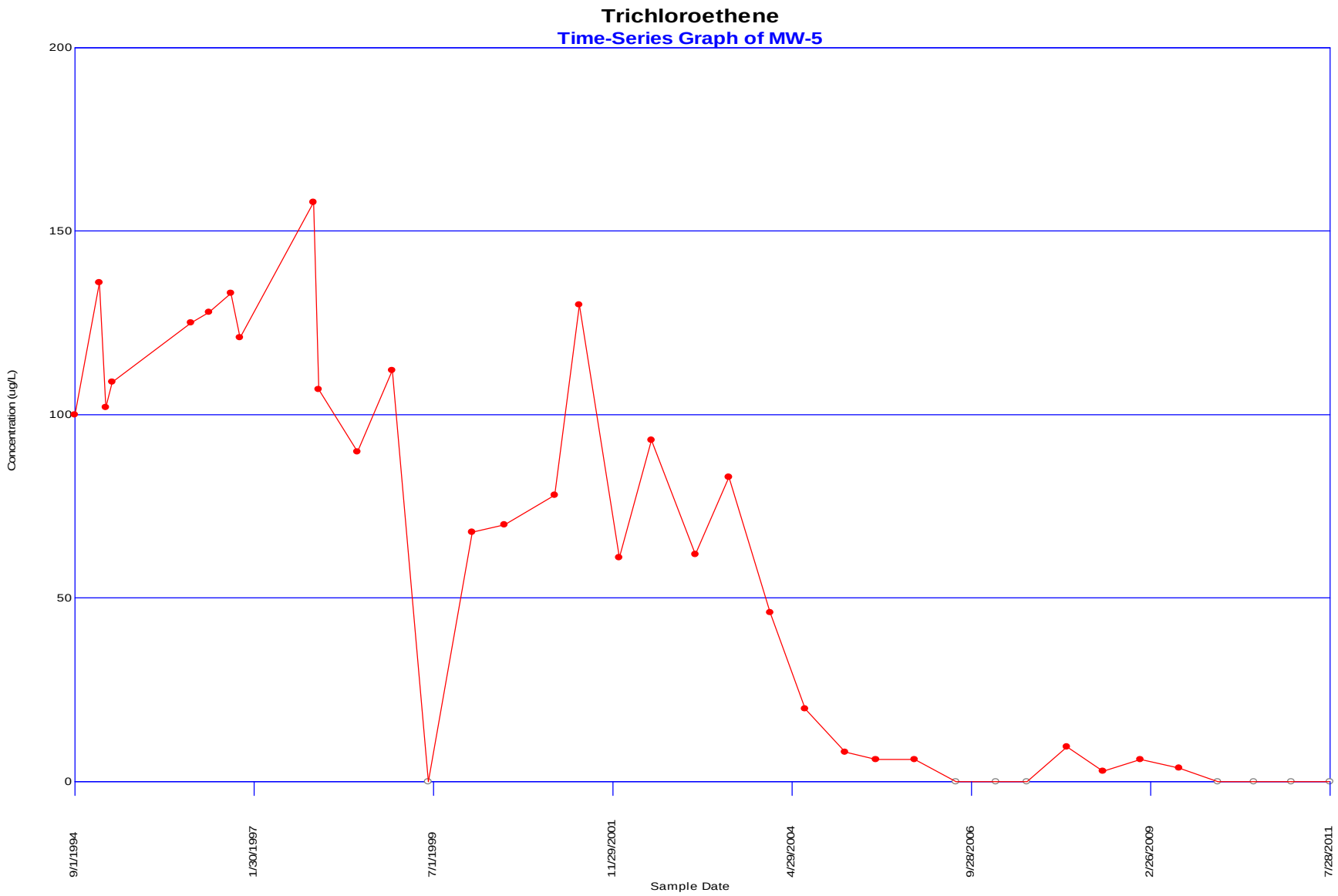
(TIME SERIES GRAPHS FOR MONITOR WELLS)

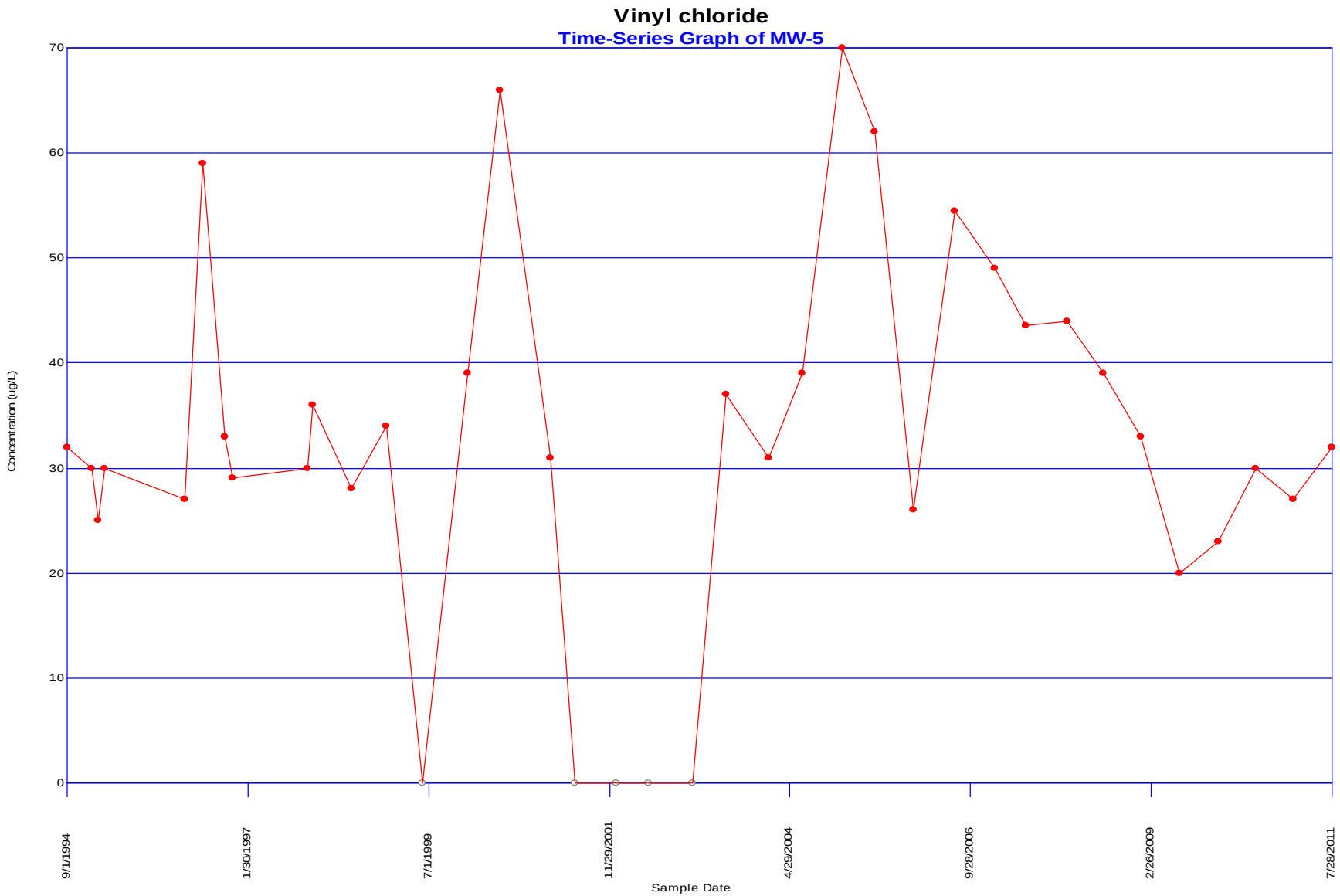

Benzene
Time-Series Graph of MW-5
Concentration (ug/L)
20
15
10
5
0
9/1/1994
1/30/1997
7/1/1999
11/29/2001
4/29/2004
9/28/2006
2/26/2009
7/28/2011
Sample Date

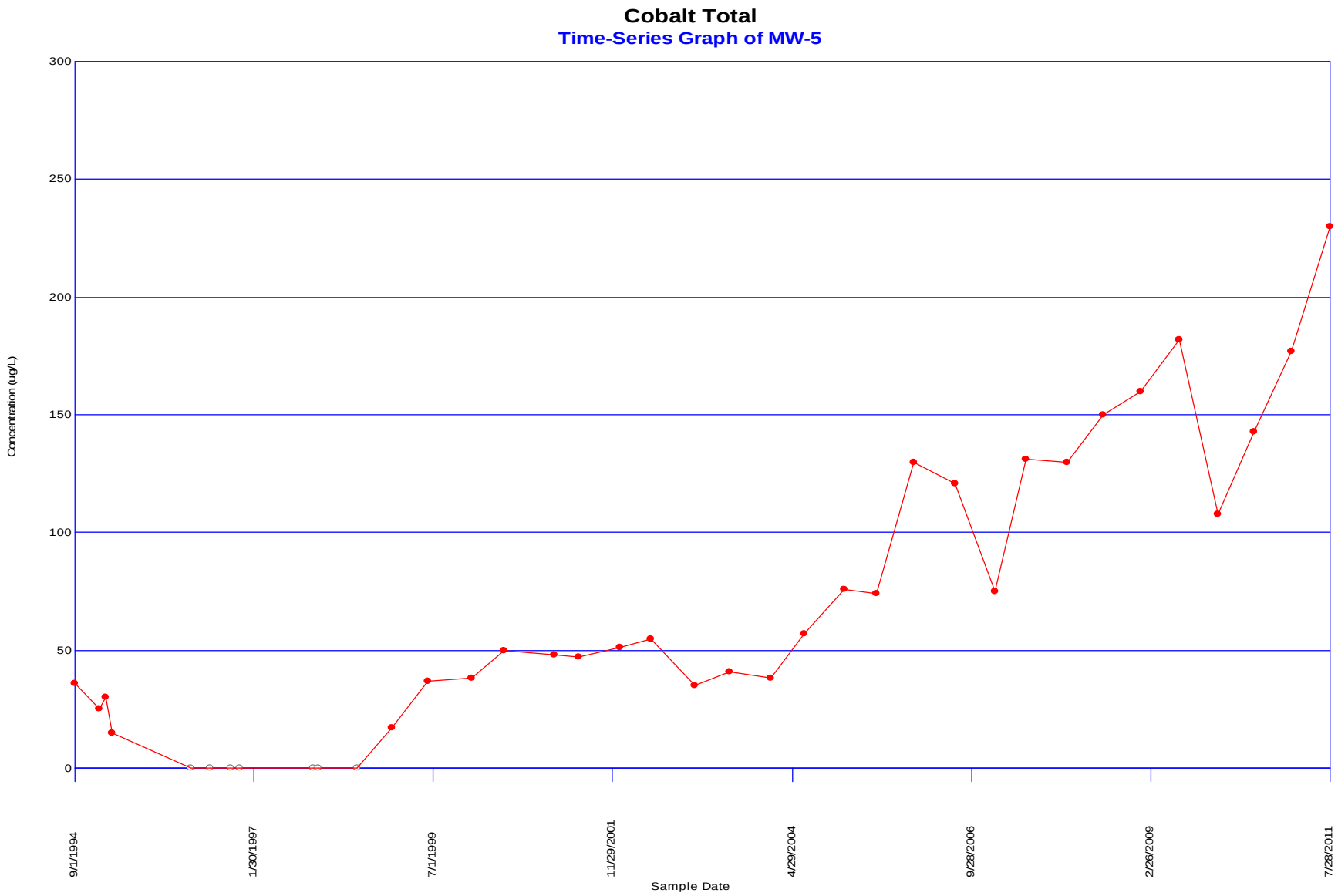

1,4-Dichlorobenzene
Time-Series Graph of MW-5
Concentration (ug/L)
20
15
10
5
0
9/1/1994
1/30/1997
7/1/1999
11/29/2001
4/29/2004
9/28/2006
2/26/2009
7/28/2011
Sample Date

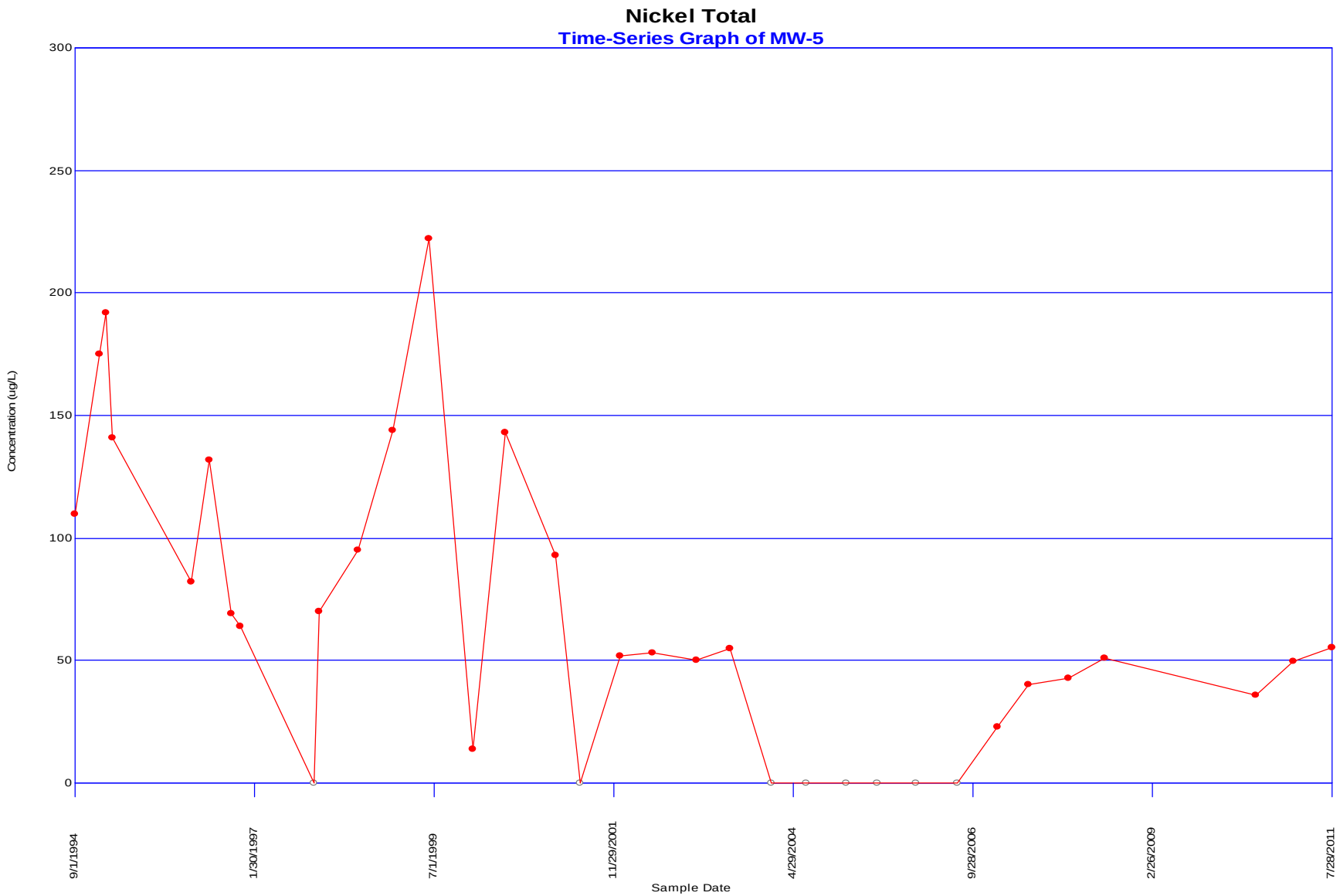

1,1-Dichloroethane
Time-Series Graph of MW-5
Concentration (ug/L)
400
350
300
250
200
150
100
50
0
9/1/1994
1/30/1997
7/1/1999
11/29/2001
4/29/2004
9/28/2006
2/26/2009
7/28/2011
Sample Date

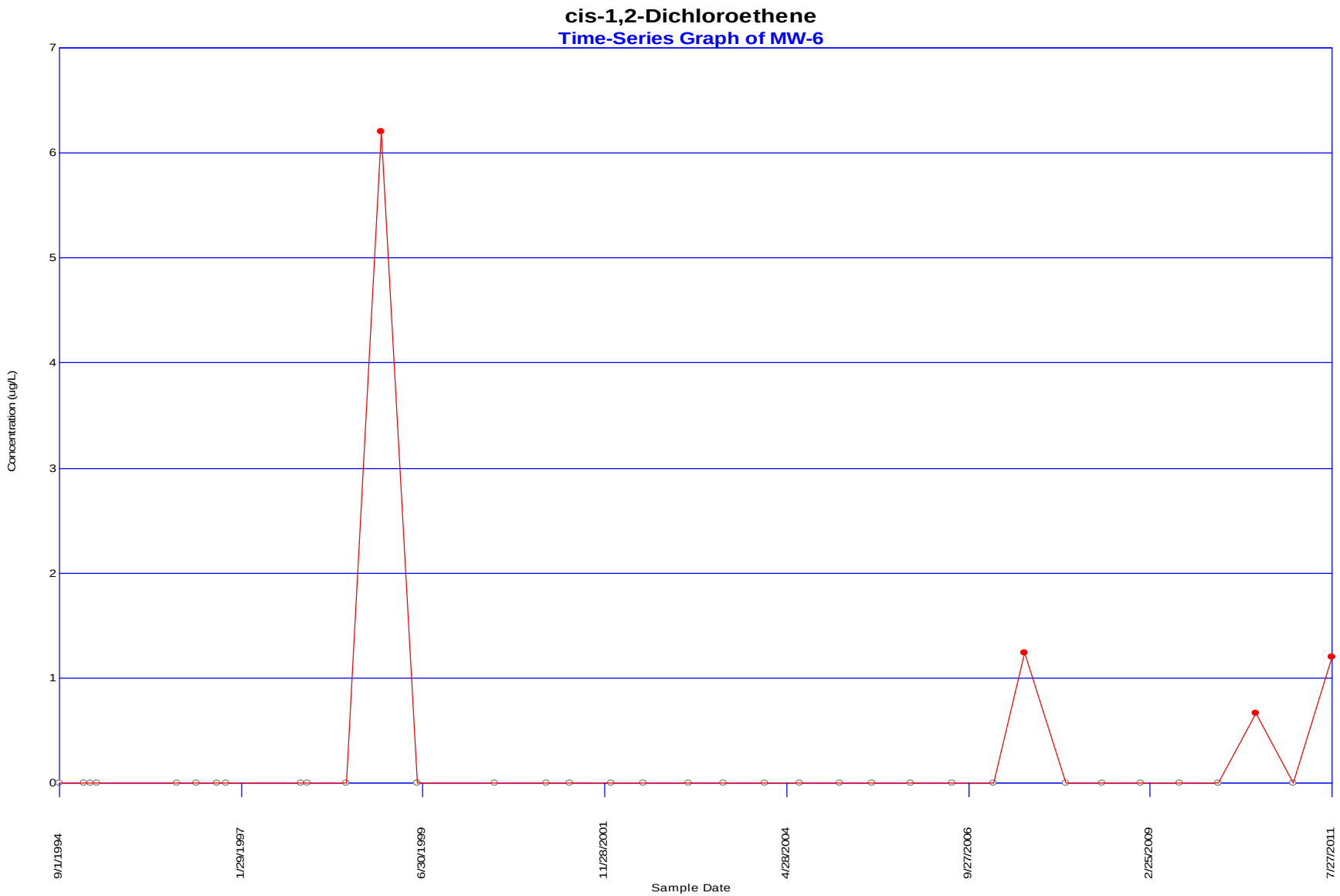

cis-1,2-Dichloroethene
Time-Series Graph of MW-5
Concentration (ug/L)
1000
800
600
400
200
0
9/1/1994
1/30/1997
7/1/1999
11/29/2001
4/29/2004
9/28/2006
2/26/2009
7/28/2011
Sample Date

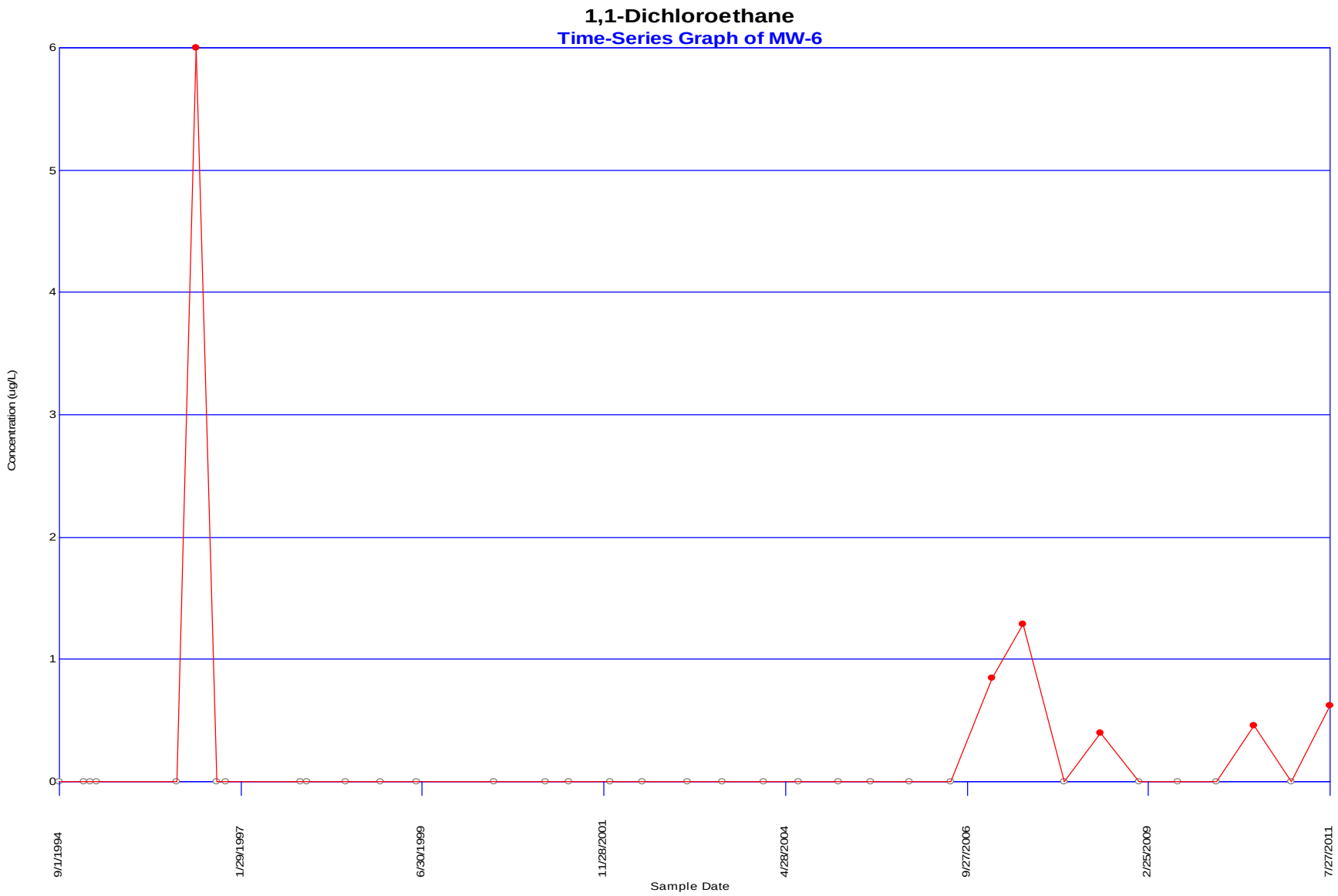

Trichloroethene
Time-Series Graph of MW-5
200
150
100
50
0
Concentration (ug/L)
9/1/1994
1/30/1997
7/1/1999
11/29/2001
4/29/2004
9/28/2006
2/26/2009
7/28/2011
Sample Date

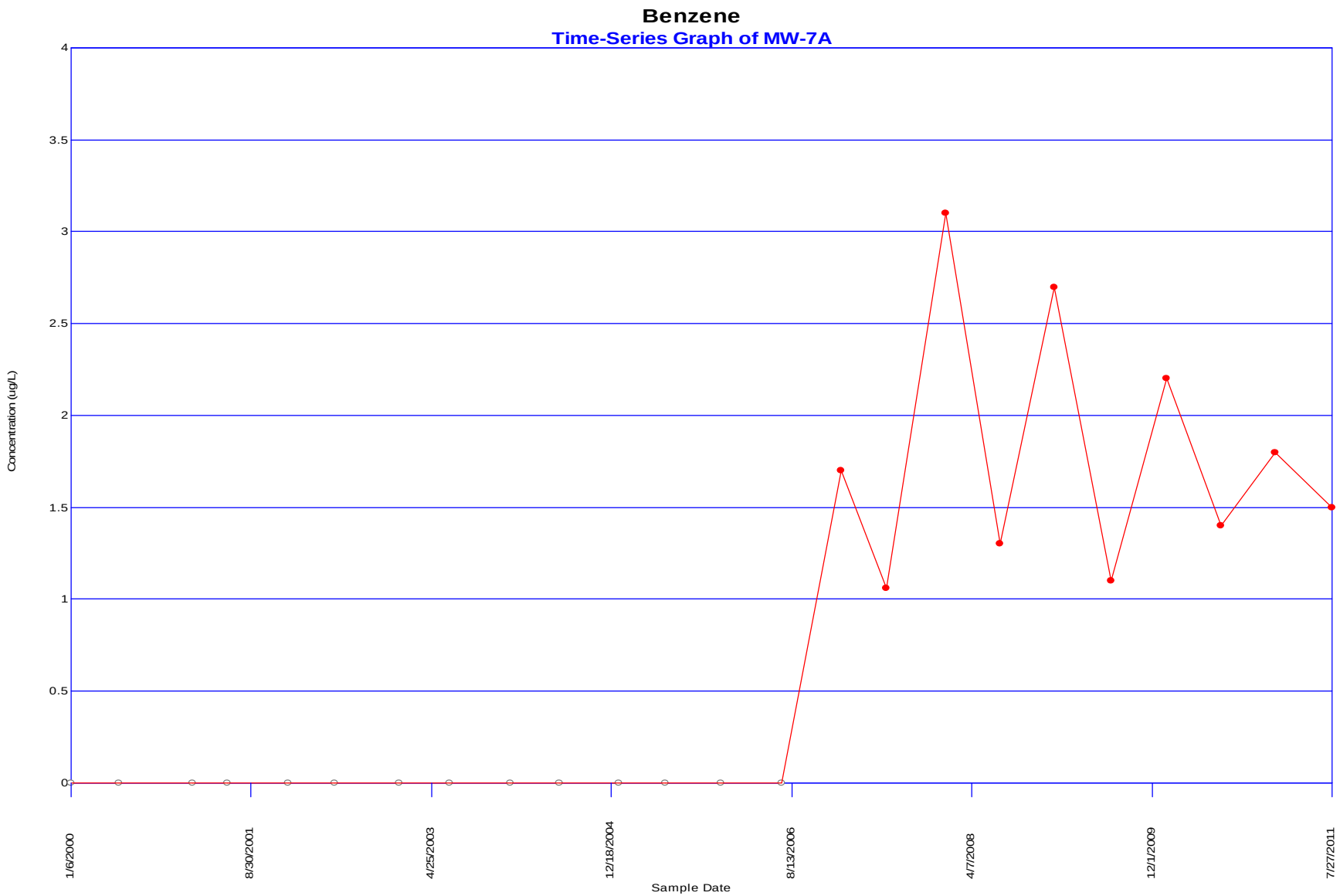

Vinyl chloride
Time-Series Graph of MW-5
Concentration (ug/L)
70
60
50
40
30
20
10
0
9/1/1994
1/30/1997
7/1/1999
11/29/2001
4/29/2004
9/28/2006
2/26/2009
7/28/2011
Sample Date

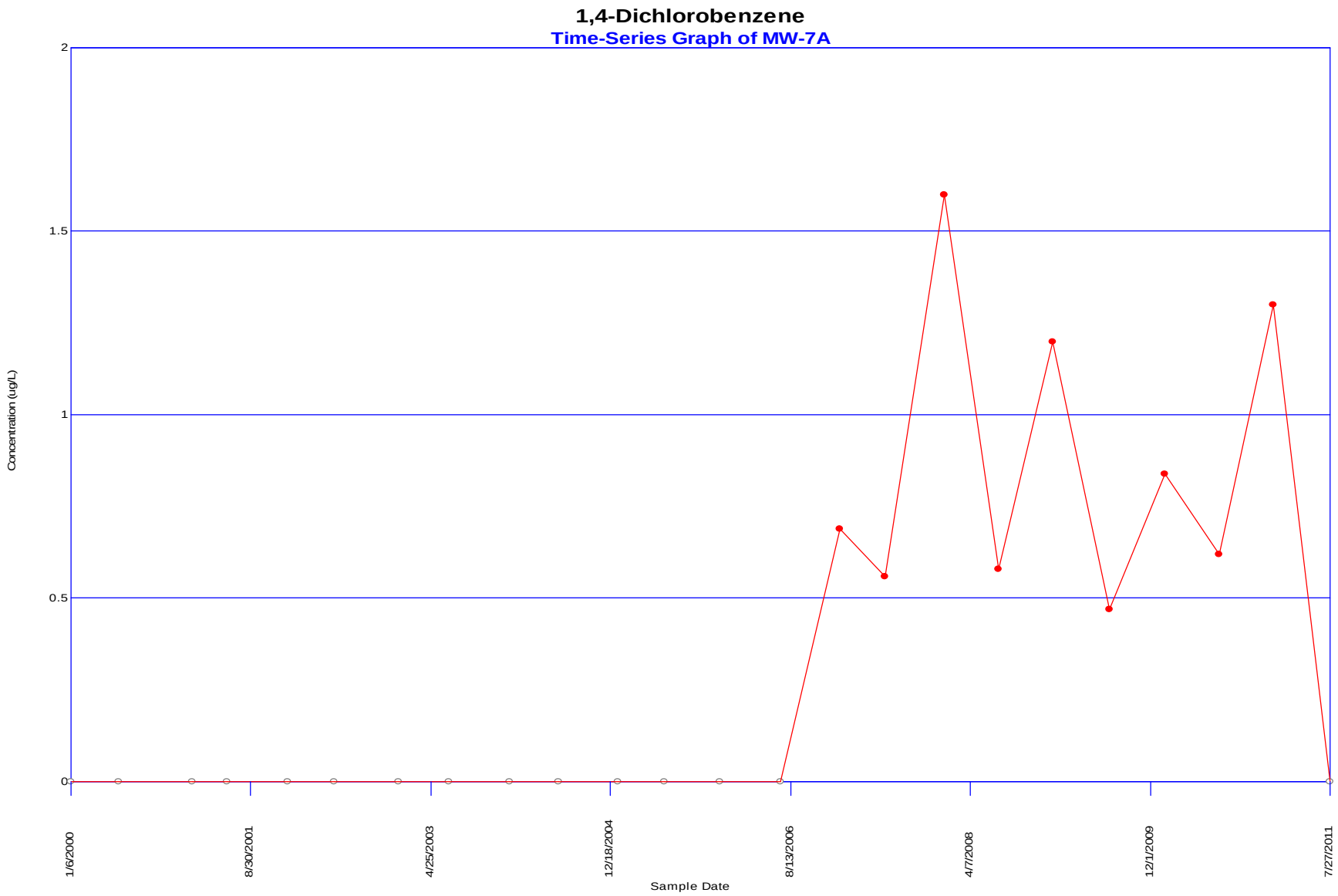

Cobalt Total
Time-Series Graph of MW-5
Concentration (ug/L)
300
250
200
150
100
50
0
9/1/1994
1/30/1997
7/1/1999
11/29/2001
4/29/2004
9/28/2006
2/26/2009
7/28/2011
Sample Date

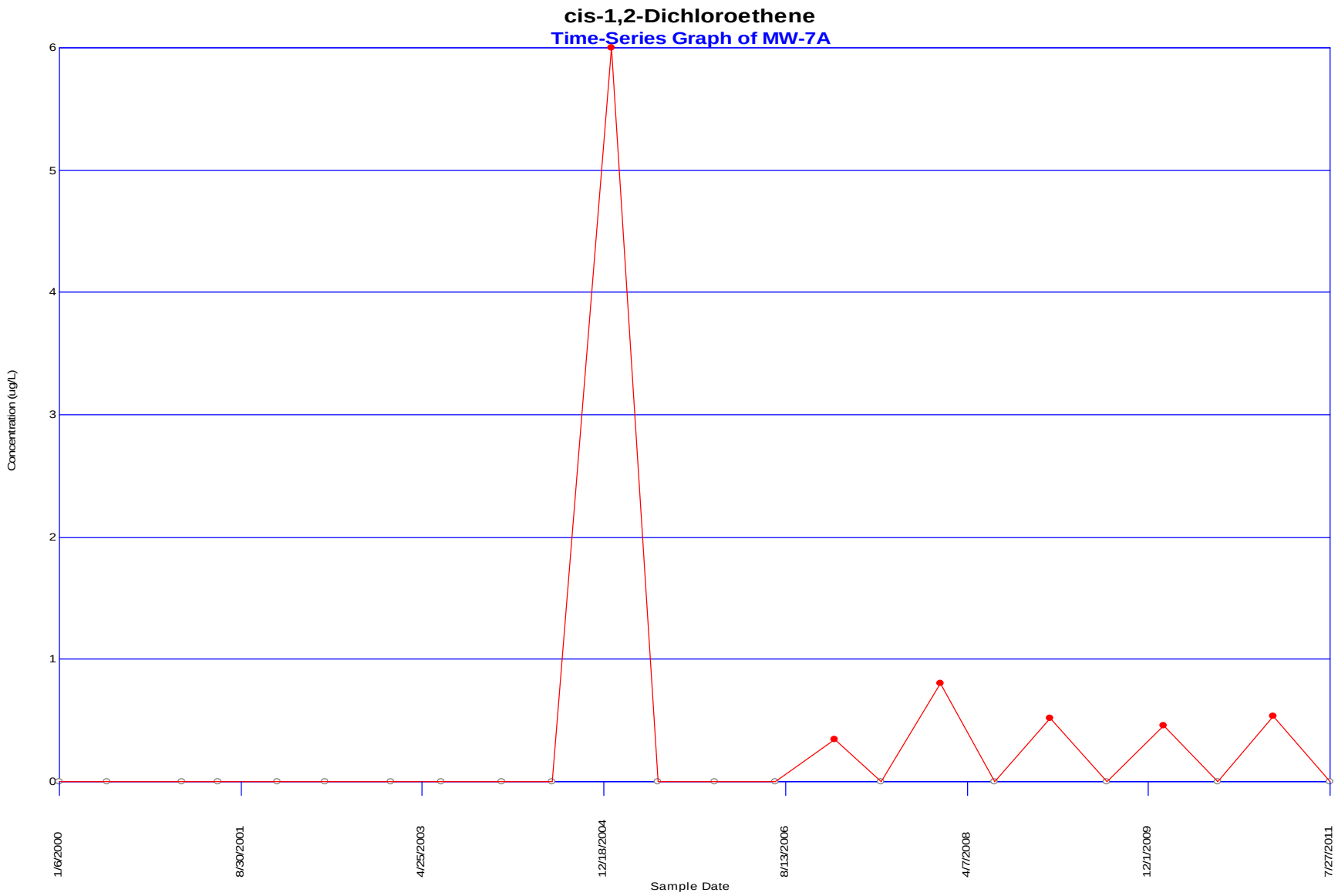

Nickel Total
Time-Series Graph of MW-5
Concentration (ug/L)
300
250
200
150
100
50
0
9/1/1994
1/30/1997
7/1/1999
11/29/2001
4/29/2004
9/28/2006
2/26/2009
7/28/2011
Sample Date

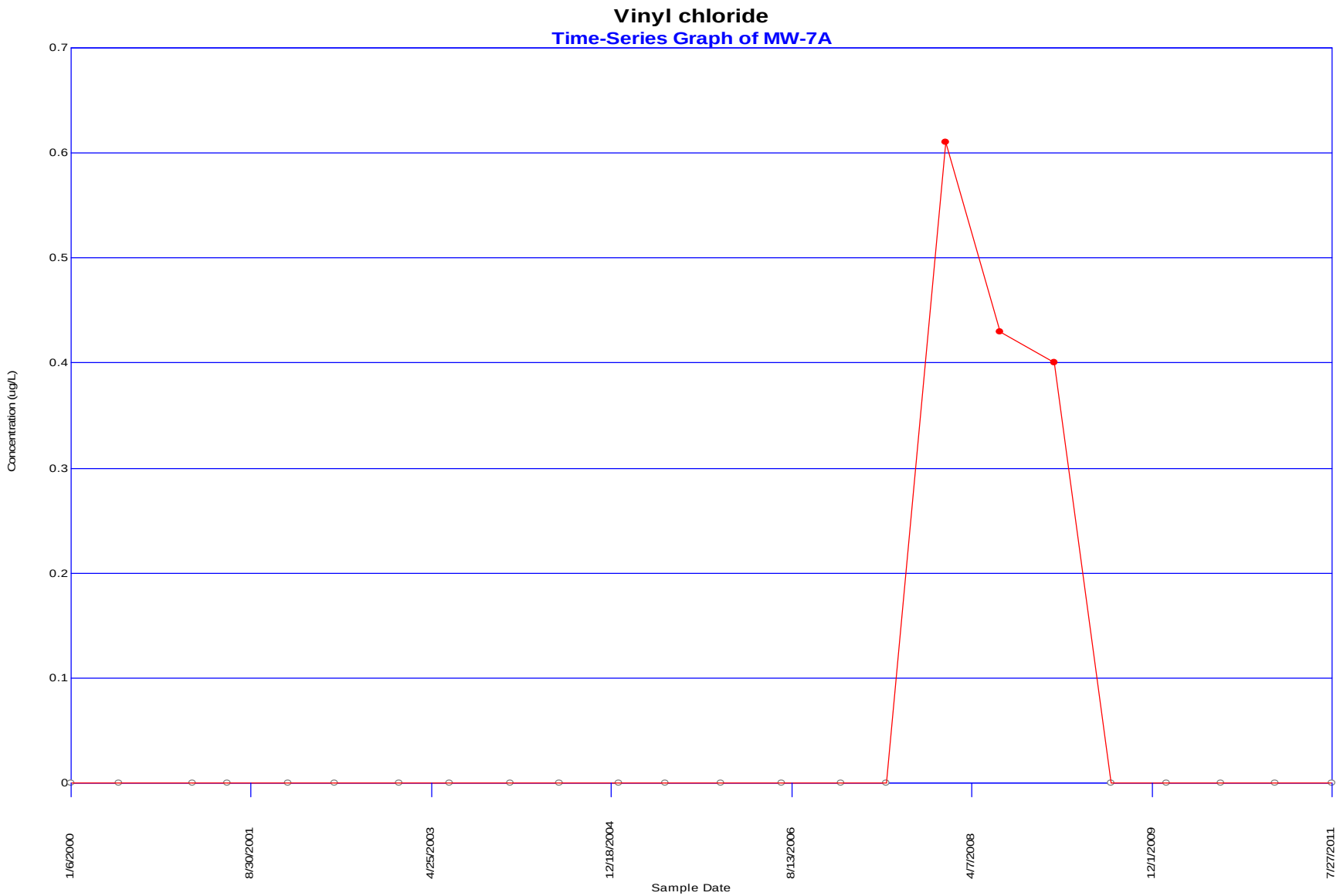

cis-1,2-Dichloroethene
Time-Series Graph of MW-6
Concentration (ug/L)
0
1
2
3
4
5
6
7
9/1/1994
1/29/1997
6/30/1999
11/28/2001
4/28/2004
9/27/2006
2/25/2009
7/27/2011
Sample Date

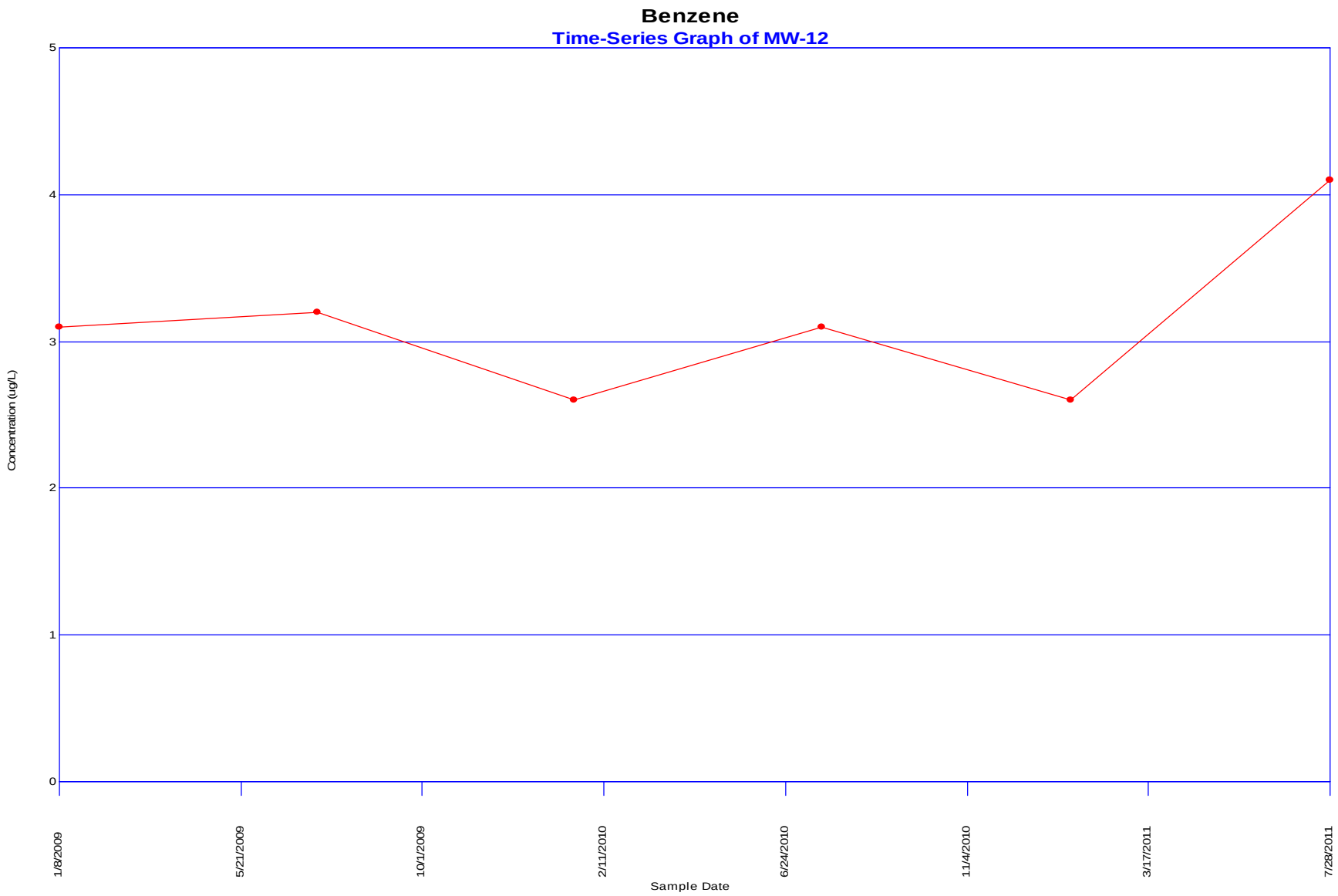

1,1-Dichloroethane
Time-Series Graph of MW-6
Concentration (ug/L)
0
1
2
3
4
5
6
9/1/1994
1/29/1997
6/30/1999
11/28/2001
4/28/2004
9/27/2006
2/25/2009
7/27/2011
Sample Date

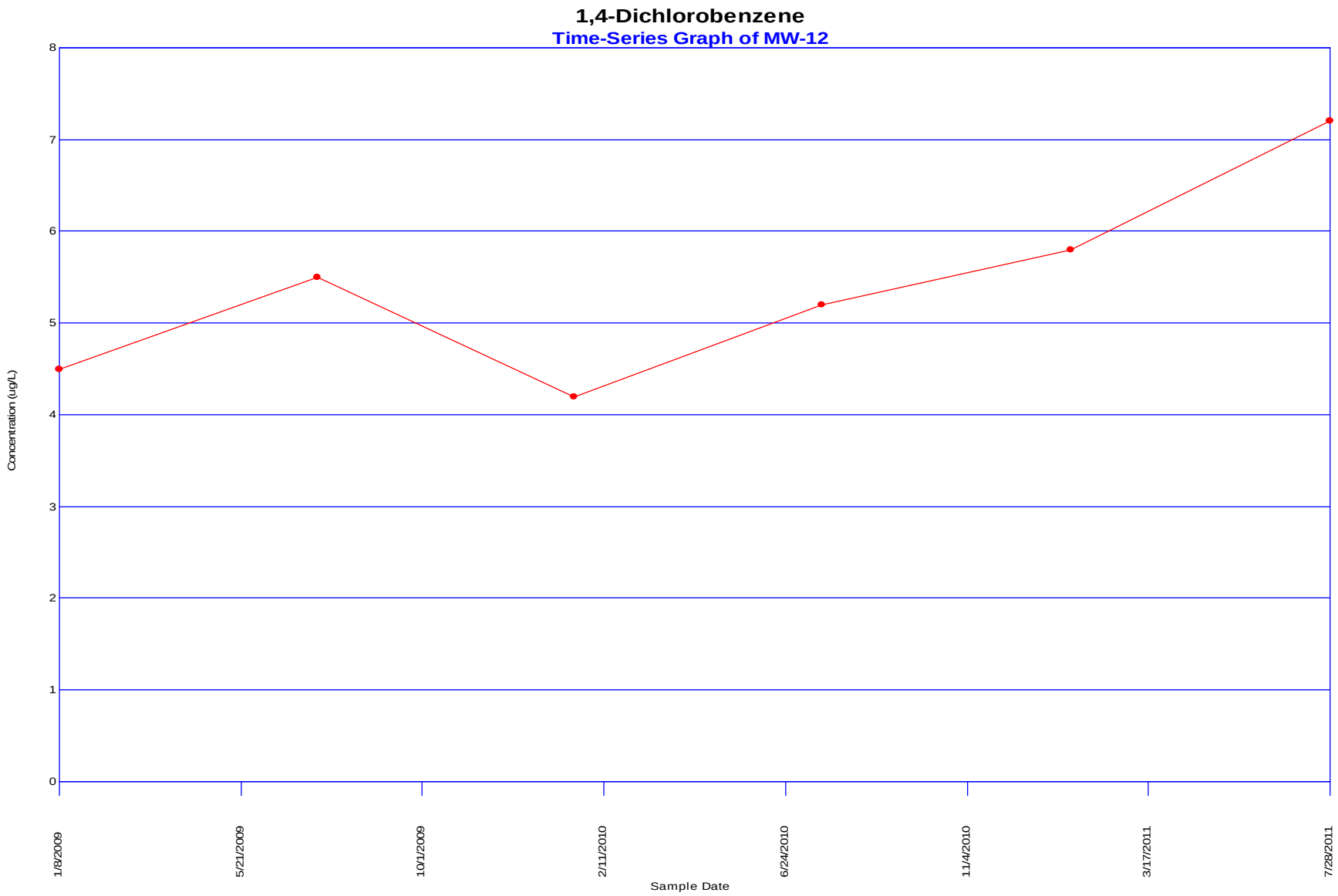

Benzene
Time-Series Graph of MW-7A
Concentration (ug/L)
4
3.5
3
2.5
2
1.5
1
0.5
0
1/6/2000
8/30/2001
4/25/2003
12/18/2004
8/13/2006
4/7/2008
12/1/2009
7/27/2011
Sample Date

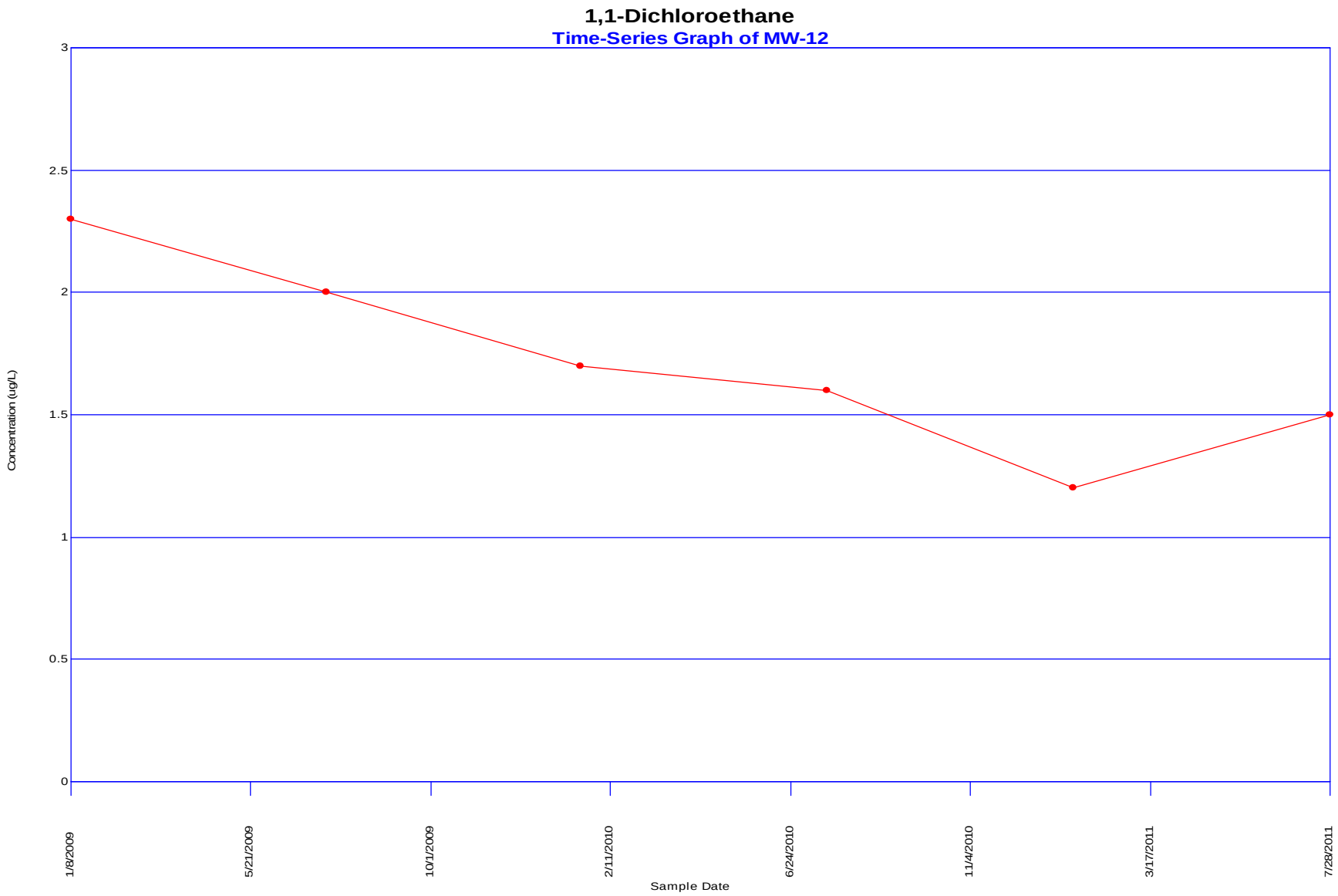

1,4-Dichlorobenzene
Time-Series Graph of MW-7A
Concentration (ug/L)
2
1.5
1
0.5
0
1/6/2000
8/30/2001
4/25/2003
12/18/2004
8/13/2006
4/7/2008
12/1/2009
7/27/2011
Sample Date

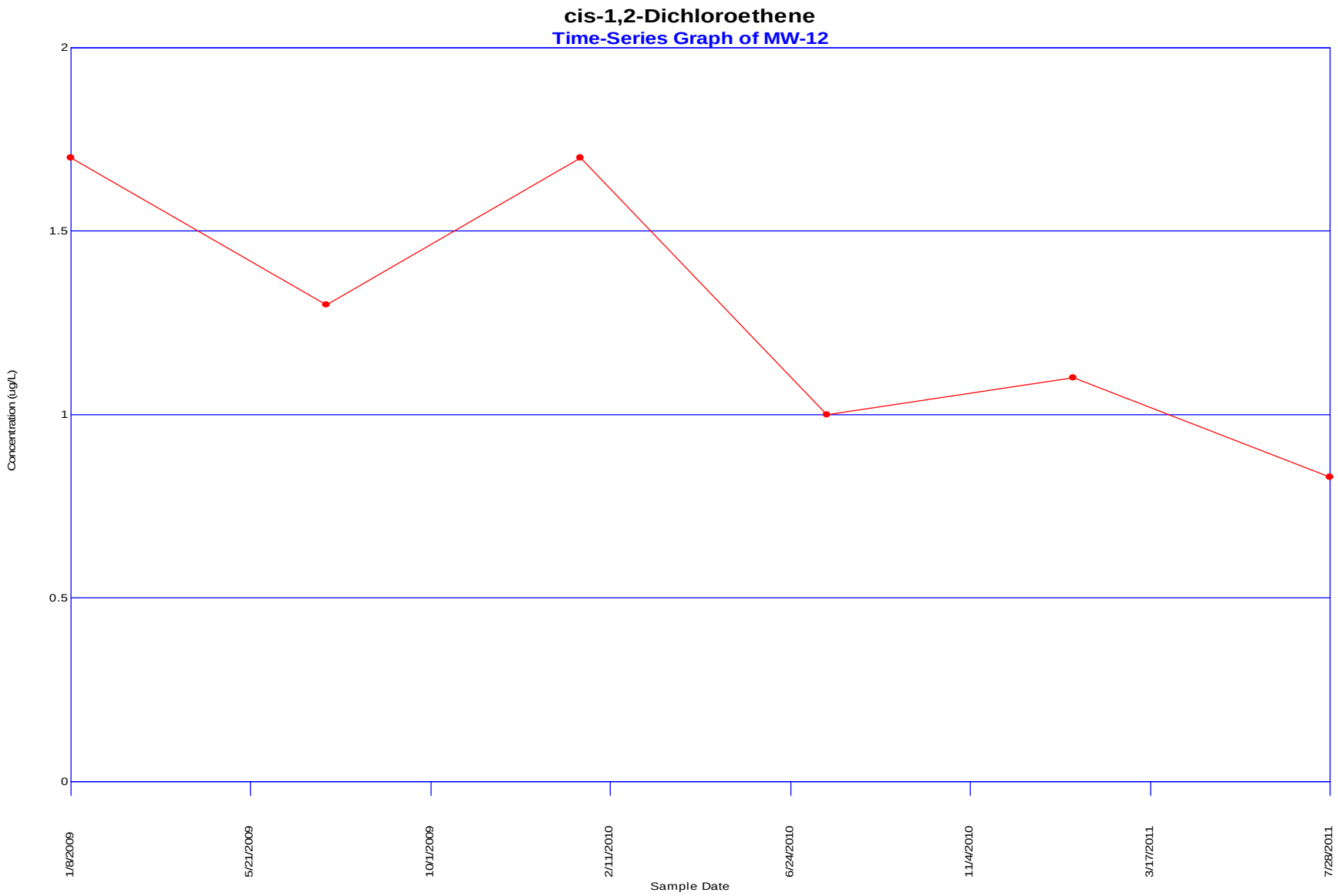

cis-1,2-Dichloroethene
Time-Series Graph of MW-7A
Concentration (ug/L)
0
1
2
3
4
5
6
1/6/2000
8/30/2001
4/25/2003
12/18/2004
8/13/2006
4/7/2008
12/1/2009
7/27/2011
Sample Date

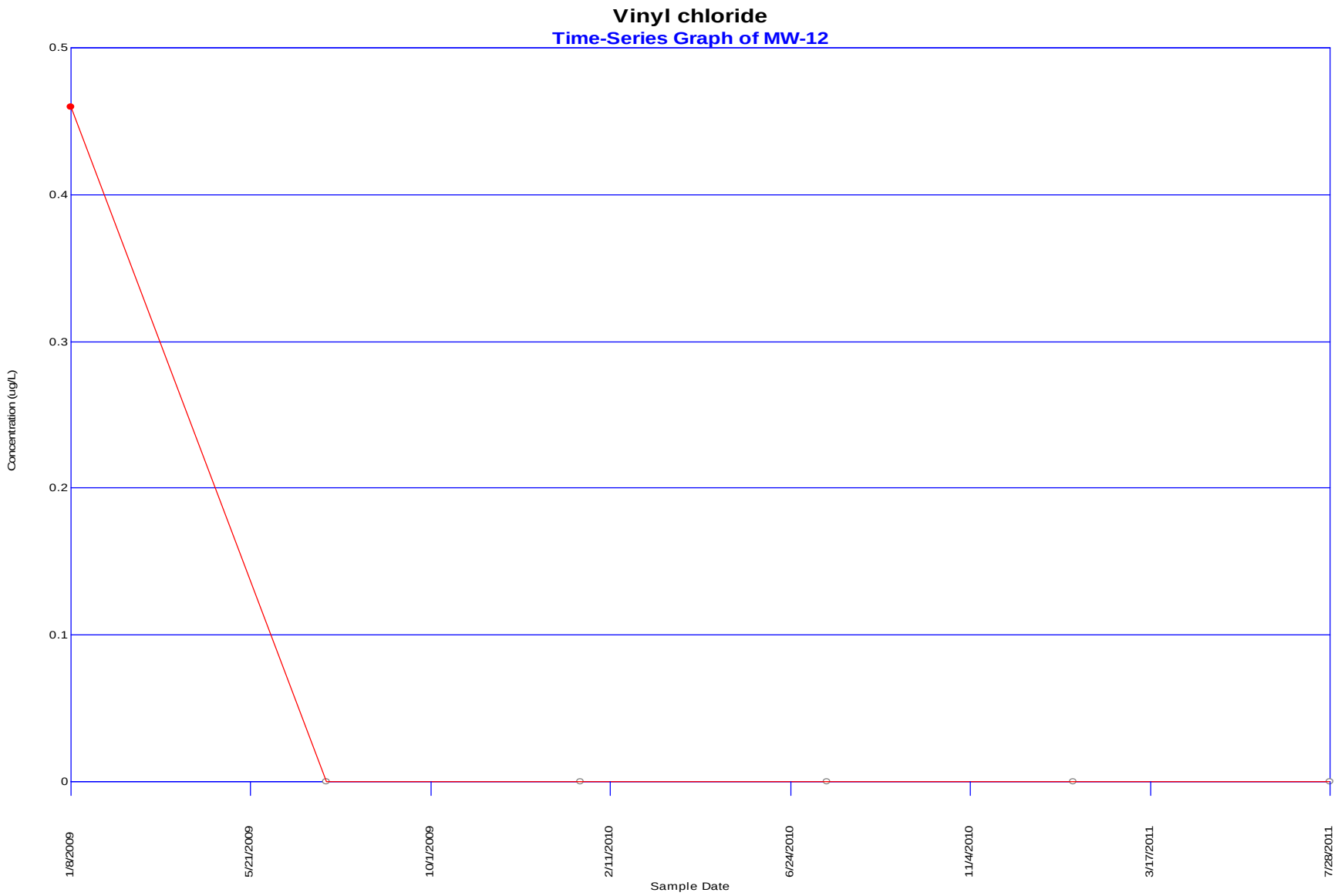

Vinyl chloride
Time-Series Graph of MW-7A
Concentration (ug/L)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/6/2000
8/30/2001
4/25/2003
12/18/2004
8/13/2006
4/7/2008
12/1/2009
7/27/2011
Sample Date

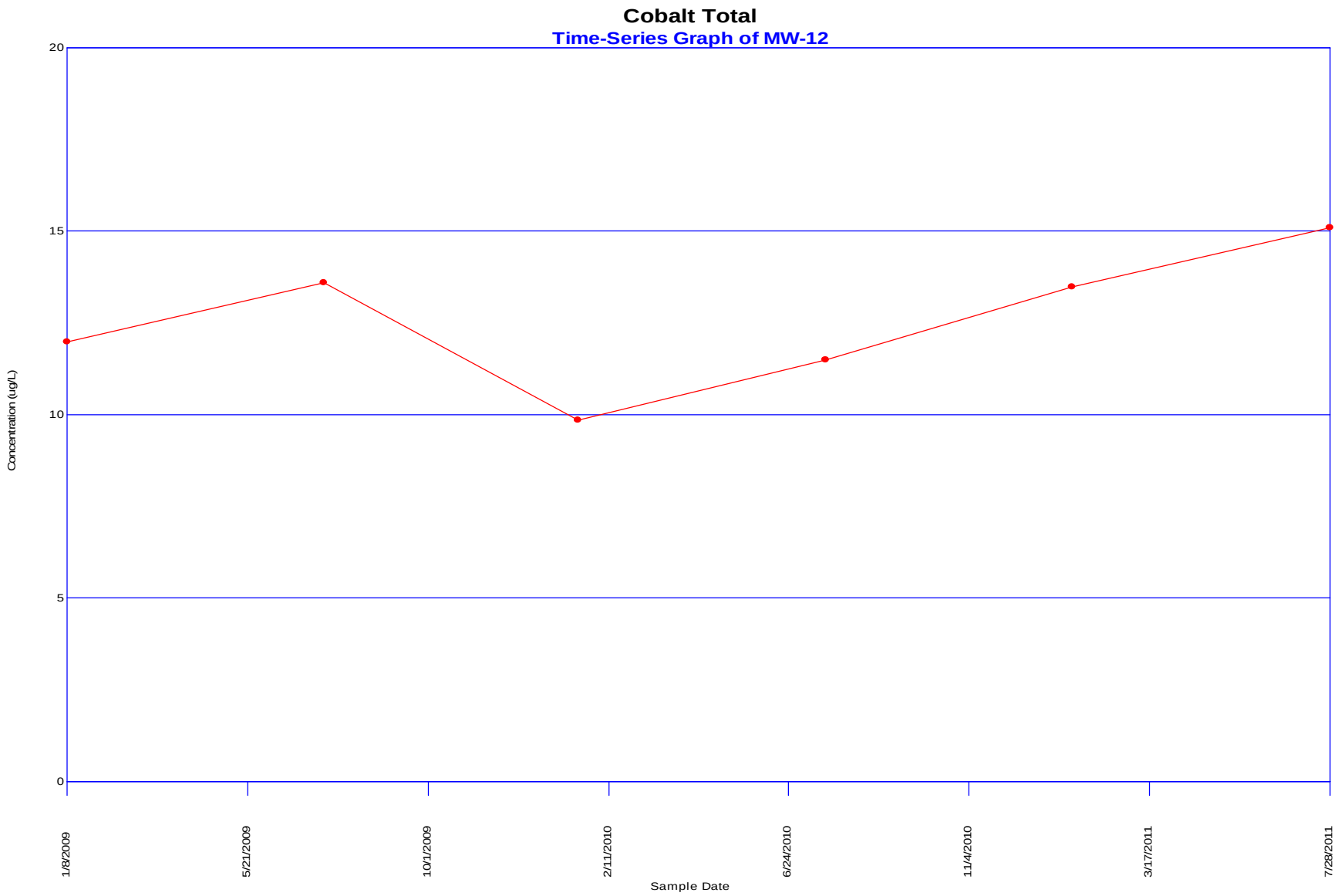

Benzene
Time-Series Graph of MW-12
Concentration (ug/L)
5
4
3
2
1
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

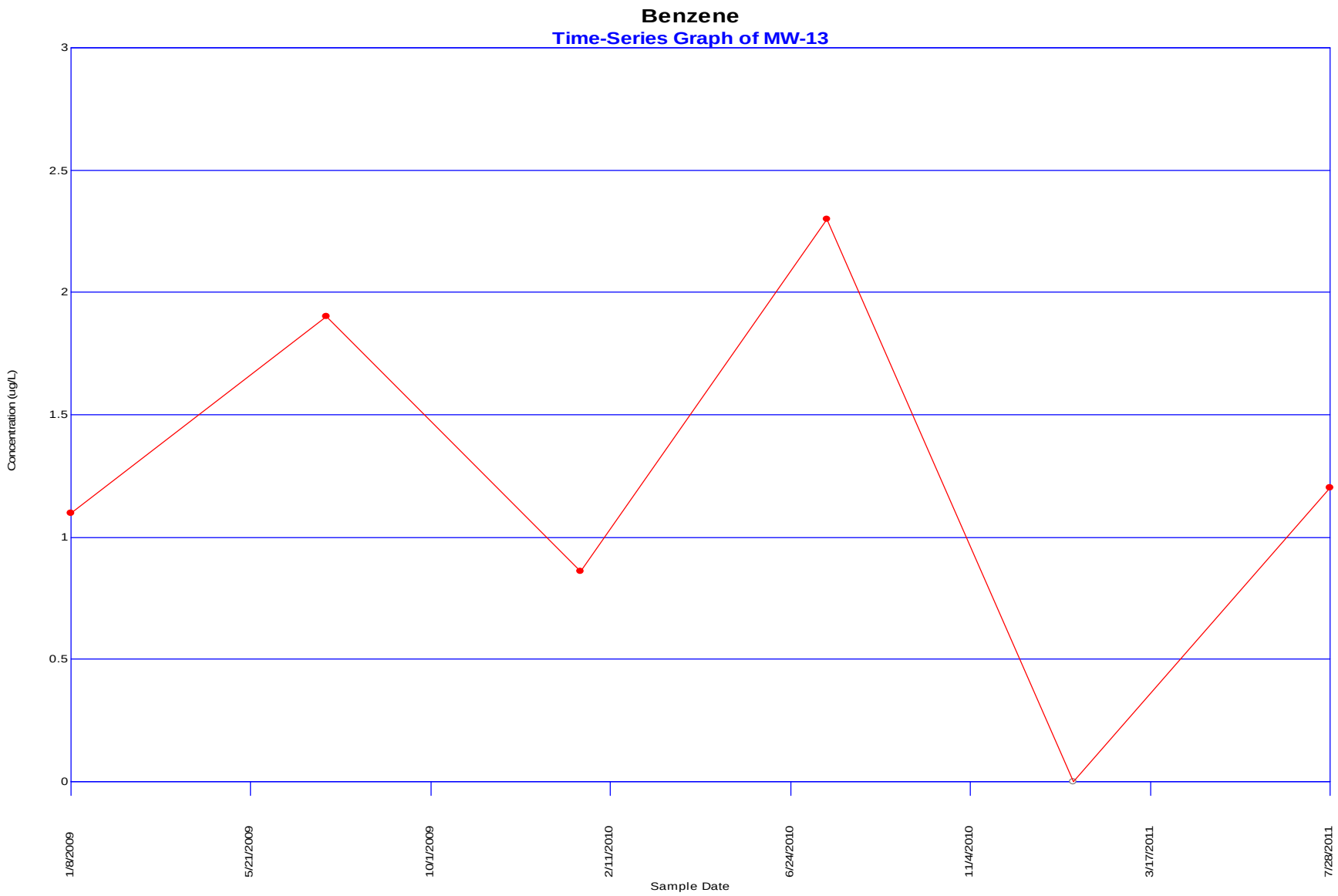

1,4-Dichlorobenzene
Time-Series Graph of MW-12
Concentration (ug/L)
0
1
2
3
4
5
6
7
8
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

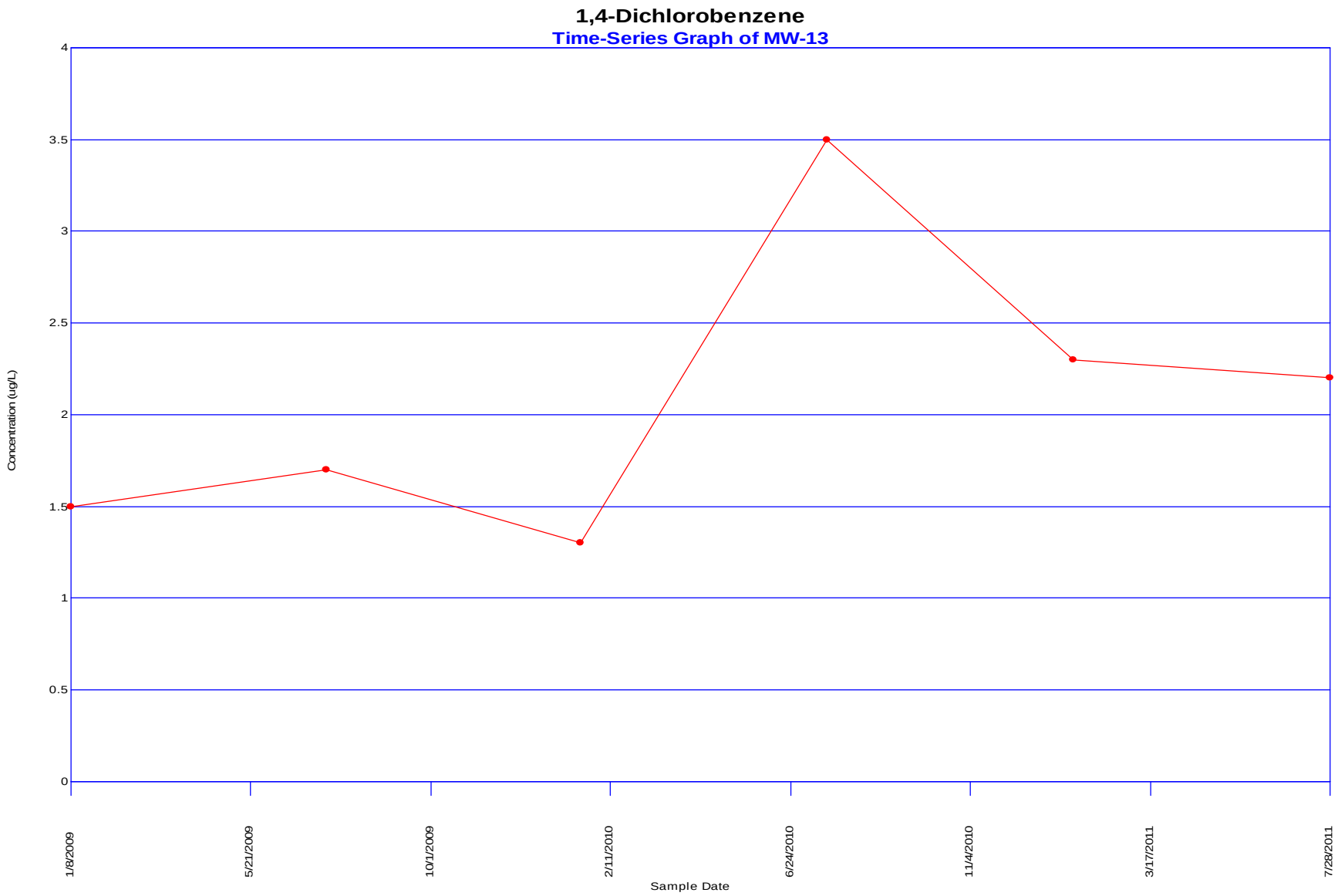

1,1-Dichloroethane
Time-Series Graph of MW-12
Concentration (ug/L)
3
2.5
2
1.5
1
0.5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

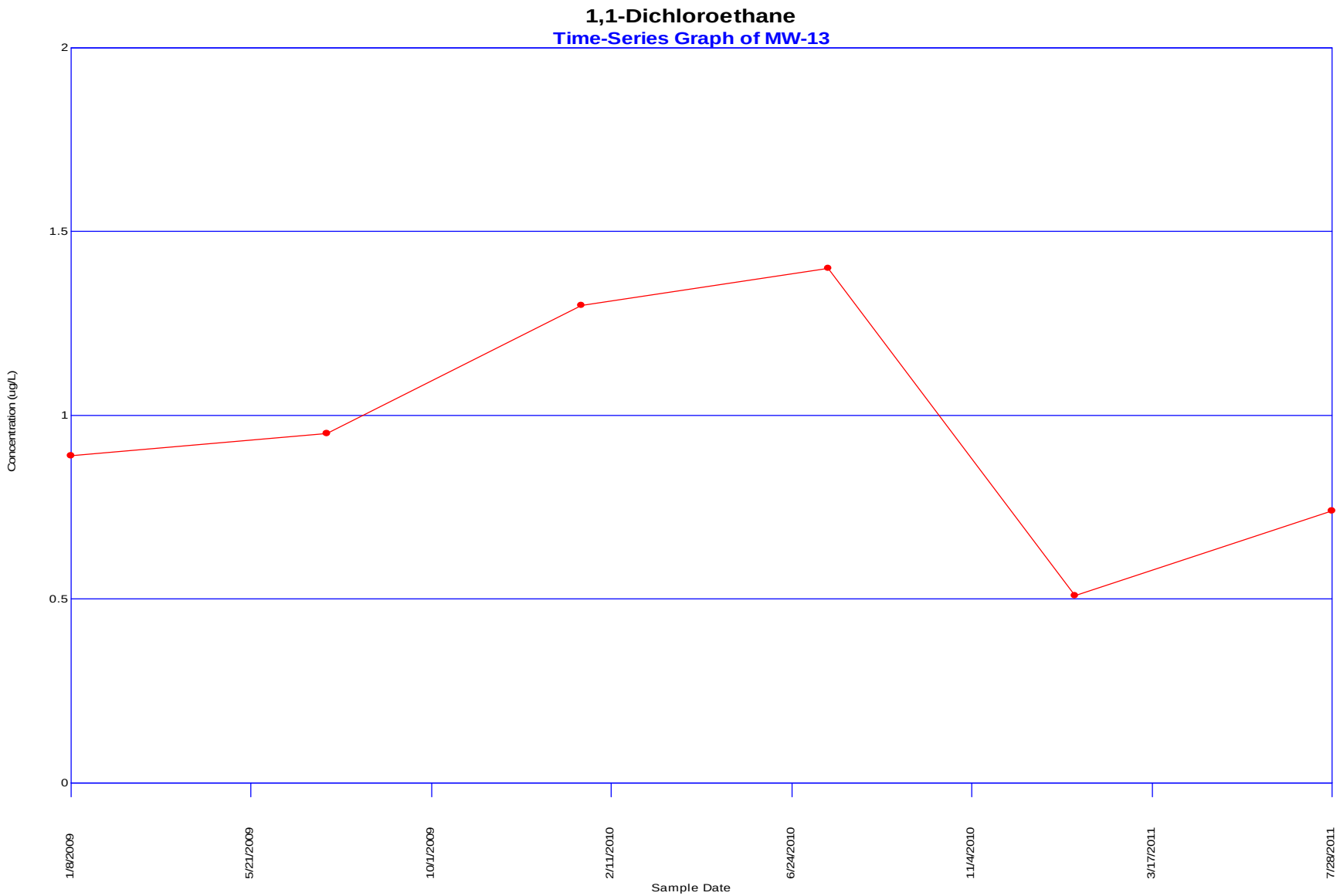

cis-1,2-Dichloroethene
Time-Series Graph of MW-12
Concentration (ug/L)
2
1.5
1
0.5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

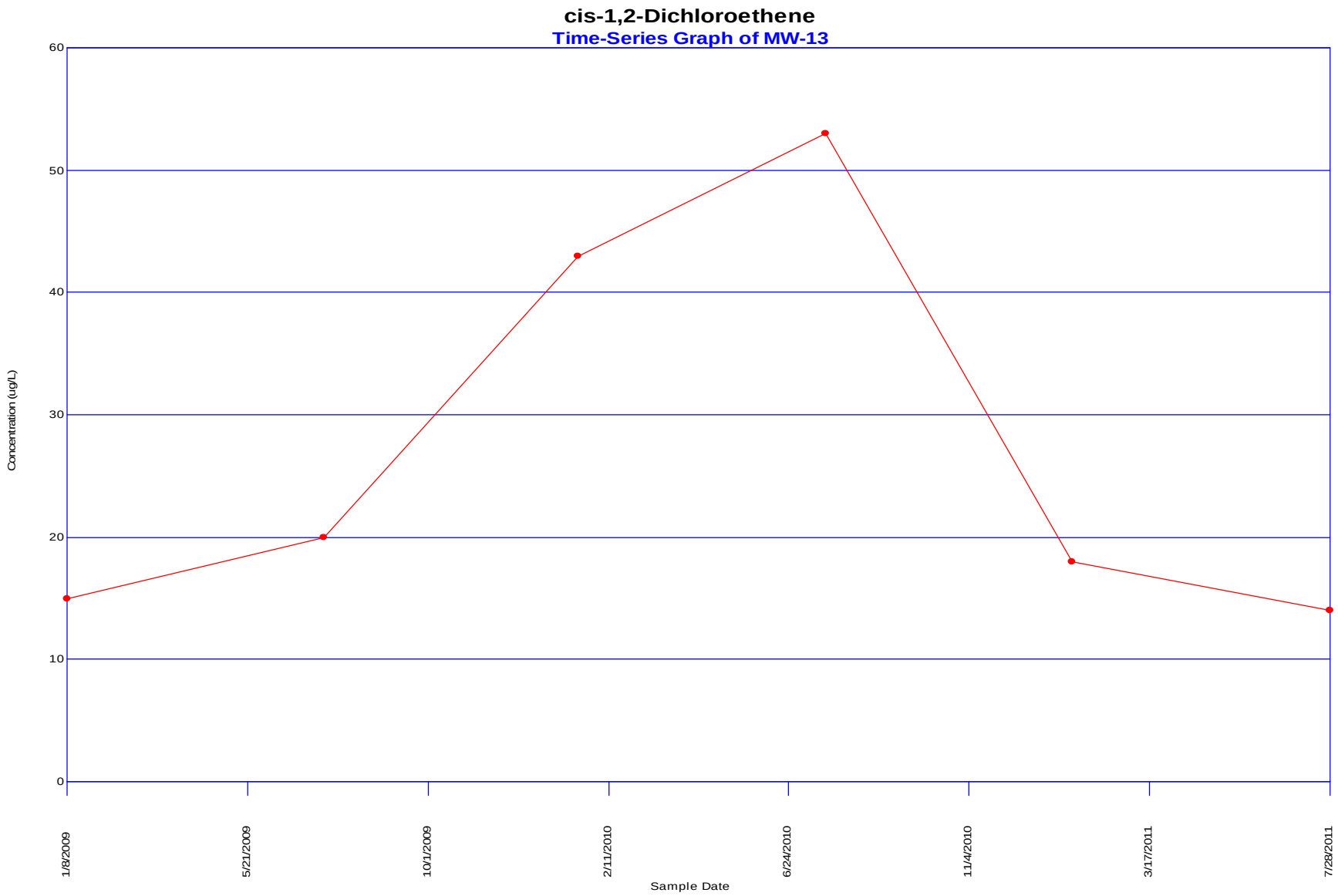

Vinyl chloride
Time-Series Graph of MW-12
Concentration (ug/L)
0.5
0.4
0.3
0.2
0.1
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

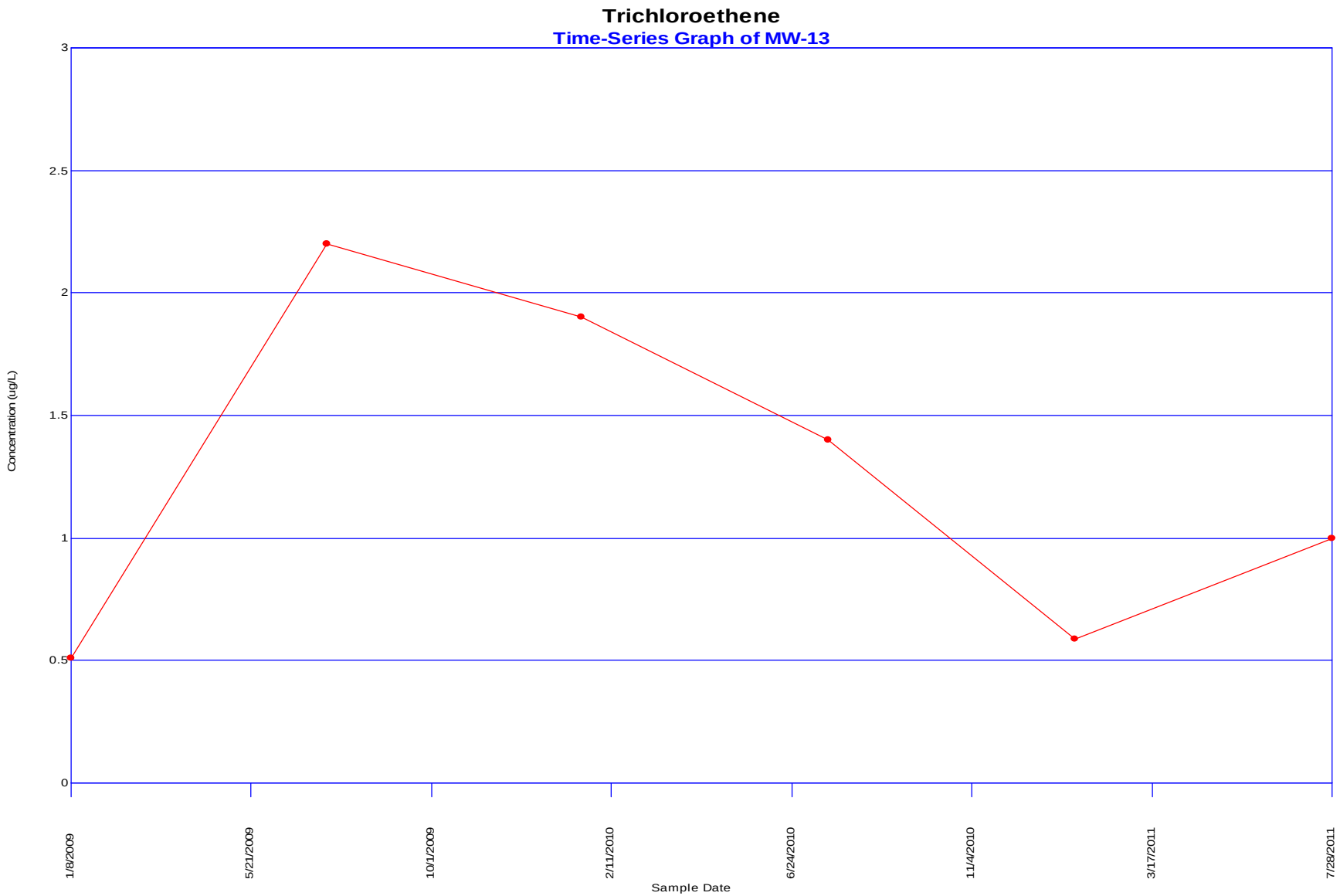

Cobalt Total
Time-Series Graph of MW-12
Concentration (ug/L)
20
15
10
5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

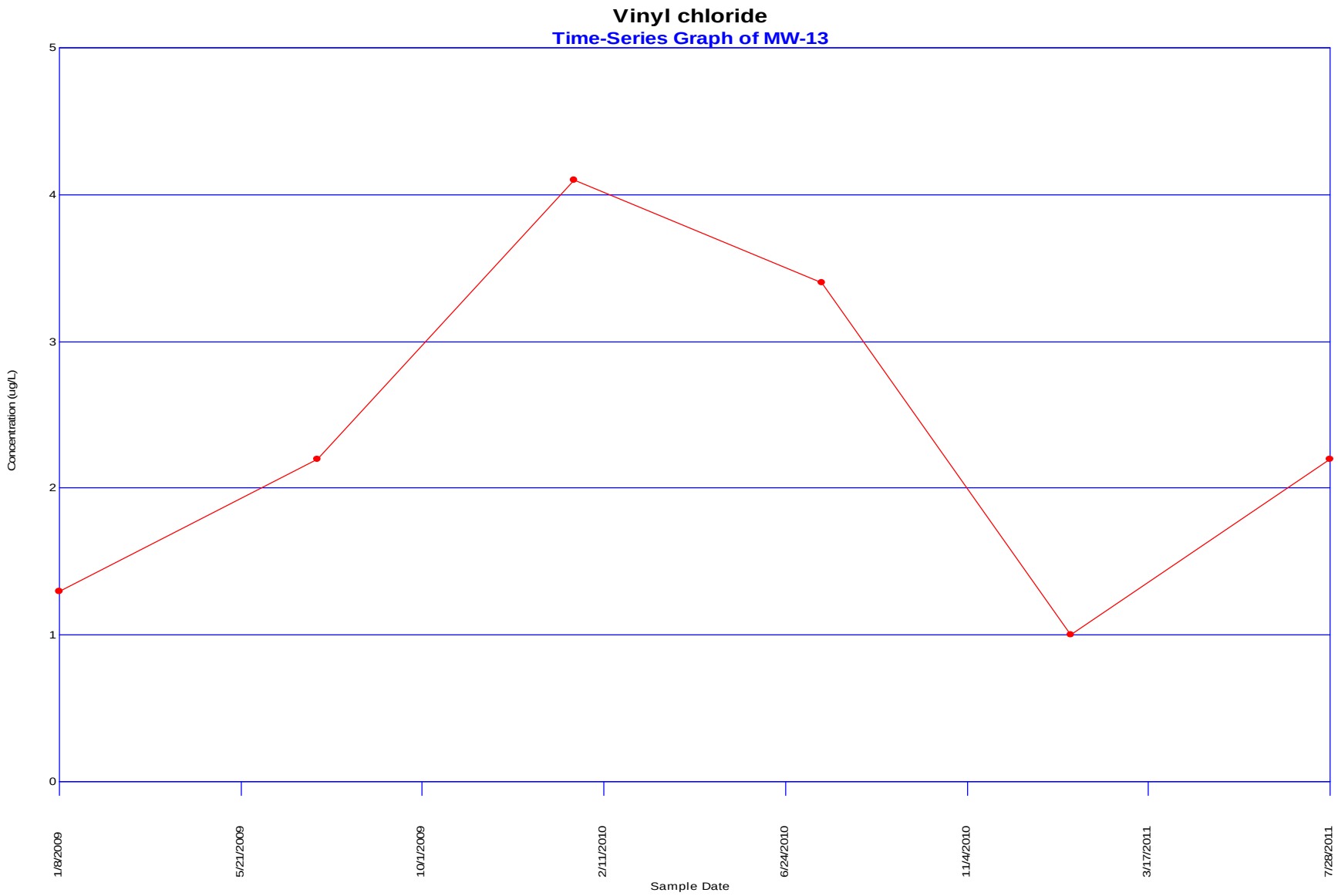

Benzene
Time-Series Graph of MW-13
Concentration (ug/L)
3
2.5
2
1.5
1
0.5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

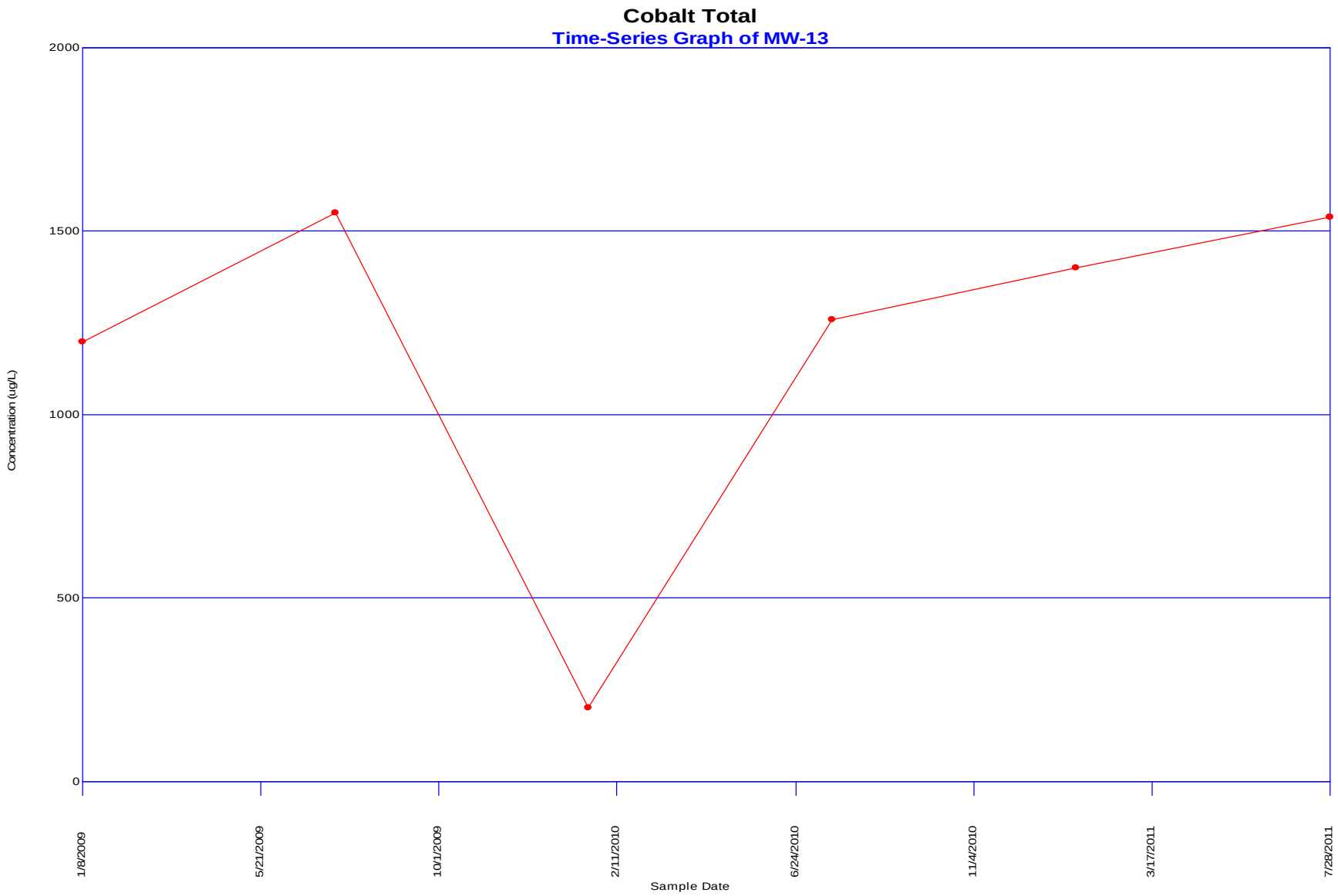

1,4-Dichlorobenzene
Time-Series Graph of MW-13
Concentration (ug/L)
4
3.5
3
2.5
2
1.5
1
0.5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

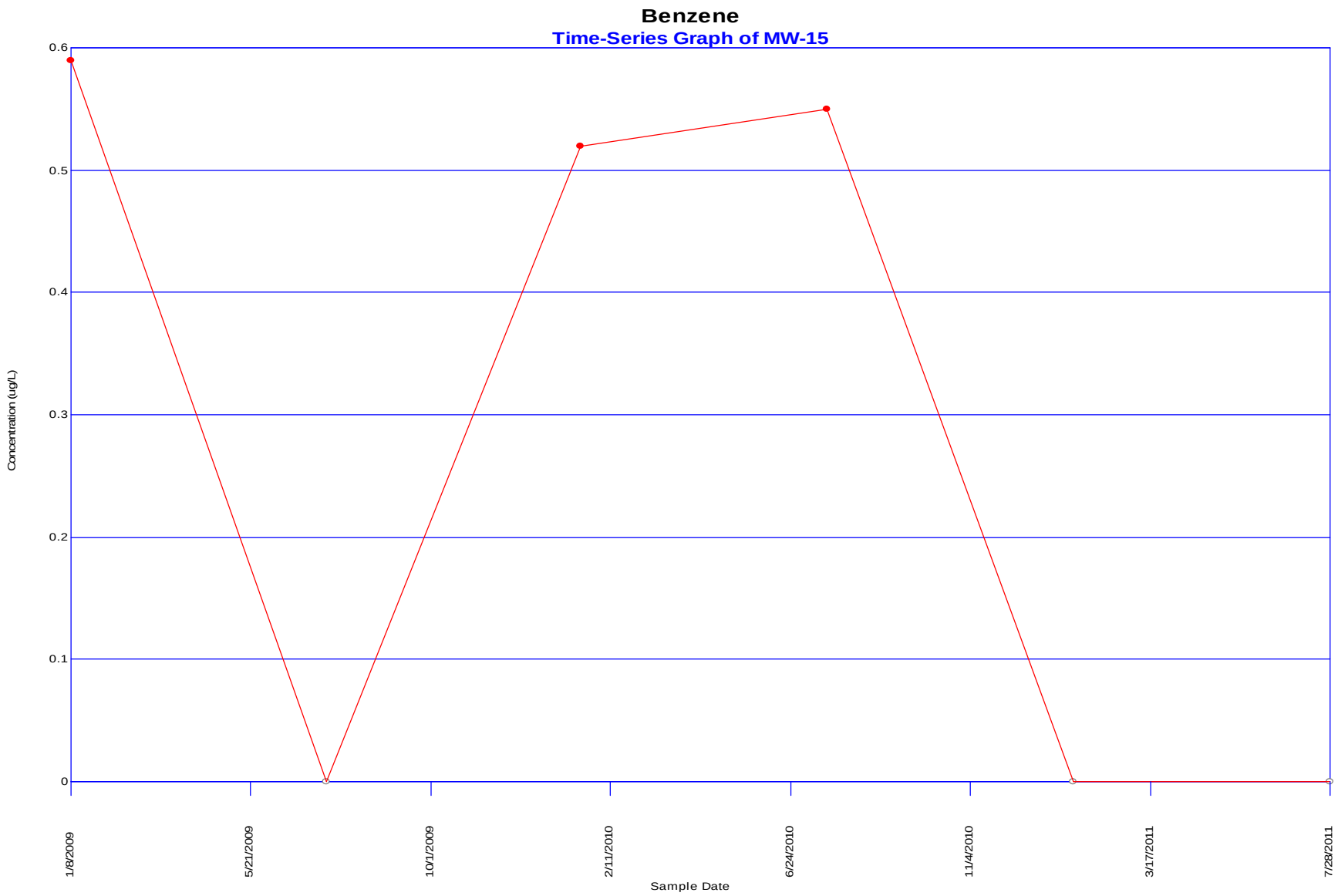

1,1-Dichloroethane
Time-Series Graph of MW-13
Concentration (ug/L)
2
1.5
1
0.5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

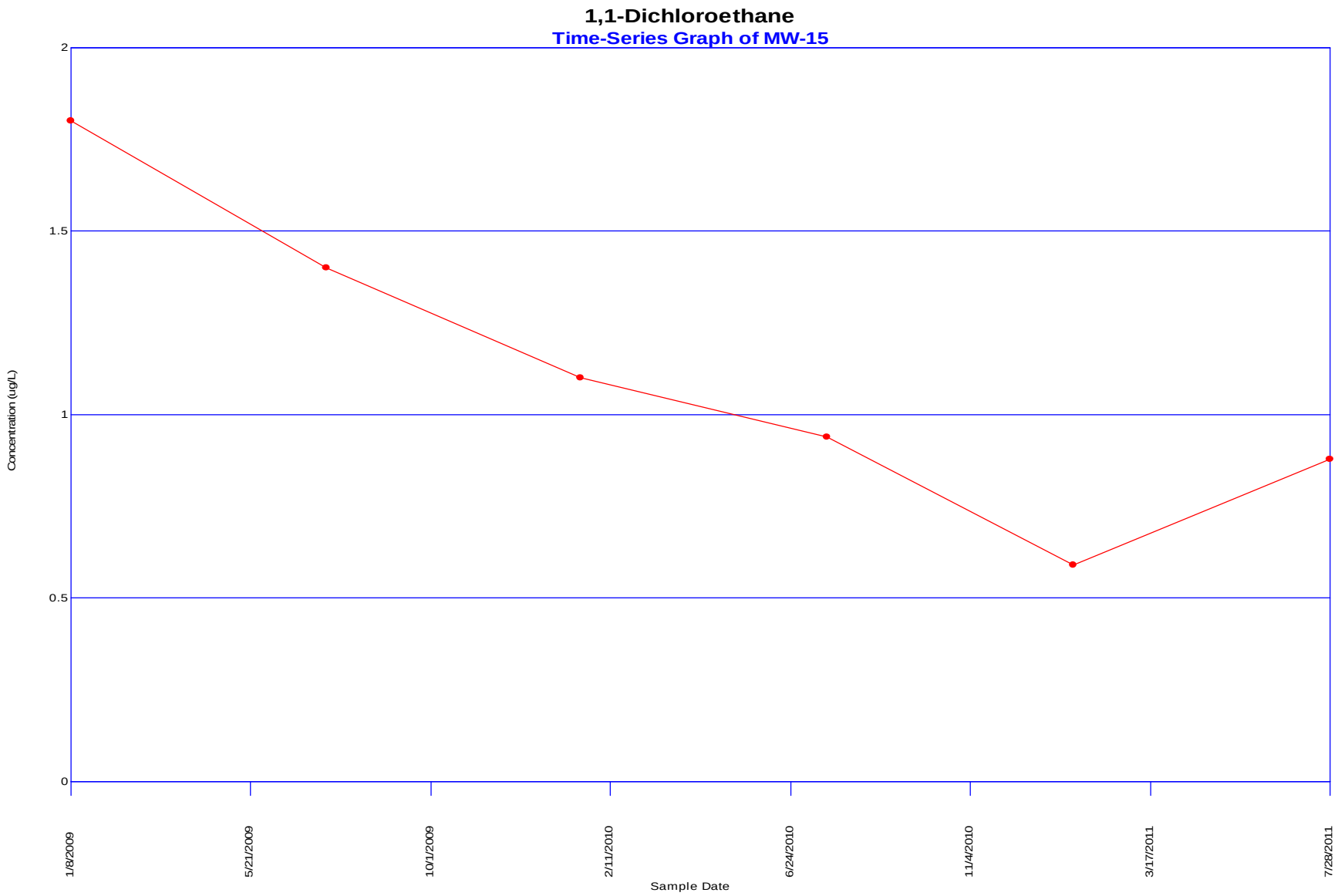

cis-1,2-Dichloroethene
Time-Series Graph of MW-13
Concentration (ug/L)
60
50
40
30
20
10
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

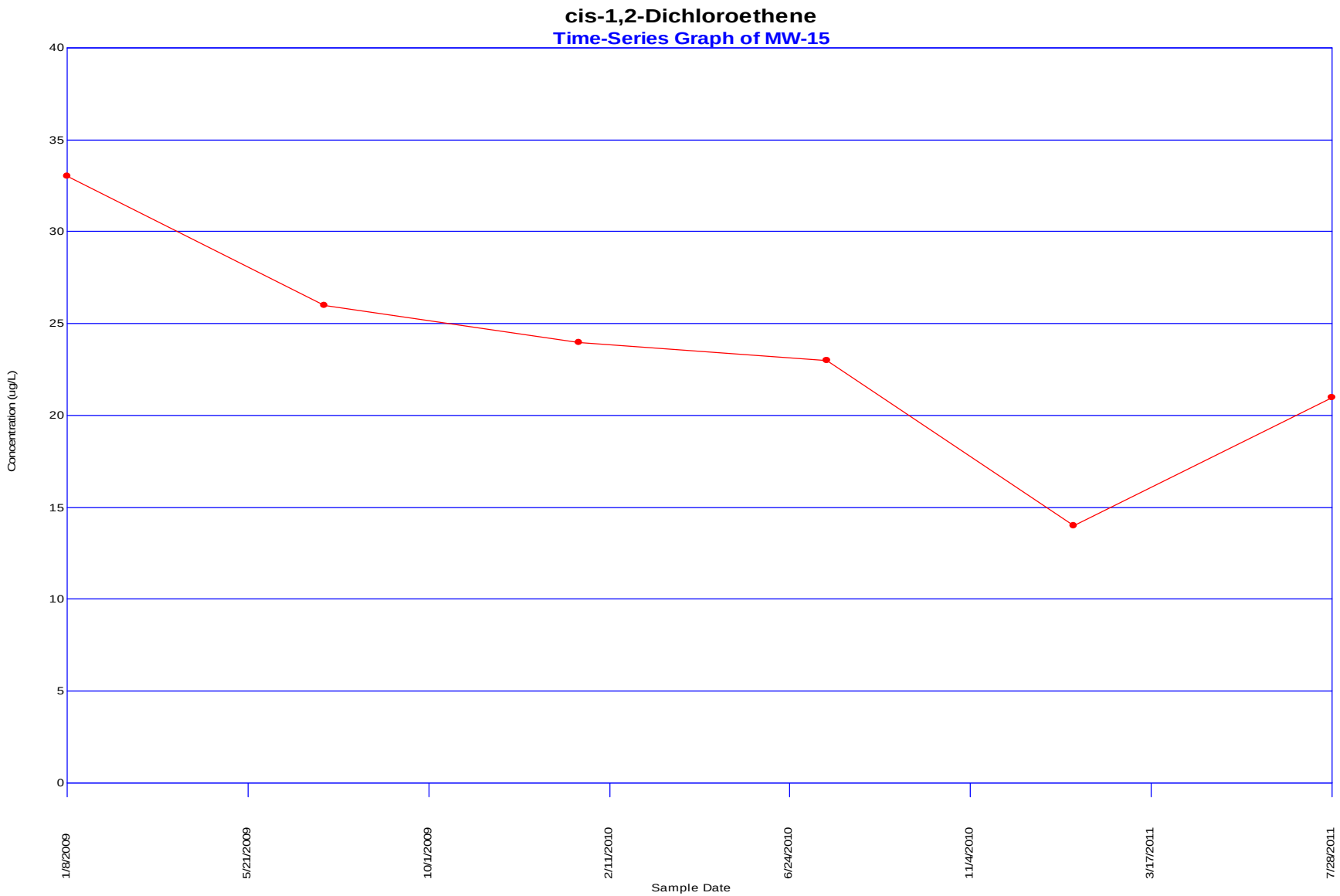

Trichloroethene
Time-Series Graph of MW-13
Concentration (ug/L)
3
2.5
2
1.5
1
0.5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

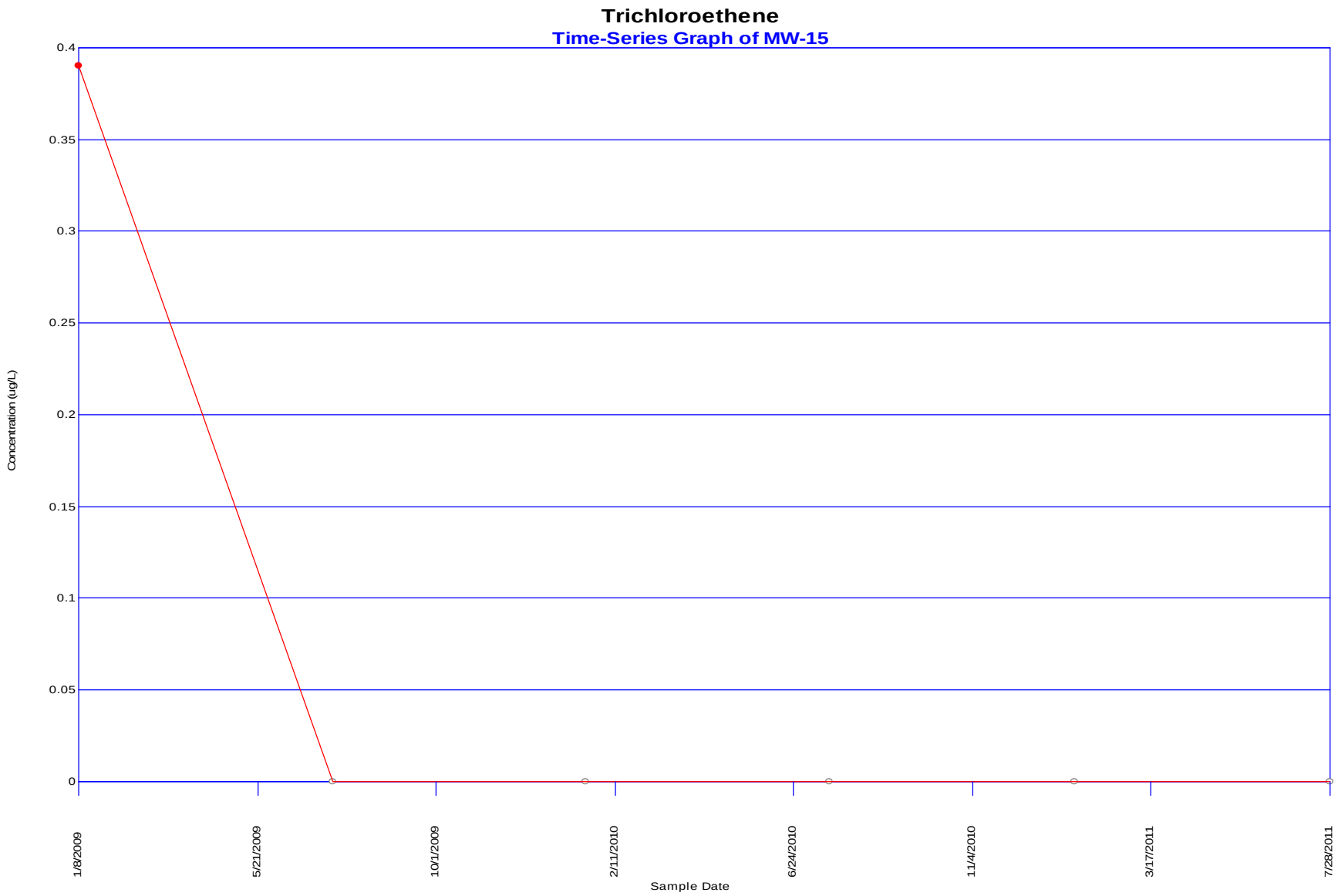

Vinyl chloride
Time-Series Graph of MW-13
Concentration (ug/L)
0
1
2
3
4
5
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

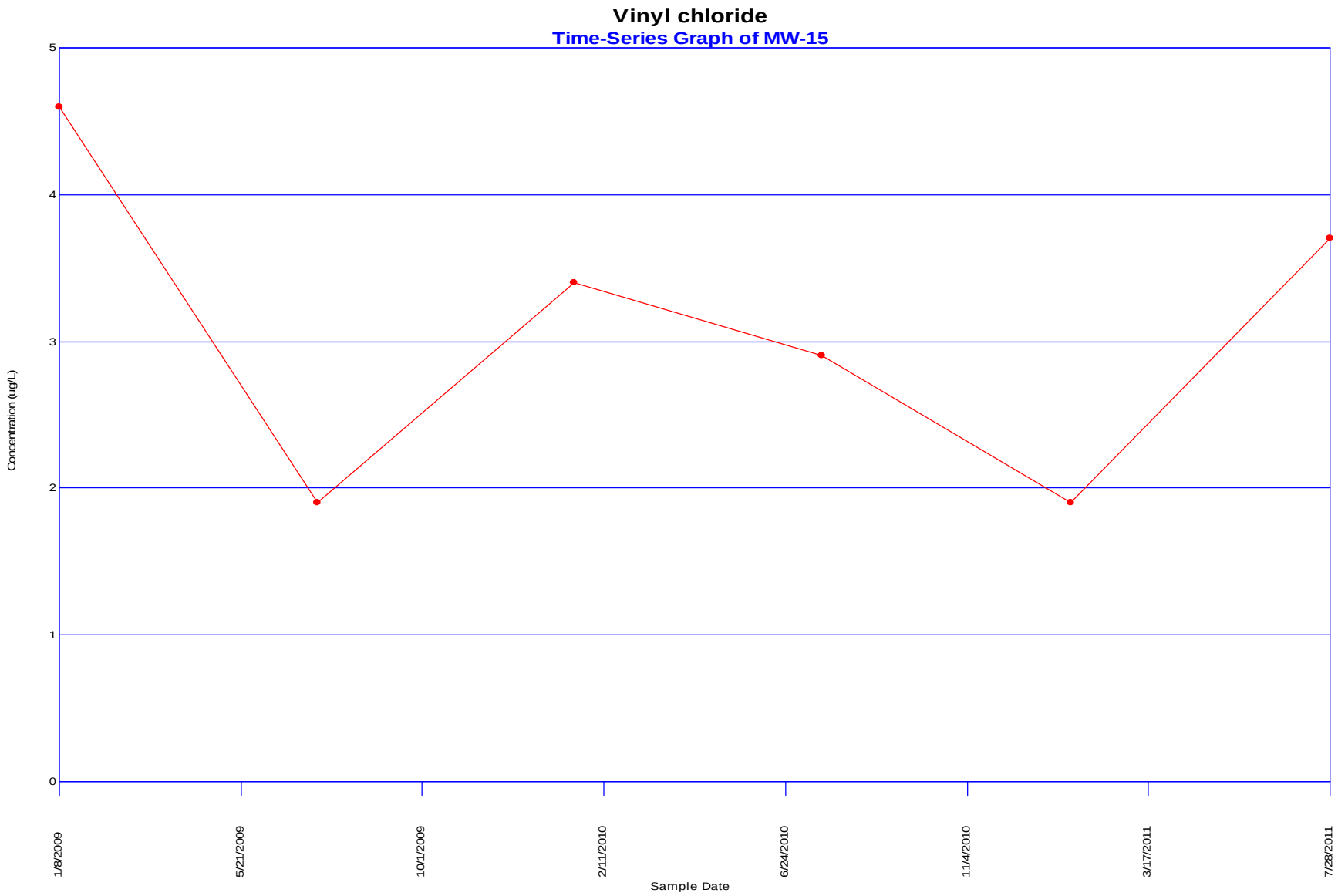

Cobalt Total
Time-Series Graph of MW-13
2000
1500
1000
500
0
Concentration (ug/L)
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date

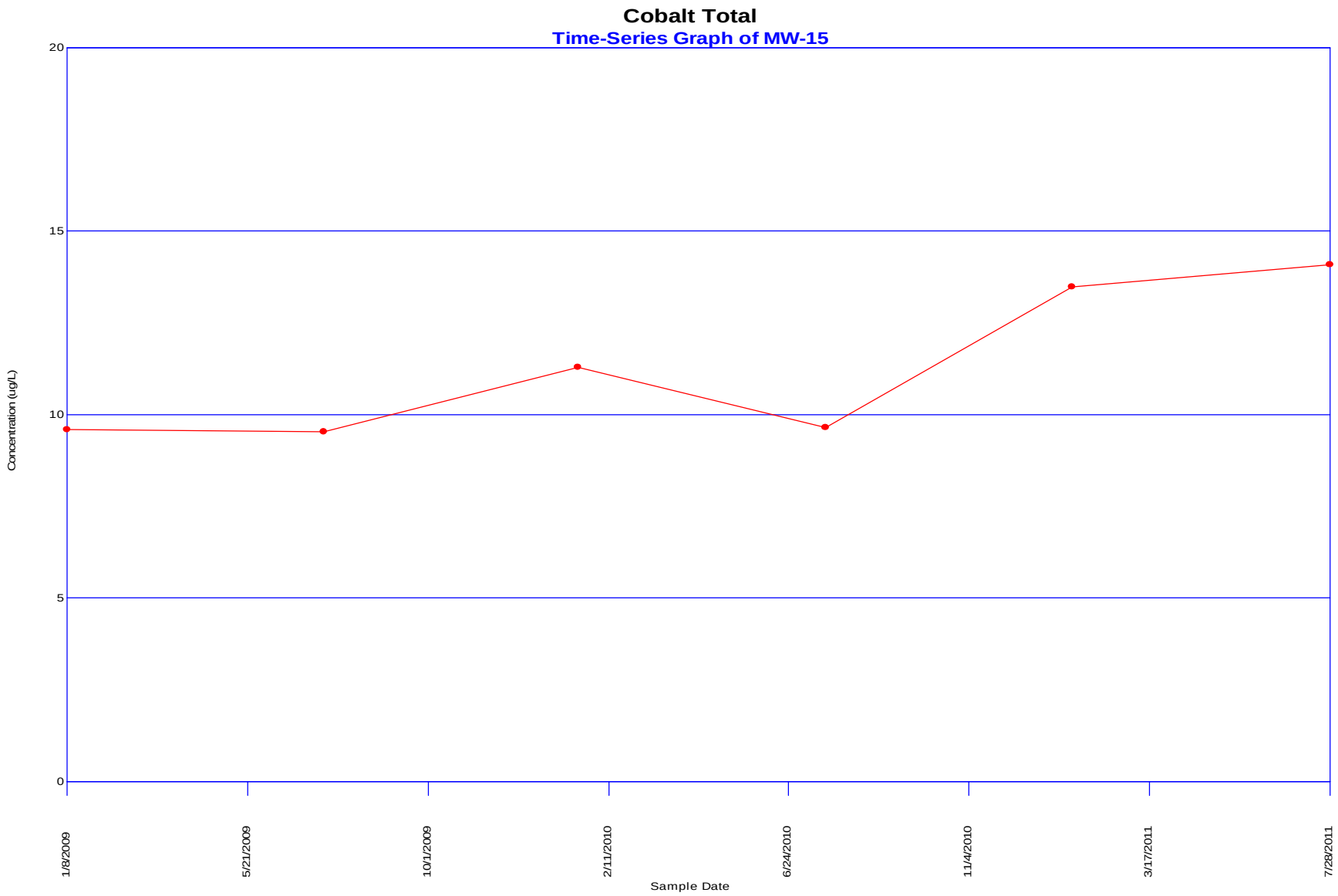

Benzene
Time-Series Graph of MW-15
Concentration (ug/L)
0.6
0.5
0.4
0.3
0.2
0.1
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date


1,1-Dichloroethane
Time-Series Graph of MW-15
Concentration (ug/L)
2
1.5
1
0.5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date


cis-1,2-Dichloroethene
Time-Series Graph of MW-15
Concentration (ug/L)
40
35
30
25
20
15
10
5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date


Trichloroethene
Time-Series Graph of MW-15
Concentration (ug/L)
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date


Vinyl chloride
Time-Series Graph of MW-15
Concentration (ug/L)
5
4
3
2
1
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date


Cobalt Total
Time-Series Graph of MW-15
Concentration (ug/L)
20
15
10
5
0
1/8/2009
5/21/2009
10/1/2009
2/11/2010
6/24/2010
11/4/2010
3/17/2011
7/28/2011
Sample Date