SHIELD ENGINEERING, INC.

October 31, 2012

Mr. Ervin Lane
Solid Waste Section
Division of Waste Management
NCDENR
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

Subject: **Semi-Annual Groundwater Monitoring Report**
City of Albemarle Landfill
DSWM Permit No. 84-01
Shield Project 1110192

Dear Mr. Lane:

On behalf of City of Albemarle, Shield Engineering (Shield) has completed the second 2012 Semi-Annual Sampling and Analysis event at the City of Albemarle Active C&D and closed Municipal Solid Waste Landfill (MSWLF) and the Subtitle D Lined MSWLF. The results are contained in the attached report.

Please contact the undersigned at (704) 394-6913 if you have any questions or comments about this report or other landfill-related issues.

Sincerely,
SHIELD ENGINEERING, INC.

J. David Wallace, P.E.
Senior Engineer

Keith A. Anthony, P.E.
Principal Engineer

Attachments

cc: Mr. Mike Lambert, Director of Public Works (City of Albemarle)

4301 Taggart Creek Road
Charlotte, NC 28208

www.shieldengineering.com

Telephone 704.394.6913
Fax 704.394.6968

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).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- 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):

SHIELD ENGINEERING, INC.

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

Name: J. David Wallace, P.E. Phone: (704)-971-4149

E-mail: dwallace@shieldengineering.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
CITY OF ALBEMARLE LANDFILL	40592 STONY GAP ROAD ALBEMARLE NORTH CAROLINA, 28001	84-01	.1600	JULY 16-19, 2012

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

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

Notification attached?

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

Certification

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

J. David Wallace, P.E.	SENIOR ENGINEER	(704)-971-4149
Facility Representative Name (Print)	Title	(Area Code) Telephone Number
J. David Wallace Signature	10/31/12 Date	Affix NC Licensed/ Professional Geologist/Engineer Seal here:

Revised 01/2007

REPORT OF
SEMI-ANNUAL SAMPLING AND ANALYSIS
JULY 2012
CITY OF ALBEMARLE LANDFILL

ACTIVE C&D AND CLOSED MSWLF
SUBTITLE D LINED MSWLF
DSWM PERMIT NO. 84-01

Prepared for:

City of Albemarle – Public Works Department
Stanly County, North Carolina

October 31, 2012
Shield Project 1110192

SHIELD ENGINEERING, INC.

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1.0 BACKGROUND INFORMATION

The City of Albemarle Landfill (DSWM [Division of Solid Waste Management] Permit #84-01) is located on Stony Gap Road (SR 1720), in Stanly County, North Carolina (see Figure 1). Prior to operating as a C&D Landfill, the site formerly operated as an unlined Municipal Solid Waste Landfill (MSWLF) that consisted of two units. The first unit (Unit #1) was closed prior to October 1991 with a 24-inch final soil cover. The second unit (Unit #2) was closed with an 18-inch thick cohesive soil cap with a permeability of 10^{-5} centimeters per second (cm/sec) and an 18-inch thick soil erosive layer prior to June 1999 in accordance with the *Transition Plan*. The C&D Landfill is constructed and operating on top of the Unit #1 MSWLF.

Adjacent to the C&D Landfill, across the unnamed tributary of Jacobs Creek, on the same contiguous property is the active Subtitle D lined MSWLF. The lined MSWLF is comprised of two contiguous phases (Phase 1 and 2) which are combined and treated as a single unit for continuity of the reporting to the SWS. This active MSWLF also operates under DSWM Permit #84-01 and is also reported herein.

As specified within Solid Waste Management Rules as per Title 15A, Subchapter 13B, Rules .1630 - .1637 of the North Carolina Administrative Code (15A NCAC 13B.1630 - .1637) this report contains sampling procedures, field measurements, laboratory analytical results, characterization of the groundwater and surface water, and findings from this sampling event. Tables of the hydrogeologic properties of the underlying groundwater, field parameters, summary of the analytical results with detections of those constituents exceeding the North Carolina Groundwater Standards (i.e., 15A NCAC 2L.0202) (NC 2L Groundwater Standards), potentiometric map, and quality assurance/quality control data, are presented. Additionally the laboratory analytical reports with chains-of-custody (CoC) are included in Appendix A.

The sampling programs for these two areas (i.e., Active C&D and closed MSWLF; and, the Subtitle D lined MSWLF) are described in Sections 1.1 and 1.2, respectively. The sampling procedures are described in Section 1.3.

1.1 ACTIVE C&D AND CLOSED MSWLF

A groundwater monitoring system for the Active C&D and the closed MSWLF landfill has been installed in accordance with Solid Waste Management Rules 15A NCAC 13B.1630 - .1637.

The site-specific Sampling and Analysis Plan (SAP) contains a combination of detection, assessment and corrective action monitoring. Detection monitoring was performed on six monitoring wells (MW-4R, MW-5R, MW-8D, MW-11, MW-24, and MW-25); one surface water sampling location (SW-7); and, background monitoring well (MW-1). Corrective action monitoring was performed on six monitoring wells (MW-2, MW-3, MW-6, MW-7, MW-9, and MW-10). An area downgradient of the Phase 1 Subtitle D lined MSWLF; and, between the unnamed tributary of Jacobs Creek and the Active C&D and closed MSWLF around the Leachate Lagoon has been under assessment since July 2009. At a meeting with SWS on July 14, 2009 a subset of monitoring wells were selected for assessment monitoring in this area. Therefore, assessment monitoring was performed on Monitoring Wells MW-12, MW-13 and MW-23 around the Leachate Lagoon. These monitoring well locations are shown on Figure 2.

Three surface water sampling locations monitor the unnamed tributary of Jacobs Creek (i.e., SW-1, SW-6, and SW-7); with SW-1 upstream, SW-6 downstream, and SW-7 is located between these two locations (i.e., SW-1 and SW-6). Since the unnamed tributary of Jacobs Creek passes between the closed MSWLF and the Subtitle D lined MSWLF, these three surface water sampling locations are also included for the SAP for the Subtitle D lined MSWLF (see Section 1.2). A fourth surface water sampling location (SW-5) monitors surface water runoff from the closed MSWLF before the runoff enters into the unnamed tributary of Jacobs Creek. These four surface water monitoring locations are shown on Figure 2.

Groundwater and surface water samples have been collected at this site on a semi-annual basis since 1994, in accordance with Solid Waste Management Title 15A, Subchapter 13B, Rules .1633(b) of the North Carolina Administrative Code (NCAC) [15A NCAC 13B.1633(b)]. As a condition of the water quality monitoring program, semi-annual reports are required to be submitted to the North Carolina Solid Waste Section (SWS). Shield Engineering, Inc. (Shield) of Charlotte, North Carolina performed this sampling event on July 16 through 17, 2012 in accordance with the *Sampling and Analysis Plan* (SAP) contained in the *CAER* dated July 1, 2011 for this site; and, the SWS *Guidelines for Groundwater, Soil, and Surface Water Sampling* dated April 2008.

SWS rule 15A NCAC 13B.1634(d)(2) requires that an Appendix I detection exceeding the NC 2L Groundwater Standards within the groundwater at any of the monitoring wells be followed by re-sampling of "all wells of the approved detection monitoring system for the unit for all constituents listed in the Appendix I and for those constituents in Appendix II that have been detected". In the vicinity of the leachate lagoon Appendix II sampling has been previously performed at Monitoring Wells MW-12, MW-13, and MW-23. Hence, for this sampling event Appendix II sampling was again completed in these three monitoring wells and reported to the SWS herein. Appendix I sampling was completed for the remaining monitoring wells at this site.

1.2 SUBTITLE D LINED MSWLF

A groundwater monitoring system for the Subtitle D lined MSWLF landfill has been installed in accordance with Solid Waste Management Rules as per Title 15A, Subchapter 13B, Rules .1630 - .1637 of the North Carolina Administrative Code (15A NCAC 13B.1630 - .1637).

Based on both the site-specific SAP and interaction with the SWS the water quality monitoring program for this site consists of detection monitoring. Detection monitoring was performed on nine monitoring wells (MW-14, MW-15, MW-16S, MW-16D, MW-17, MW-18, MW-22, MW-26, and MW-27); four surface water sampling locations (SW-1, SW-2, SW-6, and SW-7); background monitoring well (MW-19); and, a leachate sample (LEACHATE) from the collection lagoon.

The three surface water sampling locations that monitor the unnamed tributary of Jacobs Creek (i.e., SW-1, SW-6, and SW-7) are located between the closed MSWLF (see Section 1.1) and the Subtitle D lined MSWLF. Hence, these three surface water sampling locations are also included for the SAP for the Subtitle D lined MSWLF. A fourth surface water sampling location (SW-2) monitors surface water runoff in a drainage feature south from the Subtitle D lined MSWLF before the runoff enters into the unnamed tributary of Jacobs Creek. These four surface water monitoring locations are shown on Figure 2.

Groundwater and surface water samples have been collected at this site on a semi-annual basis since this MSWLF commenced operations in 1999. The groundwater and surface water sampling has been conducted in accordance with Solid Waste Management Title 15A, Subchapter 13B, Rules .1633(b) of the North Carolina Administrative Code (NCAC) [15A NCAC 13B.1633(b)]. As a condition of the water quality monitoring program, semi-annual reports are required to be submitted to the North Carolina Solid

Waste Section (SWS). Shield Engineering, Inc. (Shield) of Charlotte, North Carolina performed this sampling event on July 18 through 19, 2012 in accordance with the *Sampling and Analysis Plan* dated March 2, 2009 for this site; and, the SWS *Guidelines for Groundwater, Soil, and Surface Water Sampling* dated April 2008.

1.3 SAMPLING PLAN

Prior to the initiation of the data collection during this sampling event the function and integrity of each of the monitoring locations was visually evaluated and inspected. Subsequently, the depth-to-groundwater measurements were collected using an electronic water level meter at each of the monitoring wells prior to the purging of the groundwater from the monitoring wells. Additionally, the dissolved oxygen (DO) was measured in the monitoring well prior to the initiation of the well purging. The purging of each of the monitoring wells was carried out using bailing with clean Teflon bailers. The well purging was completed for a minimum of three well volumes or until the well was dry. During the well purging field parameters of pH, specific conductivity, temperature, and oxidation-reduction potential (ORP) were recorded for each monitoring well.

Shield personnel performed this sampling event utilizing portable monitoring methodology. Monitoring locations were designated in the approved SAPs for both sites. Groundwater sampling and analysis were performed at each of the two City of Albemarle sites in general accordance with the respective SAPs for these sites, and other appropriate documents and agreements. The second 2012 semi-annual sampling event for these two sites was performed in July 2012. The results of this sampling event are reported herein.

The samples were placed into laboratory prepared pre-preserved containers using a Teflon bailer. Samples were collected based on likelihood of potential cross-contamination, kept on ice, and transported to a North Carolina certified laboratory using proper Chain-of-Custody protocol within the specified hold times for each of the required analyses.

The sampling was attempted at the Active C&D and closed MSWLF for the following:

- Appendix I list constituents and turbidity for Monitoring Wells MW-1, MW-2, MW-3, MW-4R, MW-5R, MW-6, MW-7, MW-8D, MW-9, MW-10, MW-11, MW-24, and MW-25; and Surface Water monitoring stations SW-1, SW-2, SW-5, and SW-7.

- Appendix II list constituents and turbidity for Monitoring Wells MW-12, MW-13, and MW-23 and Surface Water monitoring station SW-6.
- Monitored natural attenuation parameters for Monitoring Wells MW-1, MW-2, MW-3, MW-6, MW-7, MW-9, and MW-10.

The sampling was attempted at the Subtitle D lined MSWLF for the following:

- Appendix I list constituents for Monitoring Wells MW-14, MW-15, MW-16S, MW-16D, MW-17, MW-18, MW-19, MW-22, MW-26, and MW-27; and, Surface Water monitoring stations SW-1, SW-2, SW-6 and SW-7.

The sampling includes the collection of a leachate sample from the leachate lagoon for the Subtitle D lined MSWLF for the following:

- Leachate for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), nitrate, sulfate, phosphate, pH, Total Suspended Solids, and Appendix I metals and volatile constituents.

Quality control measures implemented during this sampling event included submittal and subsequent blank quantification, equipment blank (EB), field blank (FB), and trip blank (TB).

2.0 ACTIVE C&D AND CLOSED MSWLF

2.1 SAMPLING AND CHEMICAL ANALYSES

The function and integrity of each of the monitoring locations was visually evaluated and inspected prior to the purging/sampling at the monitoring location. Subsequently, the depths to groundwater were measured at the site monitoring wells prior to well purging and sampling and are presented in Section 2.2. The sixteen wells identified in Section 1.1 were purged on the date listed below. Samples of groundwater were collected from monitoring locations described in Section 1.1 with the exception of the four surface water sampling locations (i.e., SW-1, SW-5, SW-6, and SW-7). All of these surface water locations were dry, due to the prevalent dry weather in the area prior to, and through the month of July 2012. Water samples were collected in laboratory cleaned and laboratory furnished containers, preserved as appropriate for the test method, and delivered to Environmental Conservation Laboratories (ENCO) in Cary, North Carolina. Chain-of-custody protocol was followed.

The chemical analyses (i.e., Appendix I or Appendix II) performed on the samples of groundwater were identified in Section 1.3 and the results of these analyses are presented in Section 2.3.

2.2 GROUNDWATER DEPTHS AND FIELD MEASUREMENTS

2.2.1 Groundwater Flow Characteristics

Depths to groundwater were measured at the site monitoring wells prior to well purging and sampling. Groundwater elevations at the wells are listed in the attached Table 1, and were determined by subtracting the depths to groundwater measured on July 16 through 18, 2012 from the surveyed (reference) top-of-casing elevations.

A potentiometric map for the contiguous property, which includes both sites, is included in Figure 2. The groundwater flow characteristics based on both the potentiometric map and the aquifer characteristics for the monitoring system in July 2012, are presented in Table 2. The estimated groundwater flow velocities for this site range from 0.1 (MW-8D) up to 100 (MW-11) feet per year (ft/yr), with an average groundwater flow velocity of about 25 ft/yr.

2.2.2 Indicator Parameters

The field parameters pH, temperature, DO, ORP, and specific conductivity were measured with calibrated electronic meters. Field tested parameters are shown in Table 3. Specific conductivity values of the groundwater samples for the monitoring wells ranged from 193.7 (MW-11) to 2067 (MW-10) micromhos per centimeter (µmhos/cm). Values of groundwater pH for the monitoring wells ranged from 5.48 (MW-6) to 6.65 (MW-3). The concentrations of dissolved oxygen ranged from 0.10 (MW-3 and MW-24) to 5.27 (MW-5R) milligrams per liter (mg/L). Values of oxidation reduction potential (ORP) for the monitoring wells ranged from -50.0 (MW-12) to 164.0 (MW-24) millivolts (mV).

Due to the absence of surface water no field parameters were obtained for the four surface water sampling locations, three of which are located on the unnamed tributary of Jacobs Creek (SW-1, SW-6, and SW-7). The other surface water sampling location (SW-5) is located on a drainage feature from which surface water would usually flow into the unnamed tributary of Jacobs Creek.

2.3 RESULTS OF CHEMICAL ANALYSES

Results of analyses for inorganics in groundwater are listed in Table 4 and the organics in groundwater are listed in Table 5. The results of the analyses for the partial list of monitored natural attenuation parameters for the six (seven were attempted, however MW-1 was dry) selected corrective action monitoring wells (i.e., MW-2, MW-3, MW-6, MW-7, MW-9, and MW-10) are shown in Table 6.

Several inorganics exceeded the NC 2L Groundwater Standards (i.e., arsenic [MW-2, MW-3, MW-12, and MW-13], cadmium [MW-7], chromium [MW-2, MW-11, and MW-25], lead [MW-2], and nickel [MW-2]). The Interim Maximum Allowable Concentration (IMAC) for cobalt was exceeded in all of the sampled monitoring wells except Monitoring Well MW-6. The IMAC for vanadium was exceeded in Monitoring Wells MW-2, MW-7, MW-8D, MW-11, MW-24, and MW-25.

Only those organic constituents that were detected in any one of the monitoring wells were included in Table 5. Organic constituents were detected in all of the monitoring wells, except Monitoring Wells MW-4R, MW-5R, MW-24 and MW-25 (see Table 5). However, only seven of these monitoring wells (i.e., MW-6, MW-7, MW-8D, MW-9, MW-11, MW-13, and MW-23) had organic constituent concentrations exceeding the NC 2L Groundwater Standards.

Tetrachloroethene was detected above the NC 2L Groundwater Standard of 0.7 mg/L in Monitoring Wells MW-6, MW-8D, and MW-9 at estimated concentrations of 0.79J and 0.71J; and 7.2 µg/L, respectively. Vinyl chloride was detected above the NC 2L Groundwater Standard of 0.03 µg/L in Monitoring Wells MW-11, MW-13, and MW-23 at estimated concentrations of 0.61J, 0.86J and 2.0 µg/L, respectively. One other organic constituent (1,1-dichloroethane) were detected above the NC 2L Groundwater Standard in Monitoring Well MW-11 (see Table 5). In addition to the tetrachloroethene present in Monitoring Well MW-9 above the NC 2L Groundwater Standard, trichloroethene was also measured (4.6 µg/L) above the NC 2L Groundwater Standard (3 µg/L) in this monitoring well. Benzene was also detected above the NC 2L Groundwater Standard of 1 µg/L in Monitoring Wells MW-7 and MW-23 at 2 and 1.3 µg/L, respectively.

Monitoring Wells MW-2, MW-6 and MW-7 are located along the western property boundary in an area where the groundwater has been labeled as the West Plume due to the previous occurrence of organic constituents at these wells. Recently the City of Albemarle purchased the adjacent 104-acre property beyond the western property boundary as a buffer for the active C&D and closed MSWLF area of the site. This additional buffer is located beyond these monitoring wells. Additionally, Monitoring Well MW-24 which is located immediately downgradient from Monitoring Well MW-7, continued to exhibit no detections of organic constituents during this sampling event. Hence, with the increased buffer zone in this area Monitoring Well MW-7 will no longer be a compliance well in this area.

Within the West Plume and similar to previous sampling events, none of the four VOCs measured at Monitoring Well MW-2 during the July 2012 sampling event exceeded their respective NC 2L Groundwater Standards. The total VOC concentration at Monitoring Well MW-2 of 8.59 µg/L, is within the range of previous total VOC concentrations recorded since 2007. Similar to previous sampling events one VOC (tetrachloroethene at 0.79 µg/L) exceeded the NC 2L Groundwater Standard (0.7 µg/L) in Monitoring Well MW-6. Also, similar to previous sampling events one VOC (benzene at 2 µg/L) exceeded the NC 2L Groundwater Standard (1 µg/L) in Monitoring Well MW-7. The two monitoring wells (MW-24 and 25) immediately downgradient from Monitoring Wells MW-2 and MW-7, did not exhibit any VOCs during this sampling event.

Monitoring Wells MW-3, MW-9, and MW-11 are located on the east side the closed MSWLF area of the site. Together these wells make up the East Plume due to previous occurrence of organic constituents in

these three monitoring wells. During this sampling event no exceedances of the NC 2L Groundwater Standards were identified in the area of the East Plume at Monitoring Wells MW-3 or MW-10. Two VOCs (tetrachloroethene and trichloroethene) were measured above their respective NC 2L Groundwater Standards in Monitoring Well MW-9. The monitoring wells in this area (i.e., MW-3, MW-9, and MW-10) will continue to be monitored during subsequent sampling events.

Monitoring Well MW-8D is located upgradient from the active C&D and closed MSWLF area. This well exhibited tetrachloroethene at an estimated concentration of 0.71 µg/L, slightly above the NC 2L Groundwater Standard of 0.7 µg/L. Estimated concentrations of tetrachloroethene have been reported at this well in two previous sampling events (February 2009 and January 2010). Neither of these estimated concentrations (0.52 and 0.36 µg/L, respectively) exceeded the NC 2L Groundwater Standard of 0.7 µg/L.

Due to the dry weather this summer the unnamed tributary of Jacobs Creek that passes through the property has been dry. Therefore no surface water samples were collected during the July 2012 sampling event. Additionally, the groundwater in this area is not discharging to the stream courses in the vicinity of the City of Albemarle Landfill.

In the area of the Leachate Lagoon Monitoring Well MW-12, which is located upgradient from the lagoon (see Figure 2), exhibited two VOCs, but no exceedances of the NC 2L Groundwater Standards. However, both monitoring wells on the downgradient side of the Leachate Lagoon (i.e., MW-13 and MW-23; which are both located between the lagoon and the unnamed tributary of Jacobs Creek) exhibited VOCs above the NC 2L Groundwater Standards. Both of these wells exhibited vinyl chloride concentrations of 0.86J (MW-13) and 2 µg/L (MW-23), which are above the NC 2L Groundwater Standard of 0.03 µg/L. Additionally, Monitoring Well MW-23 exhibited benzene at a concentration of 1.3 µg/L, which is above the NC 2L Groundwater Standard of 1 µg/L.

Selected monitored natural attenuation (MNA) parameters were measured in the laboratory for selected monitoring wells (i.e., MW-2, MW-3, MW-6, MW-7, MW-9 and MW-10). The results of the laboratory analyses for the MNA parameters are shown in Table 6. However, these particular MNA parameters are a partial set of the complete suite of typical MNA parameters and as a result it is not possible to provide an assessment of overall biodegradation for these wells. A comparison of these results to previous MNA data sets does indicate ongoing degradation. In their letter dated July 11, 2011 the SWS has provided the City of Albemarle a sequencing schedule for collecting the MNA parameters over the coming years. The

primary conclusion from these data is that natural degradation is continuing to breakdown the VOCs within the subsurface.

The laboratory reports for these analyses are included in Appendix A.

3.0 SUBTITLE D LINED MSWLF

3.1 SAMPLING AND CHEMICAL ANALYSES

The function and integrity of each of the monitoring locations was visually evaluated and inspected prior to the purging/sampling at the monitoring location. Subsequently, the depths to groundwater were measured at the site monitoring wells prior to well purging and sampling and are presented in Section 3.2. The ten monitoring wells identified in Section 1.2 were purged on the date listed below. Samples of groundwater were collected from monitoring locations described in Section 1.2 with the exception of the four surface water sampling locations (i.e., SW-1, SW-2, SW-6, and SW-7). All of these surface water locations were dry, due to the prevalent dry weather in the area through the month of July 2012. Water samples were collected in laboratory cleaned and laboratory furnished containers, preserved as appropriate for the test method, and delivered to Environmental Conservation Laboratories (ENCO) in Cary, North Carolina. Chain-of-custody protocol was followed.

The chemical analyses (i.e., Appendix I) performed on the samples of groundwater were identified in Section 1.3 and the results of these analyses are presented in Section 3.3.

3.2 GROUNDWATER DEPTHS AND FIELD MEASUREMENTS

3.2.1 Groundwater Flow Characteristics

Depths to groundwater were measured at the site monitoring wells prior to well purging and sampling. Groundwater elevations at the wells are listed in the attached Table 1, and were determined by subtracting the depths to groundwater measured on July 16 through 18, 2012 from the surveyed (reference) top-of-casing elevations.

A potentiometric map for the contiguous property, which includes both sites, is included in Figure 2. The groundwater flow characteristics based on both the potentiometric map and the aquifer characteristics for the detection monitoring system in July 2012, are presented in Table 7. The estimated groundwater flow velocities for this site range from 1 (MW-16S) up to 700 (MW-15) feet per year (ft/year), with an average groundwater flow velocity of about 125 ft/year.

3.2.2 Indicator Parameters

The field parameters pH, temperature, DO, ORP, and specific conductivity were measured with calibrated electronic meters. Field tested parameters are shown in Table 8. Specific conductivity values of the groundwater samples for the detection monitoring system wells ranged from 108.1 (MW-26) to 838 (MW-19) µmhos/cm. Values of groundwater pH for the detection wells ranged from 5.65 (MW-26) to 6.60 (MW-19). The concentrations of dissolved oxygen ranged from 0.11 (MW-16D) to 7.65 (MW-19) mg/L. Values of ORP for the detection wells ranged from -116.0 (MW-22) to 298.0 (MW-26) mV.

Due to the absence of surface water no field parameters were obtained for the four surface water sampling locations, three of which are located on the unnamed tributary of Jacobs Creek (SW-1, SW-6, and SW-7). The other surface water sampling location (SW-2) is located on a drainage feature located south of the Subtitle D lined MSWLF and when it flows, the surface water would usually flow into the unnamed tributary of Jacobs Creek.

3.3 RESULTS OF CHEMICAL ANALYSES

Results of analyses for the inorganics in groundwater are listed in Table 4 and the organics in groundwater are listed in Table 5.

Of the 15 Appendix I total metals analyzed, only one metal (arsenic) was detected above the NC 2L Groundwater Standard. Three metals (cobalt, thallium, and vanadium) were detected above the North Carolina IMACs. Arsenic was detected in Monitoring Well MW-16D with a concentration of 0.0124 mg/l, respectively. Cobalt was found above the IMAC (i.e., 0.001 mg/L) in all ten monitoring wells around the Subtitle D lined MSWLF with concentrations ranging from 0.00141J (MW-15) up to 0.117 (MW-16D) mg/L. Thallium was detected above the IMAC in Monitoring Well MW-15 with an estimated concentration of 0.000221 mg/L. Vanadium was detected above the IMAC in Monitoring Wells MW-14, MW-15, MW-18, MW-22, MW-26, and MW-27 with estimated concentrations ranging from 0.00152 (MW-22) to 0.00631 (MW-26) mg/L.

No organic constituents were detected at the Subtitle D lined MSWLF site. All the ten monitoring wells around the Subtitle D lined MSWLF did not exhibit any traces of organic constituents.

Due to the dry weather this summer the unnamed tributary of Jacobs Creek that passes through the property has been dry. Therefore no surface water samples were collected during the July 2012 sampling event. Additionally, the groundwater in this area is not discharging to the stream courses in the vicinity of the City of Albemarle Landfill.

4.0 SUMMARY AND CONCLUSIONS

The sampling event reported herein includes the monitoring wells for each of the two landfill sites presented in Sections 1.1 and 1.2, and the leachate sample collected from the leachate lagoon that receives flow from the Subtitle D lined MSWLF. Due to the dry weather this summer the unnamed tributary of Jacobs Creek that passes through the property has been dry. Therefore no surface water samples were collected from any of the five surface water sampling locations during the July 2012 sampling event.

The inorganic constituents identified at the two landfill sites that exceed either the NC 2L Groundwater Standards or the IMACs are as follows:

Active C&D and closed MSWLF:

- Arsenic: MW-2, MW-3, MW-12, and MW-13
- Cadmium: MW-7
- Chromium: MW-2, MW-11, and MW-25
- Cobalt: All thirteen monitoring wells (except MW-1 which was dry, and MW-6)
- Lead: MW-2
- Nickel: MW-2
- Vanadium: MW-2, MW-7, MW-8D, MW-11, MW-24, and MW-25

Subtitle D lined MSWLF:

- Arsenic: MW-16D
- Cobalt: All ten monitoring wells, including background Monitoring Well MW-19
- Thallium: MW-15
- Vanadium: MW-14, MW-15, MW-18, MW-22, MW-26, and MW-27

One of the wells listed above is the background monitoring well (MW-19) for the Subtitle D lined MSWLF. Additionally, another monitoring well listed twice above (MW-8D; see Figure 2) is located upgradient from the Active C&D and closed MSWLF, and is not a compliance well.

The organic constituents identified at the landfill sites that exceed either the NC 2L Groundwater Standards or the IMACs are as follows:

Active C&D and closed MSWLF:

The only organic constituents identified at the Active C&D and closed MSWLF Site that exceed the NC 2L Groundwater Standards are as follows:

- 1,1-Dichloroethane in Monitoring Well MW-11;
- Benzene in Monitoring Wells MW-7 and MW-23;
- Tetrachloroethene in Monitoring Wells MW-6, MW-8D, and MW-9;
- Trichloroethene in Monitoring Well MW-9; and
- Vinyl chloride in Monitoring Wells MW-11, MW-13, and MW-23.

Organic constituents continue to be present within Monitoring Wells MW-2, MW-6, and MW-7 in the West Plume and similar to previous sampling events, none of the four VOCs measured at Monitoring Well MW-2 during the July 2012 sampling event exceeded their respective NC 2L Groundwater Standards. Similar to previous sampling events one VOC exceeding the NC 2L Groundwater Standards was identified in each of Monitoring Wells MW-6 and MW-7. The monitoring wells in this area (i.e., MW-2, MW-6, and MW-7) will continue to be monitored during subsequent sampling events. The two monitoring wells (MW-24 and 25) immediately downgradient from Monitoring Wells MW-2 and MW-7, did not exhibit any VOCs during this sampling event.

No exceedances of the NC 2L Groundwater Standards were identified in the area of the East Plume at Monitoring Wells MW-3 or MW-10. Whereas two VOCs exceeded their respective NC 2L Groundwater Standards in Monitoring Well MW-9. The monitoring wells in this area (i.e., MW-3, MW-9, and MW-10) will continue to be monitored during subsequent sampling events.

Subtitle D lined MSWLF:

No organic constituents were detected at the Subtitle D lined MSWLF site as all the ten monitoring wells around this site did not exhibit any traces of organic constituents.

The leachate sample collected from the leachate lagoon exhibited one organic constituent (see Table 5). Seven inorganic constituents were also identified in the leachate sample (see Table 4).

The monitoring networks currently sampled around each of the two landfill sites owned and operated by City of Albemarle are capable of detecting the migration of constituents for the landfill cells.

TABLE 8

FIELD-TESTED PARAMETERS - SUBTITLE D LINED MSWLF
MEASUREMENTS OF JULY, 2012
CITY OF ALBEMARLE LANDFILL
STANLY COUNTY, NORTH CAROLINA

Monitoring Well Identification	Specific Conductivity (µmhos/cm)	pH (SU)	Temperature (^oC)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)
MW-14	533.0	6.09	20.7	1.06	74.0
MW-15	473.8	6.16	20.8	3.78	28.0
MW-16S	651.0	6.34	21.1	0.51	158.0
MW-16D	561.0	5.95	23.4	0.11	14.0
MW-17	409.5	6.09	20.8	0.21	171.0
MW-18	250.1	5.88	17.4	1.92	-6.0
MW-19	838	6.60	20.5	7.65	52.0
MW-22	303.6	5.67	21.3	2.72	-116.0
MW-26	108.1	5.65	20.7	7.34	298.0
MW-27	437.4	5.87	24.1	2.60	150.0
SW-1	Dry	Dry	Dry	Dry	Dry
SW-2	Dry	Dry	Dry	Dry	Dry
SW-6	Dry	Dry	Dry	Dry	Dry
SW-7	Dry	Dry	Dry	Dry	Dry

NOTES:
1) µmhos/cm = micromhos per centimeter
2) SU = Standard Units
3) ^oC = Degrees Celsius
4) mg/L = Milligrams per Liter
5) mV = Millivolts

Prepared/Date: D. Wallace 8/13/2012
Checked/Date: R. Sutley 8/22/12

TABLE 7

GROUNDWATER FLOW CHARACTERISTICS - SUBTITLE D LINED MSWLF
MEASUREMENTS OF JULY 2012
CITY OF ALBEMARLE LANDFILL
STANLY COUNTY, NORTH CAROLINA

Monitoring Well Identification	Hydraulic Conductivity[1] (cm/sec)	Groundwater Flow Direction	Potentiometric Gradient[2] (ft/ft)	Effective Porosity[3] (%)	Flow Rate (ft/yr)
MW-14	4.0E-04	Southwest	0.046	15	100
MW-15	4.0E-03	Southwest	0.035	20	700
MW-16S	4.0E-06	West-Southwest	0.027	15	1
MW-17	7.0E-06	West	0.043	15	2
MW-18	6.0E-06	West	0.042	15	2
MW-19	6.0E-06	West	0.122	15	5
MW-22	3.0E-04	Southwest	0.058	15	100
MW-26	4.0E-04	Southwest	0.050	12	200
MW-27	Not Available	South	0.042	12	Not Available

Prepared/Date: J. D. Wallace 8/28/12
Checked/Date: R. Sutley 8/30/12

NOTES:

1. [1] = Calculated from slug tests performed by MESCO upon well completion.
2. [2] = Calculated from groundwater contours for July 2012 sampling event.
3. [3] = Estimated by MESCO from Hamill & Bell, 1986 based on Boring Records.

TABLE 6

MONITORED NATURAL ATTENUATION PARAMETERS FOR GROUNDWATER SAMPLES - JULY 2012
CITY OF ALBEMARLE LANDFILL
STANLY COUNTY, NORTH CAROLINA

	Chemical Oxygen Demand	Chloride	Iron	Manganese	Nitrate	Sulfate	Sulfide	Total Alkalinity	Total Organic Carbon
SWSL	5	1	100	1	3	10	5	1.0	1
ACTIVE C&D AND CLOSED MSWLF									
MW-1 (1)	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	300	66	54.6	6.01	0.13J	150	ND	260	19
MW-3	36	140	0.629	1.16	0.04J	18J	ND	440	5.7
MW-6	19	11	0.33	0.0288J	9J	9.8J	ND	31	2.8
MW-7	34	140	0.0373J	1.2	0.033J	5.1J	ND	490	7.6
MW-9	25	120	0.362	0.0457J	ND	8.4J	ND	210	3.4
MW-10	67	320	0.124J	0.741	14	13J	ND	490	12

NOTES:
1) All data reported in Milligrams per Liter (mg/L)
2) ND = Not detected at or Above the SWSL.
3) NS = Not Sampled (Dry)
4) J = Estimated value, see Laboratory Report.
(1) Monitoring Well MW-1 was Dry

Prepared/Date:	J.D. Wallace	8/13/2012
Checked/Date:	R. Sutley	8/23/2012

TABLE 5

ANALYTICAL ORGANIC PARAMETERS FOR GROUNDWATER SAMPLES - JULY 2012
CITY OF ALBEMARLE LANDFILL
STANLY COUNTY, NORTH CAROLINA

	1,1-DCA	1,4-DCB	Acetone	Benzene	Chlorobenzene	Chloroethane	cis-1,2-DCE	Methylene Chloride	Tetrachloroethene	Tetrahydrofuran	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride
SWSL	5	1	100	1	3	10	5	1.0	1	NE	1	1	1
NC 2L	6	6	6000	1	50	3000	70	5.0	0.7	NE	3	2000	0.03
IMAC	--	--	--	--	--	--	--	--	--	--	--	--	--
ACTIVE C&D AND CLOSED MSWLF													
MW-1 [(1)]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS
MW-2	ND	0.49J	5.9J	ND	1.1J	ND	ND	ND	ND	1.1	ND	ND	ND
MW-3	2.5J	**2**	ND	ND	**7.6**	ND	0.72J	ND	0.52J	2.1	0.69J	ND	ND
MW-4R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-5R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6	1.4J	0.42J	ND	ND	0.53J	ND	ND	**1.5**	0.79J	0.99J	ND	**3.4**	ND
MW-7	1.6J	**2.5**	ND	**2**	**6.8**	ND	1.2J	ND	ND	1.7	ND	ND	ND
MW-8D	ND	ND	ND	ND	ND	ND	ND	ND	0.71J	ND	ND	ND	ND
MW-9	2.9J	**1.1**	ND	ND	1.8J	ND	**5.3**	ND	**7.2**	2.5	**4.6**	ND	ND
MW-10	0.55J	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
MW-11	**6.7**	ND	ND	0.51J	ND	1.8J	3.0J	ND	ND	ND	ND	ND	0.61J
MW-12	ND	ND	7.0J	ND	ND	0.70J	ND	ND	ND	ND	ND	ND	ND
MW-13	ND	ND	ND	0.93J	ND	ND	1.5J	ND	ND	NA	ND	ND	0.86J
MW-23	2.4J	ND	ND	**1.3**	ND	2.4J	**14**	ND	ND	NA	ND	ND	**2.0**
MW-24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SUBTITLE D LINED MSWLF													
MW-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
MW-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
MW-16S	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
MW-16D	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
MW-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
MW-18	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
MW-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
MW-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
MW-26	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
MW-27	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
LEACHATE SAMPLE													
LAGOON	ND	ND	6.9J	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
QUALITY CONTROL/QUALITY ASSURANCE SAMPLES													
Trip Blank	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
Field Blank	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Equip. Blank	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

1) All data reported in Micrograms per Liter (μg/L)
2) SWSL= North Carolina Solid Waste Section Limits
3) NC 2L = North Carolina 2L Groundwater Standard as found in 15A NCAC 2L.0202
4) IMAC = Interim Maximum Allowable Concentrations established under 15A NCAC 2L .0202
5) NE = Not Established.
6) ND = Not detected at or Above the SWSL.
7) NS = Not Sampled (Dry)
8) NA = Not Analyzed
9) J = Estimated value, see Laboratory Report.
10) **Bold** = Result exceeds SWSL; Shading = Result exceeds NC 2L Groundwater Standard or IMAC.

[(1)] Monitoring Well MW-1 was Dry

DCA - Dichloroethane
DCE - Dichloroethene
DCB - Dichlorobenzene

Prepared/Date:	J.D. Wallace	8/13/2012
Checked/Date:	R. Sutley	8/23/2012

TABLE 4

ANALYTICAL INORGANIC PARAMETERS FOR GROUNDWATER SAMPLES - JULY 2012
CITY OF ALBEMARLE LANDFILL
STANLY COUNTY, NORTH CAROLINA

	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Tin	Vanadium	Zinc
SWSL	0.006	0.01	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.1	0.025	0.01
NC 2L	NE	0.01	0.7	NE	0.002	0.01	NE	1.0	0.015	0.001	0.1	0.02	0.02	NE	NE	NE	1
IMAC	0.001	--	--	0.004	--	--	0.001	--	--	--	--	--	--	0.0002	2	0.0003	--
ACTIVE C&D AND CLOSED MSWLF																	
MW-1 [(1)]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NA	NS	NS
MW-2	0.000406J	**0.0159**	**0.176**	**0.00144**	ND	**0.0478**	**0.0953**	**0.0637**	**0.0484B**	NA	**0.124**	ND	ND	ND	NA	**0.051**	**0.17**
MW-3	0.000609J	**0.0119**	0.0247	ND	ND	ND	**0.0185**	ND	ND	NA	0.0038J	ND	ND	ND	NA	ND	ND
MW-4R	ND	0.0032J	0.00488J	ND	ND	ND	0.00303J	0.00299J	ND	NA	0.00829J	ND	ND	ND	NA	ND	0.00865J
MW-5R	0.000287J	0.00841J	0.00846J	ND	ND	ND	0.00882J	0.00262J	0.00277J	NA	ND	ND	ND	ND	NA	ND	ND
MW-6	ND	ND	0.00136J	ND	ND	ND	ND	**ND**	ND	NA	0.00303J	ND	ND	ND	NA	ND	ND
MW-7	0.000293J	0.00546J	0.0194J	ND	**0.00398**	0.00103J	0.00544J	ND	ND	NA	0.00674J	ND	ND	ND	NA	0.00362J	ND
MW-8D	0.000334J	ND	0.01J	ND	0.00042J	ND	**0.0103**	ND	ND	NA	0.00295J	ND	ND	ND	NA	0.0019J	0.00665J
MW-9	ND	ND	0.0102J	ND	ND	ND	0.00122J	ND	ND	NA	0.00404J	ND	ND	ND	NA	ND	ND
MW-10	ND	ND	0.0587J	ND	ND	0.00147J	0.00257J	0.00385J	ND	NA	0.0121J	ND	ND	ND	NA	ND	ND
MW-11	ND	ND	0.0508J	ND	ND	**0.0137**	0.00752J	0.00549J	ND	NA	0.0316J	ND	ND	ND	NA	0.00881J	0.00912J
MW-12	ND	**0.0108**	0.0761J	ND	ND	0.00757J	**0.0515**	ND	ND	ND	**0.0658**	ND	ND	ND	0.00271J	ND	ND
MW-13	0.000579J	**0.0167**	0.0894J	ND	ND	0.00786J	**0.048**	ND	0.00427J	ND	ND	ND	0.00288J	ND	0.00263J	ND	ND
MW-23	ND	ND	0.0471J	ND	ND	0.00434J	**0.0241**	ND	0.0038J	ND	0.0107J	ND	ND	ND	ND	ND	0.00463J
MW-24	ND	ND	0.00787J	ND	ND	ND	0.00302J	0.00422J	0.00283J	NA	0.00305J	ND	ND	ND	NA	0.00235J	0.00387J
MW-25	ND	0.0074J	0.0467J	0.000237J	ND	**0.0185**	**0.0107**	**0.0144**	0.00678J	NA	0.0166J	ND	ND	ND	NA	0.0205J	**0.0278**
SUBTITLE D LINED MSWLF																	
MW-14	0.000638J	0.00466J	0.00312J	ND	ND	0.0016J	0.00189J	ND	0.00397J	NA	0.0149J	ND	ND	ND	NA	0.00307J	ND
MW-15	0.000414J	ND	0.023J	ND	ND	0.0025J	0.00141J	0.00242J	0.00197J	NA	ND	ND	ND	0.000221J	NA	0.00386J	0.00595J
MW-16S	ND	ND	0.0237J	ND	ND	0.00308J	**0.0255**	0.0076J	0.00378J	NA	0.009J	ND	ND	ND	NA	ND	ND
MW-16D	0.000532J	**0.0124**	0.0445J	ND	ND	0.0054J	**0.117**	**0.012**	0.00234J	NA	0.011J	ND	ND	ND	NA	ND	0.00637J
MW-17	0.000777J	ND	0.0144J	ND	ND	0.00115J	0.00995J	ND	0.00305J	NA	ND	ND	ND	ND	NA	ND	0.00458J
MW-18	ND	ND	0.0137J	ND	ND	0.00198J	0.00299J	ND	0.00367J	NA	0.00439J	ND	ND	ND	NA	0.00209J	0.00635J
MW-19	0.000264J	0.00626J	0.007J	ND	ND	0.00137J	0.00253J	ND	0.00285J	NA	ND	ND	ND	ND	NA	ND	ND
MW-22	ND	0.00283J	0.026J	ND	ND	ND	**0.0362**	ND	ND	NA	0.00592J	ND	ND	ND	NA	0.00152J	0.00445J
MW-26	ND	ND	0.00815J	ND	ND	0.00462J	0.00221J	0.00409J	0.00441J	NA	0.00652J	ND	ND	ND	NA	0.00631J	**0.0121**
MW-27	ND	0.00454J	0.0323J	ND	ND	0.00226J	**0.0186**	ND	0.00313J	NA	0.0133J	ND	ND	ND	NA	0.00162J	ND
LEACHATE SAMPLE																	
LAGOON	ND	0.00666J	0.0321J	ND	ND	0.00573J	0.00809J	ND	0.00347J	NA	0.00513J	ND	0.00201J	ND	ND	ND	ND
QUALITY CONTROL/QUALITY ASSURANCE SAMPLES																	
Field Blank	ND	ND	0.00108J	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	0.00388J
Equip. Blank	ND	ND	0.001J	ND	ND	ND	ND	ND	ND	ND	ND	0.00564J	ND	ND	ND	ND	ND

NOTES:

1) All data reported in Milligrams per Liter (mg/L)
2) Analyses are for Total Metals.
3) SWSL= North Carolina Solid Waste Section Limits
4) NC 2L = North Carolina 2L Groundwater Standard as found in 15A NCAC 2L.0202
5) IMAC = Interim Maximum Allowable Concentrations established under 15A NCAC 2L .0202
6) NE = Not Established.
7) ND = Not detected at or Above the SWSL.
8) NS = Not Sampled (Dry)
9) NA = Not Analyzed
10) J = Estimated value, see Laboratory Report
11) **Bold** = Result exceeds SWSL; Shading = Result exceeds NC 2L Groundwater Standard or IMAC.

[(1)] Monitoring Well MW-1 was Dry

Prepared/Date:	J.D. Wallace	8/13/2012
Checked/Date:	R. Sutley	8/23/2012

TABLE 3

FIELD-TESTED PARAMETERS - ACTIVE C&D AND CLOSED MSWLF MEASUREMENTS OF JULY, 2012 CITY OF ALBEMARLE LANDFILL STANLY COUNTY, NORTH CAROLINA

Monitoring Well Identification	Specific Conductivity (µmhos/cm)	pH (SU)	Temperature (^oC)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)
MW-1	Dry	Dry	Dry	Dry	Dry
MW-2	1038.0	5.82	20.1	0.52	1.0
MW-3	1232.0	6.65	22.7	0.10	25.0
MW-4R	277.9	5.97	20.8	1.77	147.0
MW-5R	513.0	6.62	20.9	5.27	90.0
MW-6	224.4	5.48	18.3	1.29	98.0
MW-7	1339	6.25	18.7	0.92	120.0
MW-8D	1064	6.44	21.0	1.18	10.0
MW-9	874	6.47	20.6	0.24	94.0
MW-10	2067	6.64	18.8	0.92	34.0
MW-11	193.7	5.59	18.7	4.23	4.0
MW-12	747	6.21	20.7	0.42	-50.0
MW-13	667	6.19	22.8	1.97	-29.0
MW-23	730	5.88	22.3	0.76	22.0
MW-24	397.4	6.42	19.0	0.10	164.0
MW-25	260.6	5.86	18.8	3.14	6.0
SW-1	Dry	Dry	Dry	Dry	Dry
SW-5	Dry	Dry	Dry	Dry	Dry
SW-6	Dry	Dry	Dry	Dry	Dry
SW-7	Dry	Dry	Dry	Dry	Dry

NOTES:

1) µmhos/cm = micromhos per centimeter
2) SU = Standard Units
3) ^oC = Degrees Celsius
4) mg/L = Milligrams per Liter
5) mV = Millivolts

Prepared/Date: D. Wallace 8/13/2012
Checked/Date: R. Sutley 8/22/12

TABLE 2

GROUNDWATER FLOW CHARACTERISTICS - ACTIVE C&D AND CLOSED MSWLF
MEASUREMENTS OF JULY 2012
CITY OF ALBEMARLE LANDFILL
STANLY COUNTY, NORTH CAROLINA

Monitoring Well Identification	Hydraulic Conductivity[1] (cm/sec)	Groundwater Flow Direction	Potentiometric Gradient[2] (ft/ft)	Effective Porosity[3] (%)	Flow Rate (ft/yr)
MW-1	1.0E-04	East	0.026	15	20
MW-3	3.0E-04	Southeast	0.041	20	60
MW-4R	1.0E-05	East	0.031	15	2
MW-5R	5.0E-05	East	0.037	15	10
MW-6	4.0E-05	Southwest	0.018	15	5
MW-7	2.0E-05	Southwest	0.038	15	5
MW-8D	6.0E-07	Southeast	0.030	15	0.1
MW-9	8.0E-05	East	0.092	15	50
MW-10	7.0E-05	East	0.089	12	50
MW-11	2.0E-04	Northeast	0.065	12	100
MW-12	7.0E-05	East-Northeast	0.029	12	20
MW-13	5.0E-04	Generally to the East	Indeterminate	15	Indeterminate
MW-23	5.0E-05	East	0.024	15	10
MW-24	1.0E-05	Southwest	0.024	12	2
MW-25	3.0E-06	West-Southwest	0.045	12	1

Prepared/Date: J. D. Wallace 8/28/12
Checked/Date: R. Sutley 8/30/12

NOTES:

1. [1] = Calculated from slug tests performed by MESCO upon well completion.
2. [2] = Calculated from groundwater contours for July 2012 sampling event.
3. [3] = Estimated by MESCO from Hamill & Bell, 1986 based on Boring Records.

TABLE 1

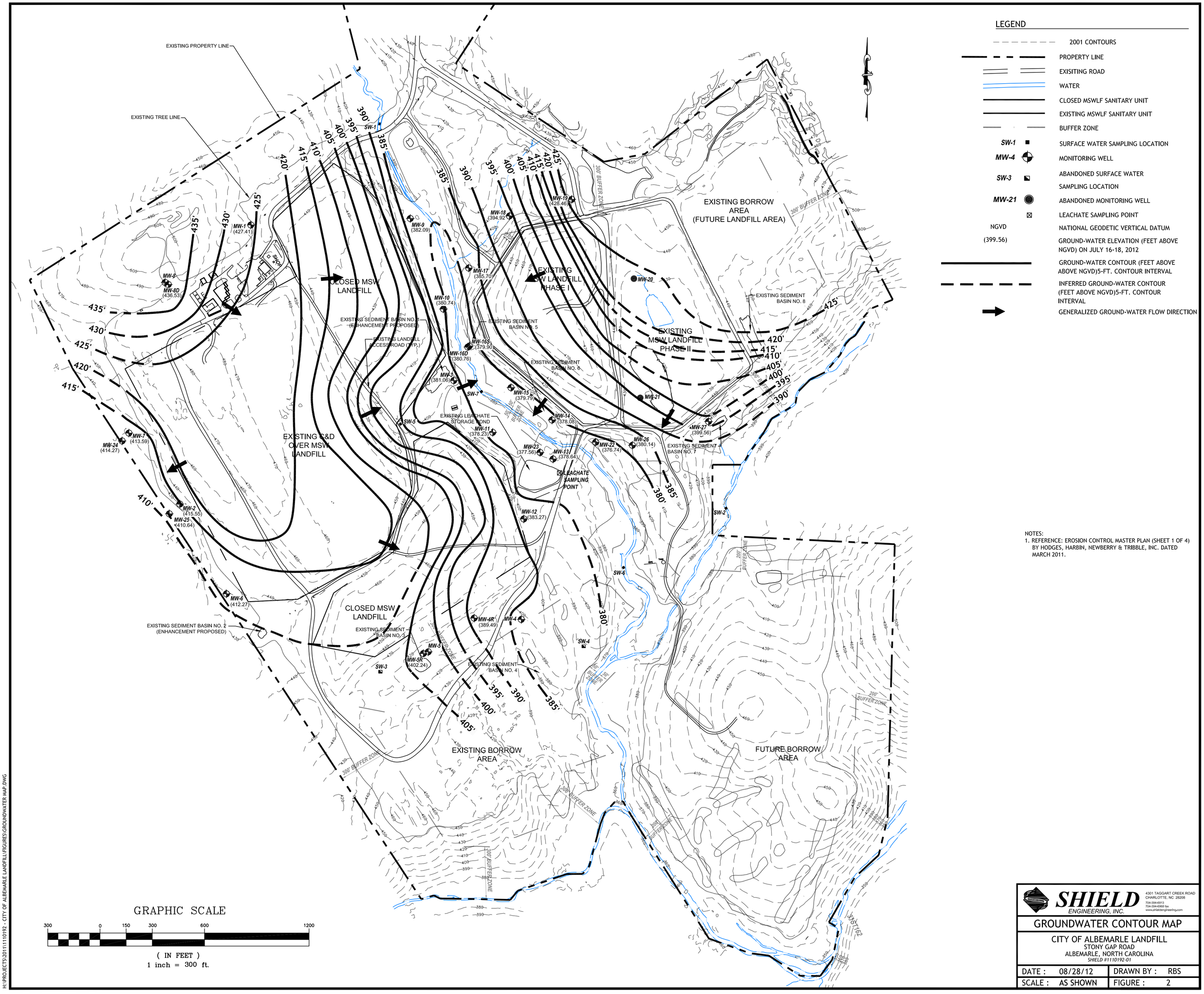
SUMMARY OF GROUNDWATER DATA
CITY OF ALBEMARLE LANDFILL
STANLY COUNTY, NORTH CAROLINA

Well Identifi-cation	TOC Elevation (Feet above NGVD)	Ground Elevation (Feet above NGVD)	Depth to Groundwater Ft below TOC	Groundwater Elevation Ft above NGVD)
			7/16-18/2012	
ACTIVE C&D AND CLOSED MSWLF				
MW-1	447.21	445.6	19.80	427.41
MW-2	431.85	429.9	16.30	415.55
MW-3	396.11	393.9	15.05	381.06
MW-4R	415.36	412.8	25.87	389.49
MW-5R	416.06	413.1	13.82	402.24
MW-6	439.63	437.7	27.36	412.27
MW-7	431.30	429.4	17.71	413.59
MW-8D	491.38	488.8	54.85	436.53
MW-9	392.64	389.1	10.55	382.09
MW-10	388.01	385.4	7.27	380.74
MW-11	386.78	384.4	8.55	378.23
MW-12	399.47	398.1	16.20	383.27
MW-13	388.52	385.7	9.88	378.64
MW-23	386.41	383.9	8.85	377.56
MW-24	432.19	429.2	17.92	414.27
MW-25	425.22	422.3	14.58	410.64
SUBTITLE D LINED MSWLF				
MW-14	383.55	380.8	5.47	378.08
MW-15	385.72	383.2	5.93	379.79
MW-16S	386.75	384.4	6.85	379.90
MW-16D	386.88	384.4	6.12	380.76
MW-17	396.47	393.5	10.77	385.70
MW-18	409.41	410.4	14.49	394.92
MW-19	452.34	450.8	23.88	428.46
MW-22	388.41	385.0	11.67	376.74
MW-26	413.98	411.0	33.84	380.14
MW-27	404.71	402.4	5.15	399.56

Notes:

1) GW = Groundwater
2) TOC = Top of Casing
3) NM = Not Measured
4) GS = Ground Surface
5) NGVD = National Geodetic Vertical Datum
6) Depth to Groundwater Measured from Top of Well casing

Prepared/Date: J. D. Wallace 8/13/12
Checked/Date: R. Sutley 8/22/12



NOTES:
1. REFERENCE: EROSION CONTROL MASTER PLAN (SHEET 1 OF 4) BY HODGES, HARBIN, NEWBERRY & TRIBBLE, INC. DATED MARCH 2011.

SHIELD ENGINEERING, INC.
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
704-394-6913
704-394-6958 fax
www.shieldengineering.com

GROUNDWATER CONTOUR MAP

CITY OF ALBEMARLE LANDFILL
STONY GAP ROAD
ALBEMARLE, NORTH CAROLINA
SHIELD #1110192-01

DATE :	08/28/12	DRAWN BY :	RBS
SCALE :	AS SHOWN	FIGURE :	2

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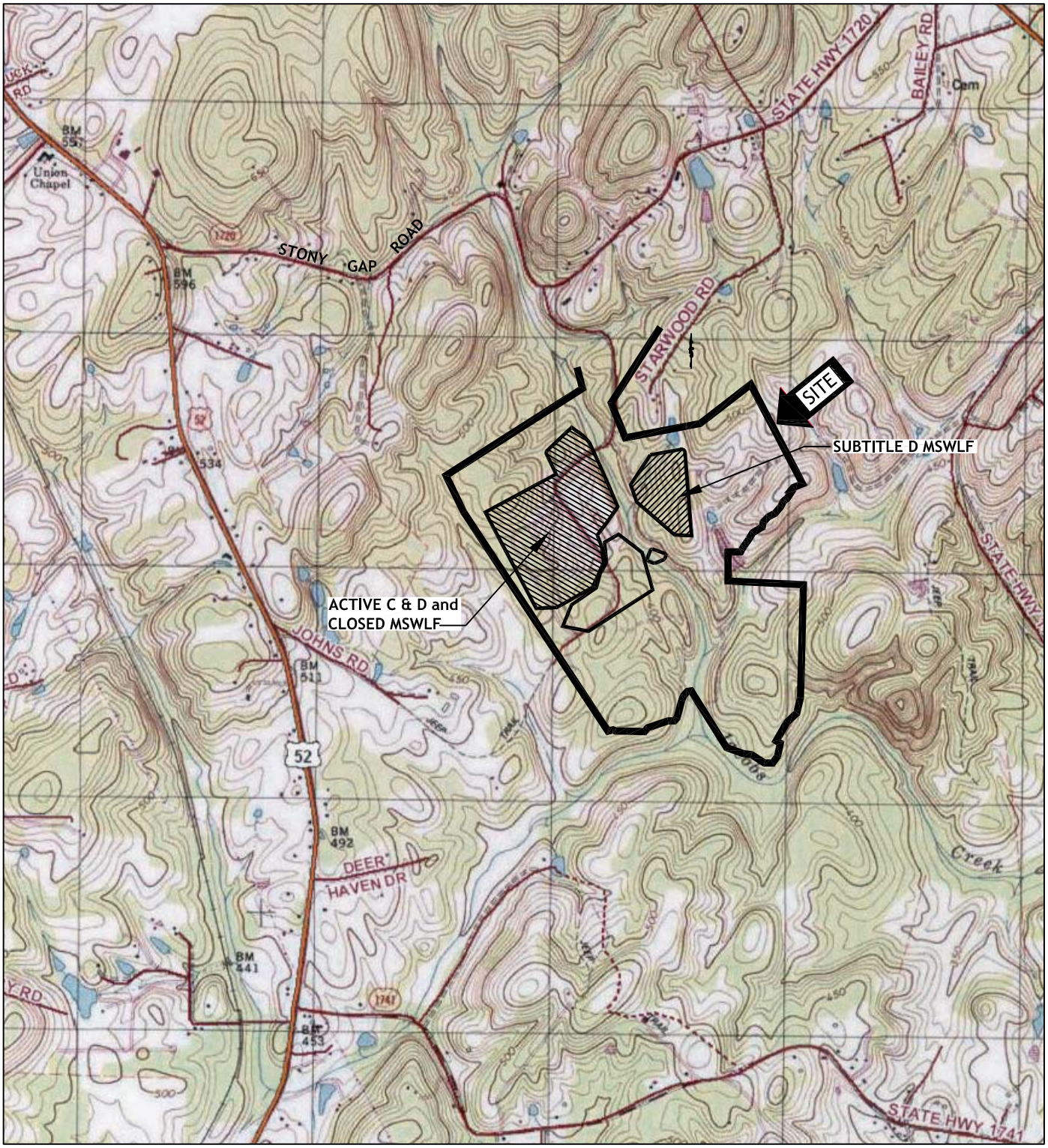

N

GRAPHIC SCALE

0 1,000 2,000

SCALE: 1 in. = 2,000 ft.

SOURCE: NATIONAL GEOGRAPHIC USGS TOPO, 7.5 MINUTE MAP SERIES, STANLY COUNTY, NORTH CAROLINA

SHIELD ENGINEERING, INC.
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
704-394-6913
704-394-6968 fax
www.shieldengineering.com

SITE VICINITY MAP

CITY OF ALBEMARLE LANDFILL

STONY GAP ROAD
ALBEMARLE, NORTH CAROLINA
SHIELD # 1110192-01

DATE :	08/24/12	DRAWN BY :	RBS
SCALE :	AS SHOWN	FIGURE :	1

H:\PROJECTS\2011\1110192 - CITY OF ALBEMARLE LANDFILL\FIGURES\SITE VICINITY MAP.DWG

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

Friday, July 27, 2012

Shield Engineering, Inc. (SH007)

Attn: David Wallace

4301 Taggart Creek Road

Charlotte, NC 28208

RE: Laboratory Results for
Project Number: 1110192, Project Name/Desc: Albemarle LF
ENCO Workorder(s): C208143

Dear David Wallace,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, July 20, 2012.

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,

Stephanie Franz

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 77.

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PROJECT NARRATIVE

Date: 27 July 2012
Client: Shield Engineering, Inc. (SH007)
Project: Albemarle LF
Lab ID: C208143

Overview

Environmental Conservation Laboratories, Inc. (ENCO) analyzed all submitted samples in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling by ENCO are discussed in the QC Remarks section below.

Quality Control Samples

No Comments

Quality Control Remarks

The determination of pH is considered a field parameter, and as such, has a holding time of approximately 15 minutes. As this time passed prior to receipt by ENCO, the analysis was conducted outside of hold time, and the result is appropriately qualified (Q-flagged).

Other Comments

The analytical data presented in this report are consistent with the methods as referenced in the analytical report. Any exceptions or deviations are noted in the QC remarks section of this narrative or in the Flags/Notes and Definitions section of the report.

Released By:
Environmental Conservation Laboratories, Inc.

Stephanie Franz
Project Manager

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 8401-MW13 | **Lab ID: C208143-01** | **Sampled: 07/19/12 11:07** | **Received: 07/20/12 08:40**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/15/13	07/20/12 09:57	7/23/2012 13:39
EPA 6020A	01/15/13	07/20/12 09:59	7/24/2012 11:25
EPA 7470A	08/16/12	07/23/12 09:52	7/23/2012 17:02
EPA 8260B	08/02/12	07/26/12 09:24	7/26/2012 16:17

Client ID: 8401-MW14 | **Lab ID: C208143-02** | **Sampled: 07/19/12 10:27** | **Received: 07/20/12 08:40**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/15/13	07/20/12 09:57	7/23/2012 14:01
EPA 6020A	01/15/13	07/20/12 09:59	7/24/2012 11:05
EPA 8260B	08/02/12	07/24/12 08:32	7/25/2012 03:01

Client ID: 8401-MW15 | **Lab ID: C208143-03** | **Sampled: 07/19/12 10:01** | **Received: 07/20/12 08:40**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/15/13	07/20/12 09:57	7/23/2012 14:03
EPA 6020A	01/15/13	07/20/12 09:59	7/24/2012 11:28
EPA 8260B	08/02/12	07/24/12 08:32	7/25/2012 03:31

Client ID: 8401-MW16S | **Lab ID: C208143-04** | **Sampled: 07/19/12 10:30** | **Received: 07/20/12 08:40**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/15/13	07/20/12 09:57	7/23/2012 14:05
EPA 6020A	01/15/13	07/20/12 09:59	7/24/2012 11:32
EPA 8260B	08/02/12	07/24/12 08:32	7/25/2012 04:00

Client ID: 8401-MW16D | **Lab ID: C208143-05** | **Sampled: 07/19/12 10:40** | **Received: 07/20/12 08:40**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/15/13	07/20/12 09:57	7/23/2012 14:11
EPA 6020A	01/15/13	07/20/12 09:59	7/24/2012 11:46
EPA 8260B	08/02/12	07/24/12 08:32	7/25/2012 04:29

Client ID: 8401-MW17 | **Lab ID: C208143-06** | **Sampled: 07/19/12 10:06** | **Received: 07/20/12 08:40**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/15/13	07/20/12 09:57	7/23/2012 14:09
EPA 6020A	01/15/13	07/20/12 09:59	7/24/2012 11:50
EPA 8260B	08/02/12	07/24/12 08:32	7/25/2012 04:59

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Client ID: 8401-MW18	Lab ID: C208143-07	Sampled: 07/19/12 09:21	Received: 07/20/12 08:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/15/13		07/20/12	09:57	7/23/2012 14:14
EPA 6020A	01/15/13		07/20/12	09:59	7/24/2012 11:54
EPA 8260B	08/02/12		07/24/12	08:32	7/25/2012 05:28

Client ID: 8401-MW19	Lab ID: C208143-08	Sampled: 07/19/12 09:44	Received: 07/20/12 08:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/15/13		07/20/12	09:57	7/23/2012 14:22
EPA 6020A	01/15/13		07/20/12	09:59	7/24/2012 11:58
EPA 8260B	08/02/12		07/24/12	08:32	7/25/2012 05:58

Client ID: 8401-MW22	Lab ID: C208143-09	Sampled: 07/19/12 11:43	Received: 07/20/12 08:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/15/13		07/20/12	09:57	7/23/2012 14:24
EPA 6020A	01/15/13		07/20/12	09:59	7/24/2012 12:02
EPA 8260B	08/02/12		07/24/12	08:32	7/25/2012 06:27

Client ID: 8401-MW23	Lab ID: C208143-10	Sampled: 07/19/12 11:14	Received: 07/20/12 08:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/15/13		07/20/12	09:57	7/23/2012 14:26
EPA 6020A	01/15/13		07/20/12	09:59	7/24/2012 12:05
EPA 7470A	08/16/12		07/23/12	09:52	7/23/2012 17:04
EPA 8260B	08/02/12		07/24/12	08:32	7/25/2012 06:57
EPA 8270D	07/26/12	09/02/12	07/24/12	17:30	7/26/2012 20:11

Client ID: 8401-MW26	Lab ID: C208143-11	Sampled: 07/19/12 12:00	Received: 07/20/12 08:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/15/13		07/20/12	09:57	7/23/2012 14:34
EPA 6020A	01/15/13		07/20/12	09:59	7/24/2012 12:09
EPA 8260B	08/02/12		07/24/12	08:32	7/25/2012 07:26

Client ID: 8401-MW27	Lab ID: C208143-12	Sampled: 07/19/12 12:07	Received: 07/20/12 08:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/15/13		07/20/12	09:57	7/23/2012 14:30
EPA 6020A	01/15/13		07/20/12	09:59	7/24/2012 12:13
EPA 8260B	08/02/12		07/24/12	08:32	7/25/2012 07:56

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Client ID: 8401-LAGOON	Lab ID: C208143-13	Sampled: 07/19/12 11:30	Received: 07/20/12 08:40

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/16/12	07/23/12 11:05	7/24/2012 03:18
EPA 353.2	07/21/12 11:30	07/20/12 12:26	7/20/2012 13:41
EPA 353.2	08/16/12	07/23/12 09:26	7/23/2012 09:26
EPA 353.2	04/14/15	07/25/12 12:59	7/26/2012 13:39
EPA 365.4	08/16/12	07/23/12 10:50	7/24/2012 11:31
EPA 6010C	01/15/13	07/20/12 09:57	7/23/2012 14:31
EPA 6020A	01/15/13	07/20/12 09:59	7/24/2012 12:17
EPA 8260B	08/02/12	07/26/12 09:24	7/26/2012 16:46
SM 2540D	07/26/12	07/25/12 10:19	7/25/2012 10:19
SM 5210B	07/21/12 11:30	07/20/12 14:11	7/20/2012 14:11
SM 5220D	08/16/12	07/23/12 14:28	7/23/2012 17:30
SM4500-H/B	07/19/12 11:44	07/24/12 08:49	7/24/2012 08:49

Client ID: Trip Blank 1	Lab ID: C208143-14	Sampled: 07/19/12 09:21	Received: 07/20/12 08:40

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	08/02/12	07/26/12 09:24	7/26/2012 17:16

Client ID: Trip Blank 2	Lab ID: C208143-15	Sampled: 07/19/12 09:21	Received: 07/20/12 08:40

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	08/02/12	07/26/12 09:24	7/26/2012 17:45

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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 8401-MW13 **Lab ID: C208143-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.579	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Arsenic - Total	16.7		1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	89.4	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	0.93	J	1	0.15	1.0	1	ug/L	EPA 8260B	
Chromium - Total	7.86	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	1.5	J	1	0.15	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	48.0		1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total	4.27	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Silver - Total	2.88	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Tin - Total	2.63	J	1	2.10	10.0	100	ug/L	EPA 6010C	
Vinyl chloride	0.86	J	1	0.32	1.0	1	ug/L	EPA 8260B	

Client ID: 8401-MW14 **Lab ID: C208143-02**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.638	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Arsenic - Total	4.66	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	3.12	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	1.60	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	1.89	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total	3.97	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	14.9	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	3.07	J	1	1.40	10.0	25	ug/L	EPA 6010C	

Client ID: 8401-MW15 **Lab ID: C208143-03**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.414	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total	23.0	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	2.50	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	1.41	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	2.42	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	1.97	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Thallium - Total	0.221	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Vanadium - Total	3.86	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	5.95	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW16S **Lab ID: C208143-04**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	23.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	3.08	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	25.5		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	7.60	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	3.78	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	9.00	J	1	1.80	10.0	50	ug/L	EPA 6010C	

Client ID: 8401-MW16D **Lab ID: C208143-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.532	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Arsenic - Total	12.4		1	2.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW16D **Lab ID: C208143-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	44.5	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	5.40	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	117		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	12.0		1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	2.34	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	11.0	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Zinc - Total	6.37	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW17 **Lab ID: C208143-06**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.777	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total	14.4	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	1.15	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	9.95	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total	3.05	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Zinc - Total	4.58	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW18 **Lab ID: C208143-07**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	13.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	1.98	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	2.99	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total	3.67	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	4.39	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	2.09	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	6.35	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW19 **Lab ID: C208143-08**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.264	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Arsenic - Total	6.26	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	7.00	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	1.37	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	2.53	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total	2.85	J	1	1.90	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW22 **Lab ID: C208143-09**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	2.83	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	26.0	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Cobalt - Total	36.2		1	1.10	10.0	10	ug/L	EPA 6010C	
Nickel - Total	5.92	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	1.52	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	4.45	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW23 **Lab ID: C208143-10**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	2.4	J	1	0.13	1.0	5	ug/L	EPA 8260B	
Barium - Total	47.1	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	1.3		1	0.15	1.0	1	ug/L	EPA 8260B	
Chloroethane	2.4	J	1	0.23	1.0	10	ug/L	EPA 8260B	

Client ID: 8401-MW23 **Lab ID: C208143-10**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chromium - Total	4.34	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	14		1	0.15	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	24.1		1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total	3.80	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	10.7	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vinyl chloride	2.0		1	0.32	1.0	1	ug/L	EPA 8260B	
Zinc - Total	4.63	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW26 **Lab ID: C208143-11**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	8.15	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	4.62	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	2.21	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	4.09	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	4.41	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	6.52	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	6.31	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	12.1		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW27 **Lab ID: C208143-12**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	4.54	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	32.3	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	2.26	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	18.6		1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total	3.13	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	13.3	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	1.62	J	1	1.40	10.0	25	ug/L	EPA 6010C	

Client ID: 8401-LAGOON **Lab ID: C208143-13**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetone	6.9	J	1	1.2	5.0	100	ug/L	EPA 8260B	
Arsenic - Total	6.66	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	32.1	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Biochemical Oxygen Demand	5600		1	2000	2000	NE	ug/L	SM 5210B	
Chemical Oxygen Demand	72000		1	10000	10000	NE	ug/L	SM 5220D	
Chromium - Total	5.73	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	8.09	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total	3.47	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	5.13	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	210	J	1	25	100	10000	ug/L	EPA 353.2	
Nitrate/Nitrite as N	370		1	25	100	NE	ug/L	EPA 353.2	
Nitrite as N	160	JB	1	3.0	100	1000	ug/L	EPA 353.2	QB-01
pH	8.2		1	1.0	1.0	NE	pH Units	SM4500-H/B	Q
Silver - Total	2.01	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Sulfate as SO4	15000	J	1	40	5000	250000	ug/L	EPA 300.0	
Total Suspended Solids	5600		1	1000	1000	NE	ug/L	SM 2540D	

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ANALYTICAL RESULTS

Description: 8401-MW13 | **Lab Sample ID:** C208143-01 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:07 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 16:17	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 16:17	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 16:17	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 16:17	JKG	
1,1-Dichloropropene [563-58-6] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 16:17	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 16:17	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 16:17	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 16:17	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 16:17	JKG	
1,3-Dichloropropane [142-28-9] ^	0.16	U	ug/L	1	0.16	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
2,2-Dichloropropane [594-20-7] ^	0.28	U	ug/L	1	0.28	1.0	15	EPA 8260B	07/26/12 16:17	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 16:17	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 16:17	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	07/26/12 16:17	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 16:17	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 16:17	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	07/26/12 16:17	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	07/26/12 16:17	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 16:17	JKG	
Benzene [71-43-2] ^	**0.93**	J	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 16:17	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 16:17	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 16:17	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 16:17	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 16:17	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 16:17	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 16:17	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	07/26/12 16:17	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**1.5**	J	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 16:17	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 16:17	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 16:17	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	07/26/12 16:17	JKG	

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Description: 8401-MW13 | **Lab Sample ID:** C208143-01 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:07 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	07/26/12 16:17	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Hexachlorobutadiene [87-68-3] ^	0.22	U	ug/L	1	0.22	1.0	10	EPA 8260B	07/26/12 16:17	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 16:17	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	07/26/12 16:17	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	07/26/12 16:17	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	07/26/12 16:17	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Naphthalene [91-20-3] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	07/26/12 16:17	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	07/26/12 16:17	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 16:17	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 16:17	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 16:17	JKG	
Vinyl chloride [75-01-4] ^	**0.86**	J	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 16:17	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 16:17	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*99 %*	*51-122*	*2G26013*	*EPA 8260B*	*07/26/12 16:17*	*JKG*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*68-117*	*2G26013*	*EPA 8260B*	*07/26/12 16:17*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*101 %*	*67-127*	*2G26013*	*EPA 8260B*	*07/26/12 16:17*	*JKG*	

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Description: 8401-MW13
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-01
Sampled: 07/19/12 11:07
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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	07/23/12 17:02	T1D	

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Description: 8401-MW13 | **Lab Sample ID:** C208143-01 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:07 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	**0.579**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/24/12 11:25	JDH	
Arsenic [7440-38-2] ^	**16.7**		ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 13:39	JDH	
Barium [7440-39-3] ^	**89.4**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 13:39	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 13:39	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 13:39	JDH	
Chromium [7440-47-3] ^	**7.86**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 13:39	JDH	
Cobalt [7440-48-4] ^	**48.0**		ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 13:39	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 13:39	JDH	
Lead [7439-92-1] ^	**4.27**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 13:39	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 13:39	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 13:39	JDH	
Silver [7440-22-4] ^	**2.88**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 13:39	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 11:25	JDH	
Tin [7440-31-5] ^	**2.63**	J	ug/L	1	2.10	10.0	100	EPA 6010C	07/23/12 13:39	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 13:39	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 13:39	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: 8401-MW14 | **Lab Sample ID:** C208143-02 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 10:27 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 03:01	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 03:01	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 03:01	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 03:01	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 03:01	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 03:01	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 03:01	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 03:01	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 03:01	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 03:01	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 03:01	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 03:01	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 03:01	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 03:01	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 03:01	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 03:01	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 03:01	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 03:01	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 03:01	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 03:01	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 03:01	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 03:01	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 03:01	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 03:01	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 03:01	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 03:01	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 03:01	JKG	

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Description: 8401-MW14
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-02
Sampled: 07/19/12 10:27
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 03:01	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 03:01*	*JKG*	
Dibromofluoromethane	*52*	*1*	*50.0*	*104 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 03:01*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 03:01*	*JKG*	

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Description: 8401-MW14 | **Lab Sample ID:** C208143-02 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 10:27 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	**0.638**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/24/12 11:05	JDH	
Arsenic [7440-38-2] ^	**4.66**	J	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:01	JDH	
Barium [7440-39-3] ^	**3.12**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:01	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:01	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:01	JDH	
Chromium [7440-47-3] ^	**1.60**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:01	JDH	
Cobalt [7440-48-4] ^	**1.89**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:01	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:01	JDH	
Lead [7439-92-1] ^	**3.97**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:01	JDH	
Nickel [7440-02-0] ^	**14.9**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:01	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:01	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:01	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 11:05	JDH	
Vanadium [7440-62-2] ^	**3.07**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:01	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:01	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: 8401-MW15 | **Lab Sample ID:** C208143-03 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 10:01 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 03:31	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 03:31	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 03:31	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 03:31	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 03:31	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 03:31	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 03:31	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 03:31	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 03:31	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 03:31	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 03:31	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 03:31	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 03:31	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 03:31	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 03:31	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 03:31	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 03:31	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 03:31	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 03:31	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 03:31	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 03:31	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 03:31	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 03:31	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 03:31	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 03:31	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 03:31	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 03:31	JKG	

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Description: 8401-MW15
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-03
Sampled: 07/19/12 10:01
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 03:31	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*99 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 03:31*	*JKG*	
Dibromofluoromethane	*52*	*1*	*50.0*	*103 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 03:31*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*99 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 03:31*	*JKG*	

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Description: 8401-MW15 | **Lab Sample ID:** C208143-03 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 10:01 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	**0.414**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/24/12 11:28	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:03	JDH	
Barium [7440-39-3] ^	**23.0**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:03	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:03	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:03	JDH	
Chromium [7440-47-3] ^	**2.50**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:03	JDH	
Cobalt [7440-48-4] ^	**1.41**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:03	JDH	
Copper [7440-50-8] ^	**2.42**	J	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:03	JDH	
Lead [7439-92-1] ^	**1.97**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:03	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:03	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:03	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:03	JDH	
Thallium [7440-28-0] ^	**0.221**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 11:28	JDH	
Vanadium [7440-62-2] ^	**3.86**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:03	JDH	
Zinc [7440-66-6] ^	**5.95**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:03	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: 8401-MW16S
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-04
Sampled: 07/19/12 10:30
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 04:00	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 04:00	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 04:00	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 04:00	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 04:00	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 04:00	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 04:00	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 04:00	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 04:00	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 04:00	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 04:00	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 04:00	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 04:00	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 04:00	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 04:00	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 04:00	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 04:00	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 04:00	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 04:00	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 04:00	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 04:00	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 04:00	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 04:00	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 04:00	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 04:00	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 04:00	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 04:00	JKG	

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Description: 8401-MW16S
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-04
Sampled: 07/19/12 10:30
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 04:00	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*100 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 04:00*	*JKG*	
Dibromofluoromethane	*52*	*1*	*50.0*	*104 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 04:00*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*99 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 04:00*	*JKG*	

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Description: 8401-MW16S
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-04
Sampled: 07/19/12 10:30
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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	07/24/12 11:32	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:05	JDH	
Barium [7440-39-3] ^	**23.7**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:05	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:05	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:05	JDH	
Chromium [7440-47-3] ^	**3.08**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:05	JDH	
Cobalt [7440-48-4] ^	**25.5**		ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:05	JDH	
Copper [7440-50-8] ^	**7.60**	J	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:05	JDH	
Lead [7439-92-1] ^	**3.78**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:05	JDH	
Nickel [7440-02-0] ^	**9.00**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:05	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:05	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:05	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 11:32	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:05	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:05	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: 8401-MW16D
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-05
Sampled: 07/19/12 10:40
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 04:29	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 04:29	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 04:29	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 04:29	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 04:29	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 04:29	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 04:29	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 04:29	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 04:29	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 04:29	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 04:29	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 04:29	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 04:29	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 04:29	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 04:29	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 04:29	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 04:29	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 04:29	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 04:29	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 04:29	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 04:29	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 04:29	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 04:29	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 04:29	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 04:29	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 04:29	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 04:29	JKG	

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Description: 8401-MW16D
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-05
Sampled: 07/19/12 10:40
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 04:29	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 04:29*	*JKG*	
Dibromofluoromethane	*53*	*1*	*50.0*	*107 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 04:29*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*99 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 04:29*	*JKG*	

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Description: 8401-MW16D
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-05
Sampled: 07/19/12 10:40
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	**0.532**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/24/12 11:46	JDH	
Arsenic [7440-38-2] ^	**12.4**		ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:11	JDH	
Barium [7440-39-3] ^	**44.5**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:11	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:11	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:11	JDH	
Chromium [7440-47-3] ^	**5.40**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:11	JDH	
Cobalt [7440-48-4] ^	**117**		ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:11	JDH	
Copper [7440-50-8] ^	**12.0**		ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:11	JDH	
Lead [7439-92-1] ^	**2.34**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:11	JDH	
Nickel [7440-02-0] ^	**11.0**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:11	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:11	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:11	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 11:46	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:11	JDH	
Zinc [7440-66-6] ^	**6.37**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:11	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: 8401-MW17 | **Lab Sample ID:** C208143-06 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 10:06 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 04:59	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 04:59	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 04:59	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 04:59	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 04:59	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 04:59	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 04:59	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 04:59	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 04:59	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 04:59	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 04:59	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 04:59	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 04:59	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 04:59	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 04:59	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 04:59	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 04:59	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 04:59	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 04:59	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 04:59	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 04:59	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 04:59	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 04:59	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 04:59	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 04:59	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 04:59	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 04:59	JKG	

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Description: 8401-MW17
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-06
Sampled: 07/19/12 10:06
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 04:59	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 04:59*	*JKG*	
Dibromofluoromethane	*53*	*1*	*50.0*	*106 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 04:59*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 04:59*	*JKG*	

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Description: 8401-MW17 | **Lab Sample ID:** C208143-06 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 10:06 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	**0.777**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/24/12 11:50	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:09	JDH	
Barium [7440-39-3] ^	**14.4**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:09	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:09	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:09	JDH	
Chromium [7440-47-3] ^	**1.15**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:09	JDH	
Cobalt [7440-48-4] ^	**9.95**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:09	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:09	JDH	
Lead [7439-92-1] ^	**3.05**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:09	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:09	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:09	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:09	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 11:50	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:09	JDH	
Zinc [7440-66-6] ^	**4.58**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:09	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: 8401-MW18 | **Lab Sample ID:** C208143-07 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 09:21 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 05:28	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 05:28	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 05:28	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 05:28	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 05:28	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 05:28	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 05:28	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 05:28	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 05:28	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 05:28	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 05:28	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 05:28	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 05:28	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 05:28	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 05:28	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 05:28	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 05:28	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 05:28	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 05:28	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 05:28	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 05:28	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 05:28	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 05:28	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 05:28	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 05:28	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 05:28	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 05:28	JKG	

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Description: 8401-MW18
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-07
Sampled: 07/19/12 09:21
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 05:28	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 05:28*	*JKG*	
Dibromofluoromethane	*52*	*1*	*50.0*	*104 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 05:28*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 05:28*	*JKG*	

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Description: 8401-MW18 | **Lab Sample ID:** C208143-07 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 09:21 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/24/12 11:54	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:14	JDH	
Barium [7440-39-3] ^	**13.7**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:14	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:14	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:14	JDH	
Chromium [7440-47-3] ^	**1.98**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:14	JDH	
Cobalt [7440-48-4] ^	**2.99**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:14	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:14	JDH	
Lead [7439-92-1] ^	**3.67**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:14	JDH	
Nickel [7440-02-0] ^	**4.39**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:14	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:14	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:14	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 11:54	JDH	
Vanadium [7440-62-2] ^	**2.09**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:14	JDH	
Zinc [7440-66-6] ^	**6.35**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:14	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: 8401-MW19 | **Lab Sample ID:** C208143-08 | **Received:** 07/20/12 08:40
Matrix: Ground Water | **Sampled:** 07/19/12 09:44 | **Work Order:** C208143
Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 05:58	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 05:58	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 05:58	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 05:58	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 05:58	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 05:58	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 05:58	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 05:58	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 05:58	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 05:58	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 05:58	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 05:58	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 05:58	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 05:58	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 05:58	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 05:58	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 05:58	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 05:58	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 05:58	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 05:58	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 05:58	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 05:58	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 05:58	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 05:58	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 05:58	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 05:58	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 05:58	JKG	

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Description: 8401-MW19
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-08
Sampled: 07/19/12 09:44
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 05:58	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 05:58*	*JKG*	
Dibromofluoromethane	*53*	*1*	*50.0*	*106 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 05:58*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 05:58*	*JKG*	

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Description: 8401-MW19 | **Lab Sample ID:** C208143-08 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 09:44 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	**0.264**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/24/12 11:58	JDH	
Arsenic [7440-38-2] ^	**6.26**	J	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:22	JDH	
Barium [7440-39-3] ^	**7.00**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:22	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:22	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:22	JDH	
Chromium [7440-47-3] ^	**1.37**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:22	JDH	
Cobalt [7440-48-4] ^	**2.53**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:22	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:22	JDH	
Lead [7439-92-1] ^	**2.85**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:22	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:22	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:22	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:22	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 11:58	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:22	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:22	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: 8401-MW22 | **Lab Sample ID:** C208143-09 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:43 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 06:27	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 06:27	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 06:27	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 06:27	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 06:27	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 06:27	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 06:27	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 06:27	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 06:27	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 06:27	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 06:27	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 06:27	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 06:27	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 06:27	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 06:27	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 06:27	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 06:27	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 06:27	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 06:27	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 06:27	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 06:27	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 06:27	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 06:27	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 06:27	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 06:27	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 06:27	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 06:27	JKG	

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Description: 8401-MW22
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-09
Sampled: 07/19/12 11:43
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 06:27	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*99 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 06:27*	*JKG*	
Dibromofluoromethane	*53*	*1*	*50.0*	*105 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 06:27*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*99 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 06:27*	*JKG*	

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Description: 8401-MW22 | **Lab Sample ID:** C208143-09 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:43 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/24/12 12:02	JDH	
Arsenic [7440-38-2] ^	**2.83**	J	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:24	JDH	
Barium [7440-39-3] ^	**26.0**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:24	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:24	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:24	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:24	JDH	
Cobalt [7440-48-4] ^	**36.2**		ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:24	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:24	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:24	JDH	
Nickel [7440-02-0] ^	**5.92**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:24	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:24	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:24	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 12:02	JDH	
Vanadium [7440-62-2] ^	**1.52**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:24	JDH	
Zinc [7440-66-6] ^	**4.45**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:24	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: 8401-MW23 | **Lab Sample ID:** C208143-10 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:14 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 06:57	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
1,1-Dichloroethane [75-34-3] ^	**2.4**	J	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
1,1-Dichloropropene [563-58-6] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 06:57	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 06:57	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
1,3-Dichloropropane [142-28-9] ^	0.16	U	ug/L	1	0.16	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
2,2-Dichloropropane [594-20-7] ^	0.28	U	ug/L	1	0.28	1.0	15	EPA 8260B	07/25/12 06:57	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 06:57	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 06:57	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	07/25/12 06:57	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 06:57	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 06:57	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	07/25/12 06:57	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	07/25/12 06:57	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 06:57	JKG	
Benzene [71-43-2] ^	**1.3**		ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 06:57	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 06:57	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 06:57	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 06:57	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 06:57	JKG	
Chloroethane [75-00-3] ^	**2.4**	J	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 06:57	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	07/25/12 06:57	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**14**		ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 06:57	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 06:57	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	07/25/12 06:57	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Hexachlorobutadiene [87-68-3] ^	0.22	U	ug/L	1	0.22	1.0	10	EPA 8260B	07/25/12 06:57	JKG	

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Description: 8401-MW23 | **Lab Sample ID:** C208143-10 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:14 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 06:57	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	07/25/12 06:57	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	07/25/12 06:57	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	07/25/12 06:57	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Naphthalene [91-20-3] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	07/25/12 06:57	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	07/25/12 06:57	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 06:57	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 06:57	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 06:57	JKG	
Vinyl chloride [75-01-4] ^	**2.0**		ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 06:57	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 06:57	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*99 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 06:57*	*JKG*	
Dibromofluoromethane	*53*	*1*	*50.0*	*105 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 06:57*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*99 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 06:57*	*JKG*	

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Description: 8401-MW23 | **Lab Sample ID:** C208143-10 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:14 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

Semivolatile 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
1,2,4,5-Tetrachlorobenzene [95-94-3] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
1,3,5-Trinitrobenzene [99-35-4] ^	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
1,3-Dinitrobenzene [99-65-0] ^	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	07/26/12 20:11	DFM	
1,4-Naphthoquinone [130-15-4] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	07/26/12 20:11	DFM	
1,4-Phenylenediamine [106-50-3] ^	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
1-Naphthylamine [134-32-7] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	07/26/12 20:11	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	07/26/12 20:11	DFM	
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	07/26/12 20:11	DFM	
2-Acetylaminofluorene [53-96-3] ^	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	07/26/12 20:11	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	07/26/12 20:11	DFM	
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	07/26/12 20:11	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
2-Naphthylamine [91-59-8] ^	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	07/26/12 20:11	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	07/26/12 20:11	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	07/26/12 20:11	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
3-Methylcholanthrene [56-49-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	07/26/12 20:11	DFM	
4-Aminobiphenyl [92-67-1] ^	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	07/26/12 20:11	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	07/26/12 20:11	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	07/26/12 20:11	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	07/26/12 20:11	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	07/26/12 20:11	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	07/26/12 20:11	DFM	
5-Nitro-o-toluidine [99-55-8] ^	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
Acetophenone [98-86-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	07/26/12 20:11	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	07/26/12 20:11	DFM	

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Description: 8401-MW23 | **Lab Sample ID:** C208143-10 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:14 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

Semivolatile 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
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
Benzo(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	07/26/12 20:11	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	1.7	U	ug/L	1	1.7	5.0	15	EPA 8270D	07/26/12 20:11	DFM	
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
Chlorobenzilate [510-15-6] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
Diallate [2303-16-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	07/26/12 20:11	DFM	
Dimethoate [60-51-5] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	07/26/12 20:11	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	07/26/12 20:11	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
Disulfoton [298-04-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	07/26/12 20:11	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	07/26/12 20:11	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	07/26/12 20:11	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	07/26/12 20:11	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	07/26/12 20:11	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Kepone [143-50-0] ^	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	07/26/12 20:11	DFM	QV-01
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	07/26/12 20:11	DFM	QV-02
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	07/26/12 20:11	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	07/26/12 20:11	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	07/26/12 20:11	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	07/26/12 20:11	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	07/26/12 20:11	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	07/26/12 20:11	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	

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Description: 8401-MW23 | **Lab Sample ID:** C208143-10 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:14 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

Semivolatile 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
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
o-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	07/26/12 20:11	DFM	
p-Dimethylaminoazobenzene [60-11-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	07/26/12 20:11	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	07/26/12 20:11	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	07/26/12 20:11	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	07/26/12 20:11	DFM	QV-01
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	07/26/12 20:11	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	07/26/12 20:11	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	07/26/12 20:11	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	07/26/12 20:11	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*83*	*1*	*100*	*83 %*	*10-179*	*2G24016*	*EPA 8270D*	*07/26/12 20:11*	*DFM*	
2-Fluorobiphenyl	*37*	*1*	*50.0*	*75 %*	*10-149*	*2G24016*	*EPA 8270D*	*07/26/12 20:11*	*DFM*	
2-Fluorophenol	*53*	*1*	*100*	*53 %*	*10-110*	*2G24016*	*EPA 8270D*	*07/26/12 20:11*	*DFM*	
Nitrobenzene-d5	*36*	*1*	*50.0*	*71 %*	*10-149*	*2G24016*	*EPA 8270D*	*07/26/12 20:11*	*DFM*	
Phenol-d5	*44*	*1*	*100*	*44 %*	*10-88*	*2G24016*	*EPA 8270D*	*07/26/12 20:11*	*DFM*	
Terphenyl-d14	*39*	*1*	*50.0*	*79 %*	*10-188*	*2G24016*	*EPA 8270D*	*07/26/12 20:11*	*DFM*	

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Description:	8401-MW23	**Lab Sample ID:**	C208143-10	**Received:**	07/20/12 08:40
Matrix:	Ground Water	**Sampled:**	07/19/12 11:14	**Work Order:**	C208143
Project:	Albemarle LF	**Sampled By:**	Danny Hefner / Joanna Ha		

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	07/23/12 17:04	T1D	

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Description: 8401-MW23 | **Lab Sample ID:** C208143-10 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 11:14 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/24/12 12:05	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:26	JDH	
Barium [7440-39-3] ^	**47.1**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:26	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:26	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:26	JDH	
Chromium [7440-47-3] ^	**4.34**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:26	JDH	
Cobalt [7440-48-4] ^	**24.1**		ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:26	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:26	JDH	
Lead [7439-92-1] ^	**3.80**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:26	JDH	
Nickel [7440-02-0] ^	**10.7**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:26	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:26	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:26	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 12:05	JDH	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	07/23/12 14:26	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:26	JDH	
Zinc [7440-66-6] ^	**4.63**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:26	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: 8401-MW26 | **Lab Sample ID:** C208143-11 | **Received:** 07/20/12 08:40
Matrix: Ground Water | **Sampled:** 07/19/12 12:00 | **Work Order:** C208143
Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 07:26	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 07:26	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 07:26	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 07:26	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 07:26	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 07:26	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 07:26	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 07:26	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 07:26	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 07:26	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 07:26	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 07:26	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 07:26	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 07:26	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 07:26	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 07:26	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 07:26	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 07:26	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 07:26	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 07:26	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 07:26	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 07:26	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 07:26	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 07:26	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 07:26	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 07:26	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 07:26	JKG	

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Description: 8401-MW26
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-11
Sampled: 07/19/12 12:00
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 07:26	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 07:26*	*JKG*	
Dibromofluoromethane	*52*	*1*	*50.0*	*105 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 07:26*	*JKG*	
Toluene-d8	*51*	*1*	*50.0*	*101 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 07:26*	*JKG*	

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Description: 8401-MW26 | **Lab Sample ID:** C208143-11 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 12:00 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/24/12 12:09	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:34	JDH	
Barium [7440-39-3] ^	**8.15**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:34	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:34	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:34	JDH	
Chromium [7440-47-3] ^	**4.62**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:34	JDH	
Cobalt [7440-48-4] ^	**2.21**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:34	JDH	
Copper [7440-50-8] ^	**4.09**	J	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:34	JDH	
Lead [7439-92-1] ^	**4.41**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:34	JDH	
Nickel [7440-02-0] ^	**6.52**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:34	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:34	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:34	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 12:09	JDH	
Vanadium [7440-62-2] ^	**6.31**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:34	JDH	
Zinc [7440-66-6] ^	**12.1**		ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:34	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: 8401-MW27 | **Lab Sample ID:** C208143-12 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 12:07 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/25/12 07:56	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/25/12 07:56	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/25/12 07:56	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 07:56	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/25/12 07:56	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/25/12 07:56	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/25/12 07:56	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/25/12 07:56	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/25/12 07:56	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/25/12 07:56	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/25/12 07:56	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/25/12 07:56	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/25/12 07:56	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/25/12 07:56	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/25/12 07:56	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 07:56	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/25/12 07:56	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/25/12 07:56	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/25/12 07:56	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/25/12 07:56	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/25/12 07:56	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/25/12 07:56	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/25/12 07:56	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/25/12 07:56	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/25/12 07:56	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/25/12 07:56	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/25/12 07:56	JKG	

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Description: 8401-MW27
Matrix: Ground Water
Project: Albemarle LF

Lab Sample ID: C208143-12
Sampled: 07/19/12 12:07
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/25/12 07:56	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*99 %*	*51-122*	*2G24007*	*EPA 8260B*	*07/25/12 07:56*	*JKG*	
Dibromofluoromethane	*53*	*1*	*50.0*	*107 %*	*68-117*	*2G24007*	*EPA 8260B*	*07/25/12 07:56*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*2G24007*	*EPA 8260B*	*07/25/12 07:56*	*JKG*	

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Description: 8401-MW27 | **Lab Sample ID:** C208143-12 | **Received:** 07/20/12 08:40

Matrix: Ground Water | **Sampled:** 07/19/12 12:07 | **Work Order:** C208143

Project: Albemarle LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/24/12 12:13	JDH	
Arsenic [7440-38-2] ^	**4.54**	J	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:30	JDH	
Barium [7440-39-3] ^	**32.3**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:30	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:30	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:30	JDH	
Chromium [7440-47-3] ^	**2.26**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:30	JDH	
Cobalt [7440-48-4] ^	**18.6**		ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:30	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:30	JDH	
Lead [7439-92-1] ^	**3.13**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:30	JDH	
Nickel [7440-02-0] ^	**13.3**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:30	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:30	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:30	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 12:13	JDH	
Vanadium [7440-62-2] ^	**1.62**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:30	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:30	JDH	

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Description: 8401-LAGOON
Matrix: Surface Water
Project: Albemarle LF

Lab Sample ID: C208143-13
Sampled: 07/19/12 11:30
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 16:46	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 16:46	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 16:46	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 16:46	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 16:46	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 16:46	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 16:46	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 16:46	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 16:46	JKG	
Acetone [67-64-1] ^	**6.9**	J	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 16:46	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 16:46	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 16:46	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 16:46	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 16:46	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 16:46	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 16:46	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 16:46	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 16:46	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 16:46	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 16:46	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 16:46	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 16:46	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 16:46	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 16:46	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 16:46	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 16:46	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 16:46	JKG	

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Description:	8401-LAGOON	**Lab Sample ID:**	C208143-13	**Received:**	07/20/12 08:40
Matrix:	Surface Water	**Sampled:**	07/19/12 11:30	**Work Order:**	C208143
Project:	Albemarle LF	**Sampled By:**	Danny Hefner / Joanna Ha		

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 16:46	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*99 %*	*51-122*	*2G26013*	*EPA 8260B*	*07/26/12 16:46*	*JKG*	
Dibromofluoromethane	*52*	*1*	*50.0*	*104 %*	*68-117*	*2G26013*	*EPA 8260B*	*07/26/12 16:46*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*99 %*	*67-127*	*2G26013*	*EPA 8260B*	*07/26/12 16:46*	*JKG*	

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Description: 8401-LAGOON
Matrix: Surface Water
Project: Albemarle LF

Lab Sample ID: C208143-13
Sampled: 07/19/12 11:30
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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	07/24/12 12:17	JDH	
Arsenic [7440-38-2] ^	**6.66**	J	ug/L	1	2.80	10.0	10	EPA 6010C	07/23/12 14:31	JDH	
Barium [7440-39-3] ^	**32.1**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/23/12 14:31	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/23/12 14:31	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/23/12 14:31	JDH	
Chromium [7440-47-3] ^	**5.73**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/23/12 14:31	JDH	
Cobalt [7440-48-4] ^	**8.09**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/23/12 14:31	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/23/12 14:31	JDH	
Lead [7439-92-1] ^	**3.47**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:31	JDH	
Nickel [7440-02-0] ^	**5.13**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/23/12 14:31	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/23/12 14:31	JDH	
Silver [7440-22-4] ^	**2.01**	J	ug/L	1	1.90	10.0	10	EPA 6010C	07/23/12 14:31	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/24/12 12:17	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/23/12 14:31	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/23/12 14:31	JDH	

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Description: 8401-LAGOON
Matrix: Surface Water
Project: Albemarle LF

Lab Sample ID: C208143-13
Sampled: 07/19/12 11:30
Sampled By: Danny Hefner / Joanna Ha

Received: 07/20/12 08:40
Work Order: C208143

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] ^	**5600**		ug/L	1	2000	2000	NE	SM 5210B	07/20/12 14:11	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**72000**		ug/L	1	10000	10000	NE	SM 5220D	07/23/12 17:30	JOC	
Nitrate as N [14797-55-8] ^	**210**	J	ug/L	1	25	100	10000	EPA 353.2	07/26/12 13:39	CCB	
Nitrate/Nitrite as N [ECL-0010] ^	**370**		ug/L	1	25	100	NE	EPA 353.2	07/23/12 09:26	CCB	
Nitrite as N [14797-65-0] ^	**160**	JB	ug/L	1	3.0	100	1000	EPA 353.2	07/20/12 13:41	AJB	QB-01
pH [ECL-0062] ^	**8.2**		pH Units	1	1.0	1.0	NE	SM4500-H/B	07/24/12 08:49	JCS	Q
Phosphorus [7723-14-0] ^	24	U	ug/L	1	24	100	NE	EPA 365.4	07/24/12 11:31	CCB	
Sulfate as SO4 [14808-79-8] ^	**15000**	J	ug/L	1	40	5000	250000	EPA 300.0	07/24/12 03:18	CCB	
Total Suspended Solids [ECL-0169] ^	**5600**		ug/L	1	1000	1000	NE	SM 2540D	07/25/12 10:19	JCS	

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

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Description: Trip Blank 1 | **Lab Sample ID:** C208143-14 | **Received:** 07/20/12 08:40

Matrix: Water | **Sampled:** 07/19/12 09:21 | **Work Order:** C208143

Project: Albemarle LF | **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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 17:16	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 17:16	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 17:16	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 17:16	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 17:16	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 17:16	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 17:16	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 17:16	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 17:16	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 17:16	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 17:16	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 17:16	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 17:16	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 17:16	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 17:16	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 17:16	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 17:16	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 17:16	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 17:16	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 17:16	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 17:16	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 17:16	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 17:16	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 17:16	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 17:16	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 17:16	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 17:16	JKG	

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Description: Trip Blank 1
Matrix: Water
Project: Albemarle LF

Lab Sample ID: C208143-14
Sampled: 07/19/12 09:21
Sampled By: ENCO

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 17:16	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*99 %*	*51-122*	*2G26013*	*EPA 8260B*	*07/26/12 17:16*	*JKG*	
Dibromofluoromethane	*52*	*1*	*50.0*	*105 %*	*68-117*	*2G26013*	*EPA 8260B*	*07/26/12 17:16*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*99 %*	*67-127*	*2G26013*	*EPA 8260B*	*07/26/12 17:16*	*JKG*	

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

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Description: Trip Blank 2 | **Lab Sample ID:** C208143-15 | **Received:** 07/20/12 08:40

Matrix: Water | **Sampled:** 07/19/12 09:21 | **Work Order:** C208143

Project: Albemarle LF | **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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 17:45	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 17:45	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 17:45	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 17:45	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 17:45	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 17:45	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 17:45	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 17:45	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 17:45	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 17:45	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 17:45	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 17:45	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 17:45	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 17:45	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 17:45	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 17:45	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 17:45	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 17:45	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 17:45	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 17:45	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 17:45	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 17:45	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 17:45	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 17:45	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 17:45	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 17:45	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 17:45	JKG	

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Description: Trip Blank 2
Matrix: Water
Project: Albemarle LF

Lab Sample ID: C208143-15
Sampled: 07/19/12 09:21
Sampled By: ENCO

Received: 07/20/12 08:40
Work Order: C208143

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] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 17:45	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*97 %*	*51-122*	*2G26013*	*EPA 8260B*	*07/26/12 17:45*	*JKG*	
Dibromofluoromethane	*53*	*1*	*50.0*	*106 %*	*68-117*	*2G26013*	*EPA 8260B*	*07/26/12 17:45*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*99 %*	*67-127*	*2G26013*	*EPA 8260B*	*07/26/12 17:45*	*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 2G24007 - EPA 5030B_MS

Blank (2G24007-BLK1) Prepared: 07/24/2012 08:32 Analyzed: 07/24/2012 21:38

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,1-Dichloropropene	0.15	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	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	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,3-Dichloropropane	0.16	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2,2-Dichloropropane	0.28	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
3-Chloropropene	0.11	U	1.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acetonitrile	5.0	U	10	ug/L							
Acrolein	4.0	U	10	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
Chloroprene	0.64	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethyl Methacrylate	0.38	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Hexachlorobutadiene	0.22	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Isobutyl alcohol	11	U	50	ug/L							
Methacrylonitrile	4.9	U	10	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2G24007 - EPA 5030B_MS

Blank (2G24007-BLK1) Continued Prepared: 07/24/2012 08:32 Analyzed: 07/24/2012 21:38

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Methyl Methacrylate	0.51	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Naphthalene	0.11	U	1.0	ug/L							
Propionitrile	5.0	U	10	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*97*	*51-122*			
Surrogate: Dibromofluoromethane	*52*			*ug/L*	*50.0*		*103*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*100*	*67-127*			

LCS (2G24007-BS1) Prepared: 07/24/2012 08:32 Analyzed: 07/24/2012 22:07

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		113	75-133			
Benzene	20		1.0	ug/L	20.0		101	81-134			
Chlorobenzene	19		1.0	ug/L	20.0		97	83-117			
Toluene	19		1.0	ug/L	20.0		97	71-118			
Trichloroethene	20		1.0	ug/L	20.0		98	74-119			
Surrogate: 4-Bromofluorobenzene	*52*			*ug/L*	*50.0*		*104*	*51-122*			
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*99*	*67-127*			

Matrix Spike (2G24007-MS1) Prepared: 07/24/2012 08:32 Analyzed: 07/24/2012 22:36

Source: C208703-02

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	0.21 U	118	75-133			
Benzene	21		1.0	ug/L	20.0	0.15 U	104	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.17 U	103	83-117			
Toluene	20		1.0	ug/L	20.0	0.14 U	102	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.15 U	105	74-119			
Surrogate: 4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*101*	*51-122*			
Surrogate: Dibromofluoromethane	*52*			*ug/L*	*50.0*		*104*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*100*	*67-127*			

Matrix Spike Dup (2G24007-MSD1) Prepared: 07/24/2012 08:32 Analyzed: 07/24/2012 23:06

Source: C208703-02

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2G24007 - EPA 5030B_MS

Matrix Spike Dup (2G24007-MSD1) Continued Prepared: 07/24/2012 08:32 Analyzed: 07/24/2012 23:06

Source: C208703-02

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	0.21 U	111	75-133	6	20	
Benzene	21		1.0	ug/L	20.0	0.15 U	103	81-134	1	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	99	83-117	4	16	
Toluene	19		1.0	ug/L	20.0	0.14 U	96	71-118	5	17	
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	102	74-119	3	22	
Surrogate: 4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*101*	*51-122*			
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*101*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*100*	*67-127*			

Batch 2G26013 - EPA 5030B_MS

Blank (2G26013-BLK1) Prepared: 07/26/2012 09:24 Analyzed: 07/26/2012 11:23

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,1-Dichloropropene	0.15	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	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	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,3-Dichloropropane	0.16	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2,2-Dichloropropane	0.28	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
3-Chloropropene	0.11	U	1.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acetonitrile	5.0	U	10	ug/L							
Acrolein	4.0	U	10	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2G26013 - EPA 5030B_MS

Blank (2G26013-BLK1) Continued Prepared: 07/26/2012 09:24 Analyzed: 07/26/2012 11:23

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
Chloroprene	0.64	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethyl Methacrylate	0.38	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Hexachlorobutadiene	0.22	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Isobutyl alcohol	11	U	50	ug/L							
Methacrylonitrile	4.9	U	10	ug/L							
Methyl Methacrylate	0.51	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Naphthalene	0.11	U	1.0	ug/L							
Propionitrile	5.0	U	10	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*98*	*51-122*			
Surrogate: Dibromofluoromethane	*52*			*ug/L*	*50.0*		*104*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*99*	*67-127*			

LCS (2G26013-BS1) Prepared: 07/26/2012 09:24 Analyzed: 07/26/2012 11:53

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		120	75-133			
Benzene	21		1.0	ug/L	20.0		103	81-134			
Chlorobenzene	19		1.0	ug/L	20.0		97	83-117			
Toluene	19		1.0	ug/L	20.0		96	71-118			
Trichloroethene	20		1.0	ug/L	20.0		100	74-119			
Surrogate: 4-Bromofluorobenzene	*52*			*ug/L*	*50.0*		*103*	*51-122*			
Surrogate: Dibromofluoromethane	*52*			*ug/L*	*50.0*		*105*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*99*	*67-127*			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2G26013 - EPA 5030B_MS

Matrix Spike (2G26013-MS1) Prepared: 07/26/2012 09:24 Analyzed: 07/26/2012 12:22

Source: C207982-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	26		1.0	ug/L	20.0	0.21 U	129	75-133			
Benzene	22		1.0	ug/L	20.0	0.15 U	108	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.46	102	83-117			
Toluene	20		1.0	ug/L	20.0	0.14 U	102	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.15 U	108	74-119			
Surrogate: 4-Bromofluorobenzene	*50*			*ug/L*	*50.0*		*101*	*51-122*			
Surrogate: Dibromofluoromethane	*52*			*ug/L*	*50.0*		*105*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*99*	*67-127*			

Matrix Spike Dup (2G26013-MSD1) Prepared: 07/26/2012 09:24 Analyzed: 07/26/2012 12:52

Source: C207982-04

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	0.21 U	117	75-133	10	20	
Benzene	20		1.0	ug/L	20.0	0.15 U	98	81-134	9	17	
Chlorobenzene	19		1.0	ug/L	20.0	0.46	94	83-117	8	16	
Toluene	19		1.0	ug/L	20.0	0.14 U	93	71-118	10	17	
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	100	74-119	7	22	
Surrogate: 4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*102*	*51-122*			
Surrogate: Dibromofluoromethane	*52*			*ug/L*	*50.0*		*104*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*99*	*67-127*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 2G24016 - EPA 3510C_MS

Blank (2G24016-BLK1) Prepared: 07/24/2012 09:51 Analyzed: 07/26/2012 19:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4,5-Tetrachlorobenzene	2.0	U	10	ug/L							
1,3,5-Trinitrobenzene	3.0	U	10	ug/L							
1,3-Dinitrobenzene	1.9	U	10	ug/L							
1,4-Naphthoquinone	2.5	U	10	ug/L							
1,4-Phenylenediamine	4.0	U	10	ug/L							
1-Naphthylamine	1.9	U	10	ug/L							
2,3,4,6-Tetrachlorophenol	2.0	U	10	ug/L							
2,4,5-Trichlorophenol	1.0	U	10	ug/L							
2,4,6-Trichlorophenol	1.1	U	10	ug/L							
2,4-Dichlorophenol	1.4	U	10	ug/L							
2,4-Dimethylphenol	1.3	U	10	ug/L							
2,4-Dinitrophenol	2.6	U	10	ug/L							
2,4-Dinitrotoluene	2.4	U	10	ug/L							
2,6-Dichlorophenol	1.1	U	10	ug/L							
2,6-Dinitrotoluene	1.5	U	10	ug/L							
2-Acetylaminofluorene	2.5	U	10	ug/L							
2-Chloronaphthalene	1.0	U	10	ug/L							
2-Chlorophenol	1.2	U	10	ug/L							

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 2G24016 - EPA 3510C_MS

Blank (2G24016-BLK1) Continued Prepared: 07/24/2012 09:51 Analyzed: 07/26/2012 19:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Methyl-4,6-dinitrophenol	2.9	U	10	ug/L							
2-Methylnaphthalene	1.5	U	10	ug/L							
2-Methylphenol	1.4	U	10	ug/L							
2-Naphthylamine	3.0	U	10	ug/L							
2-Nitroaniline	1.5	U	10	ug/L							
2-Nitrophenol	1.1	U	10	ug/L							
3 & 4-Methylphenol	1.6	U	10	ug/L							
3,3'-Dichlorobenzidine	3.3	U	10	ug/L							
3,3'-Dimethylbenzidine	2.2	U	10	ug/L							
3-Methylcholanthrene	1.3	U	10	ug/L							
3-Nitroaniline	2.1	U	10	ug/L							
4-Aminobiphenyl	2.1	U	10	ug/L							
4-Bromophenyl-phenylether	1.0	U	10	ug/L							
4-Chloro-3-methylphenol	1.5	U	10	ug/L							
4-Chloroaniline	1.2	U	10	ug/L							
4-Chlorophenyl-phenylether	1.6	U	10	ug/L							
4-Nitroaniline	3.2	U	10	ug/L							
4-Nitrophenol	2.0	U	10	ug/L							
5-Nitro-o-toluidine	3.2	U	10	ug/L							
7,12-Dimethylbenz(a)anthracene	1.1	U	10	ug/L							
Acenaphthene	1.4	U	10	ug/L							
Acenaphthylene	1.2	U	10	ug/L							
Acetophenone	1.3	U	10	ug/L							
Anthracene	1.6	U	10	ug/L							
Benzo(a)anthracene	1.3	U	10	ug/L							
Benzo(a)pyrene	1.3	U	10	ug/L							
Benzo(b)fluoranthene	1.0	U	10	ug/L							
Benzo(g,h,i)perylene	2.4	U	10	ug/L							
Benzo(k)fluoranthene	1.3	U	10	ug/L							
Benzyl alcohol	1.4	U	10	ug/L							
Bis(2-chloroethoxy)methane	1.4	U	10	ug/L							
Bis(2-chloroethyl)ether	1.2	U	10	ug/L							
Bis(2-chloroisopropyl)ether	1.3	U	10	ug/L							
Bis(2-ethylhexyl)phthalate	1.7	U	5.0	ug/L							
Butylbenzylphthalate	2.0	U	10	ug/L							
Chlorobenzilate	1.0	U	10	ug/L							
Chrysene	2.0	U	10	ug/L							
Diallate	1.0	U	10	ug/L							
Dibenzo(a,h)anthracene	2.3	U	10	ug/L							
Dibenzofuran	1.4	U	10	ug/L							
Diethylphthalate	2.1	U	10	ug/L							
Dimethoate	2.3	U	10	ug/L							
Dimethylphthalate	1.4	U	10	ug/L							
Di-n-butylphthalate	1.5	U	10	ug/L							
Di-n-octylphthalate	3.1	U	10	ug/L							
Disulfoton	1.1	U	10	ug/L							
Ethyl methanesulfonate	1.2	U	10	ug/L							
Famphur	2.7	U	10	ug/L							
Fluoranthene	2.1	U	10	ug/L							

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 2G24016 - EPA 3510C_MS

Blank (2G24016-BLK1) Continued Prepared: 07/24/2012 09:51 Analyzed: 07/26/2012 19:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Fluorene	1.7	U	10	ug/L							
Hexachlorobenzene	1.0	U	10	ug/L							
Hexachlorobutadiene	1.2	U	10	ug/L							
Hexachlorocyclopentadiene	1.3	U	10	ug/L							
Hexachloroethane	1.1	U	10	ug/L							
Hexachloropropene	1.7	U	10	ug/L							
Indeno(1,2,3-cd)pyrene	2.2	U	10	ug/L							
Isodrin	1.0	U	10	ug/L							
Isophorone	1.3	U	10	ug/L							
Isosafrole	1.3	U	10	ug/L							
Kepone	7.2	U	20	ug/L							QV-01
Methapyrilene	3.5	U	10	ug/L							QV-02
Methyl Methanesulfonate	1.0	U	10	ug/L							
Methyl parathion	2.5	U	10	ug/L							
Nitrobenzene	1.2	U	10	ug/L							
N-Nitrosodiethylamine	1.3	U	10	ug/L							
N-Nitrosodimethylamine	1.3	U	10	ug/L							
N-Nitrosodi-n-butylamine	1.2	U	10	ug/L							
N-Nitroso-di-n-propylamine	1.5	U	10	ug/L							
N-nitrosodiphenylamine/Diphenylamine	2.1	U	10	ug/L							
N-Nitrosomethylethylamine	1.9	U	10	ug/L							
N-Nitrosopiperidine	1.1	U	10	ug/L							
N-Nitrosopyrrolidine	1.3	U	10	ug/L							
O,O,O-Triethyl phosphorothioate	1.3	U	10	ug/L							
o-Toluidine	1.1	U	10	ug/L							
Parathion	1.7	U	10	ug/L							
p-Dimethylaminoazobenzene	1.4	U	10	ug/L							
Pentachlorobenzene	1.3	U	10	ug/L							
Pentachloronitrobenzene	1.0	U	10	ug/L							
Phenacetin	2.7	U	10	ug/L							
Phenanthrene	1.4	U	10	ug/L							
Phenol	1.4	U	10	ug/L							
Phorate	1.0	U	10	ug/L							QV-01
Pronamide	1.4	U	10	ug/L							
Pyrene	2.1	U	10	ug/L							
Safrole	1.2	U	10	ug/L							
Thionazin	2.3	U	10	ug/L							
Surrogate: 2,4,6-Tribromophenol	*83*			*ug/L*	*100*		*83*	*10-179*			
Surrogate: 2-Fluorobiphenyl	*38*			*ug/L*	*50.0*		*76*	*10-149*			
Surrogate: 2-Fluorophenol	*55*			*ug/L*	*100*		*55*	*10-110*			
Surrogate: Nitrobenzene-d5	*38*			*ug/L*	*50.0*		*76*	*10-149*			
Surrogate: Phenol-d5	*42*			*ug/L*	*100*		*42*	*10-88*			
Surrogate: Terphenyl-d14	*42*			*ug/L*	*50.0*		*83*	*10-188*			

LCS (2G24016-BS1) Prepared: 07/24/2012 09:51 Analyzed: 07/25/2012 13:23

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Chlorophenol	39		10	ug/L	50.0		78	40-109			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 2G24016 - EPA 3510C_MS

LCS (2G24016-BS1) Continued Prepared: 07/24/2012 09:51 Analyzed: 07/25/2012 13:23

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Chloro-3-methylphenol	43		10	ug/L	50.0		86	58-121			
4-Nitrophenol	33		10	ug/L	50.0		66	33-105			
Acenaphthene	42		10	ug/L	50.0		84	39-125			
N-Nitroso-di-n-propylamine	44		10	ug/L	50.0		89	48-126			
Phenol	25		10	ug/L	50.0		49	19-78			
Pyrene	43		10	ug/L	50.0		87	44-137			
Surrogate: 2,4,6-Tribromophenol	*88*			*ug/L*	*100*		*88*	*10-179*			
Surrogate: 2-Fluorobiphenyl	*41*			*ug/L*	*50.0*		*82*	*10-149*			
Surrogate: 2-Fluorophenol	*59*			*ug/L*	*100*		*59*	*10-110*			
Surrogate: Nitrobenzene-d5	*40*			*ug/L*	*50.0*		*81*	*10-149*			
Surrogate: Phenol-d5	*47*			*ug/L*	*100*		*47*	*10-88*			
Surrogate: Terphenyl-d14	*43*			*ug/L*	*50.0*		*87*	*10-188*			

Matrix Spike (2G24016-MS1) Prepared: 07/24/2012 09:51 Analyzed: 07/25/2012 13:51

Source: C208610-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Chlorophenol	41		10	ug/L	50.0	1.2 U	82	40-109			
4-Chloro-3-methylphenol	44		10	ug/L	50.0	1.5 U	88	58-121			
4-Nitrophenol	36		10	ug/L	50.0	2.0 U	72	33-105			
Acenaphthene	44		10	ug/L	50.0	1.4 U	88	39-125			
N-Nitroso-di-n-propylamine	45		10	ug/L	50.0	1.5 U	91	48-126			
Phenol	26		10	ug/L	50.0	1.4 U	52	19-78			
Pyrene	44		10	ug/L	50.0	2.1 U	87	44-137			
Surrogate: 2,4,6-Tribromophenol	*87*			*ug/L*	*100*		*87*	*10-179*			
Surrogate: 2-Fluorobiphenyl	*42*			*ug/L*	*50.0*		*84*	*10-149*			
Surrogate: 2-Fluorophenol	*60*			*ug/L*	*100*		*60*	*10-110*			
Surrogate: Nitrobenzene-d5	*40*			*ug/L*	*50.0*		*80*	*10-149*			
Surrogate: Phenol-d5	*47*			*ug/L*	*100*		*47*	*10-88*			
Surrogate: Terphenyl-d14	*42*			*ug/L*	*50.0*		*85*	*10-188*			

Matrix Spike Dup (2G24016-MSD1) Prepared: 07/24/2012 09:51 Analyzed: 07/25/2012 14:18

Source: C208610-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Chlorophenol	42		10	ug/L	50.0	1.2 U	84	40-109	2	22	
4-Chloro-3-methylphenol	46		10	ug/L	50.0	1.5 U	92	58-121	4	22	
4-Nitrophenol	33		10	ug/L	50.0	2.0 U	65	33-105	9	27	
Acenaphthene	45		10	ug/L	50.0	1.4 U	91	39-125	3	25	
N-Nitroso-di-n-propylamine	48		10	ug/L	50.0	1.5 U	95	48-126	5	23	
Phenol	25		10	ug/L	50.0	1.4 U	50	19-78	5	18	
Pyrene	43		10	ug/L	50.0	2.1 U	86	44-137	2	24	
Surrogate: 2,4,6-Tribromophenol	*90*			*ug/L*	*100*		*90*	*10-179*			
Surrogate: 2-Fluorobiphenyl	*43*			*ug/L*	*50.0*		*86*	*10-149*			
Surrogate: 2-Fluorophenol	*58*			*ug/L*	*100*		*58*	*10-110*			
Surrogate: Nitrobenzene-d5	*40*			*ug/L*	*50.0*		*80*	*10-149*			
Surrogate: Phenol-d5	*46*			*ug/L*	*100*		*46*	*10-88*			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 2G24016 - EPA 3510C_MS

Matrix Spike Dup (2G24016-MSD1) Continued Prepared: 07/24/2012 09:51 Analyzed: 07/25/2012 14:18

Source: C208610-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Terphenyl-d14	*41*			*ug/L*	*50.0*		*82*	*10-188*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 2G20007 - EPA 7470A

Blank (2G20007-BLK1) Prepared: 07/23/2012 09:52 Analyzed: 07/23/2012 16:06

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 (2G20007-BS1) Prepared: 07/23/2012 09:52 Analyzed: 07/23/2012 16:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.98		0.200	ug/L	5.00		100	80-120			

Matrix Spike (2G20007-MS1) Prepared: 07/23/2012 09:52 Analyzed: 07/23/2012 16:12

Source: C208575-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.08		0.200	ug/L	5.00	0.170 U	102	75-125			

Matrix Spike Dup (2G20007-MSD1) Prepared: 07/23/2012 09:52 Analyzed: 07/23/2012 16:14

Source: C208575-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.05		0.200	ug/L	5.00	0.170 U	101	75-125	0.6	25	

Post Spike (2G20007-PS1) Prepared: 07/23/2012 09:52 Analyzed: 07/23/2012 16:17

Source: C208575-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.61		0.200	ug/L	5.00	-0.111	94	75-125			

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

Batch 2G20008 - EPA 3005A

Blank (2G20008-BLK1) Prepared: 07/20/2012 09:57 Analyzed: 07/23/2012 13:34

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							

QUALITY CONTROL

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

Batch 2G20008 - EPA 3005A

Blank (2G20008-BLK1) Continued Prepared: 07/20/2012 09:57 Analyzed: 07/23/2012 13:34

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Selenium	4.50	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Tin	2.10	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (2G20008-BS1) Prepared: 07/20/2012 09:57 Analyzed: 07/23/2012 13:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	190		10.0	ug/L	200		95	80-120			
Barium	199		10.0	ug/L	200		100	80-120			
Beryllium	18.8		1.00	ug/L	20.0		94	80-120			
Cadmium	20.6		1.00	ug/L	20.0		103	80-120			
Chromium	186		10.0	ug/L	200		93	80-120			
Cobalt	197		10.0	ug/L	200		99	80-120			
Copper	181		10.0	ug/L	200		91	80-120			
Lead	195		10.0	ug/L	200		97	80-120			
Nickel	198		10.0	ug/L	200		99	80-120			
Selenium	200		10.0	ug/L	200		100	80-120			
Silver	191		10.0	ug/L	200		95	80-120			
Tin	190		10.0	ug/L	200		95	80-120			
Vanadium	188		10.0	ug/L	200		94	80-120			
Zinc	200		10.0	ug/L	200		100	80-120			

Matrix Spike (2G20008-MS1) Prepared: 07/20/2012 09:57 Analyzed: 07/23/2012 13:47

Source: C208143-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	206		10.0	ug/L	200	16.7	95	75-125			
Barium	289		10.0	ug/L	200	89.4	100	75-125			
Beryllium	19.9		1.00	ug/L	20.0	0.100 U	100	75-125			
Cadmium	20.1		1.00	ug/L	20.0	0.360 U	100	75-125			
Chromium	202		10.0	ug/L	200	7.86	97	75-125			
Cobalt	246		10.0	ug/L	200	48.0	99	75-125			
Copper	191		10.0	ug/L	200	1.60 U	96	75-125			
Lead	202		10.0	ug/L	200	4.27	99	75-125			
Nickel	200		10.0	ug/L	200	1.80 U	100	75-125			
Selenium	198		10.0	ug/L	200	4.50 U	99	75-125			
Silver	203		10.0	ug/L	200	2.88	100	75-125			
Tin	198		10.0	ug/L	200	2.63	98	75-125			
Vanadium	196		10.0	ug/L	200	1.40 U	98	75-125			
Zinc	202		10.0	ug/L	200	3.80 U	101	75-125			

Matrix Spike Dup (2G20008-MSD1) Prepared: 07/20/2012 09:57 Analyzed: 07/23/2012 13:54

QUALITY CONTROL

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

Batch 2G20008 - EPA 3005A

Matrix Spike Dup (2G20008-MSD1) Continued Prepared: 07/20/2012 09:57 Analyzed: 07/23/2012 13:54

Source: C208143-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	198		10.0	ug/L	200	16.7	91	75-125	4	20	
Barium	279		10.0	ug/L	200	89.4	95	75-125	4	20	
Beryllium	19.0		1.00	ug/L	20.0	0.100 U	95	75-125	5	20	
Cadmium	19.2		1.00	ug/L	20.0	0.360 U	96	75-125	5	20	
Chromium	194		10.0	ug/L	200	7.86	93	75-125	4	20	
Cobalt	237		10.0	ug/L	200	48.0	95	75-125	4	20	
Copper	183		10.0	ug/L	200	1.60 U	92	75-125	4	20	
Lead	192		10.0	ug/L	200	4.27	94	75-125	5	20	
Nickel	192		10.0	ug/L	200	1.80 U	96	75-125	4	20	
Selenium	190		10.0	ug/L	200	4.50 U	95	75-125	4	20	
Silver	195		10.0	ug/L	200	2.88	96	75-125	4	20	
Tin	189		10.0	ug/L	200	2.63	93	75-125	5	20	
Vanadium	188		10.0	ug/L	200	1.40 U	94	75-125	4	20	
Zinc	192		10.0	ug/L	200	3.80 U	96	75-125	5	20	

Post Spike (2G20008-PS1) Prepared: 07/20/2012 09:57 Analyzed: 07/23/2012 13:56

Source: C208143-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.204		0.0100	mg/L	0.200	0.0167	94	80-120			
Barium	0.285		0.0100	mg/L	0.200	0.0894	98	80-120			
Beryllium	0.0192		0.00100	mg/L	0.0200	-2.07E-5	96	80-120			
Cadmium	0.0195		0.00100	mg/L	0.0200	-0.000557	100	80-120			
Chromium	0.195		0.0100	mg/L	0.200	0.00786	93	80-120			
Cobalt	0.241		0.0100	mg/L	0.200	0.0480	97	80-120			
Copper	0.184		0.0100	mg/L	0.200	-0.00252	93	80-120			
Lead	0.195		0.0100	mg/L	0.200	0.00427	95	80-120			
Nickel	0.196		0.0100	mg/L	0.200	0.00175	97	80-120			
Selenium	0.191		0.0100	mg/L	0.200	0.00428	94	80-120			
Silver	0.202		0.0100	mg/L	0.200	0.00288	100	80-120			
Tin	0.193		0.0100	mg/L	0.200	0.00263	95	80-120			
Vanadium	0.189		0.0100	mg/L	0.200	-0.00323	96	80-120			
Zinc	0.201		0.0100	mg/L	0.200	0.00164	100	80-120			

Batch 2G20009 - EPA 3005A

Blank (2G20009-BLK1) Prepared: 07/20/2012 09:59 Analyzed: 07/24/2012 10:55

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (2G20009-BS1) Prepared: 07/20/2012 09:59 Analyzed: 07/24/2012 11:00

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	197		2.00	ug/L	200		99	80-120			
Thallium	205		1.00	ug/L	200		102	80-120			

QUALITY CONTROL

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

Batch 2G20009 - EPA 3005A

Matrix Spike (2G20009-MS1) Prepared: 07/20/2012 09:59 Analyzed: 07/24/2012 11:09

Source: C208143-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	196		2.00	ug/L	200	0.638	98	75-125			
Thallium	195		1.00	ug/L	200	0.110 U	97	75-125			

Matrix Spike Dup (2G20009-MSD1) Prepared: 07/20/2012 09:59 Analyzed: 07/24/2012 11:13

Source: C208143-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	197		2.00	ug/L	200	0.638	98	75-125	0.4	20	
Thallium	190		1.00	ug/L	200	0.110 U	95	75-125	3	20	

Post Spike (2G20009-PS1) Prepared: 07/20/2012 09:59 Analyzed: 07/24/2012 11:17

Source: C208143-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	199		2.00	ug/L	200	0.638	99	80-120			
Thallium	187		1.00	ug/L	200	0.0410	94	80-120			

Classical Chemistry Parameters - Quality Control

Batch 2G20013 - NO PREP

Blank (2G20013-BLK1) Prepared & Analyzed: 07/20/2012 14:11

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 (2G20013-BS1) Prepared & Analyzed: 07/20/2012 14:11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	170000		2000	ug/L	198000		86	85-115			

Duplicate (2G20013-DUP1) Prepared & Analyzed: 07/20/2012 14:11

Source: C207983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	13000		2000	ug/L		13000			0.8	25	

Batch 2G20019 - NO PREP

Blank (2G20019-BLK1) Prepared: 07/20/2012 12:26 Analyzed: 07/20/2012 13:33

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	**9.5**	**J**	100	ug/L							

LCS (2G20019-BS1) Prepared: 07/20/2012 12:26 Analyzed: 07/20/2012 13:34

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2G20019 - NO PREP

LCS (2G20019-BS1) Continued Prepared: 07/20/2012 12:26 Analyzed: 07/20/2012 13:34

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1000	B	100	ug/L	1000		100	90-110			

Matrix Spike (2G20019-MS1) Prepared: 07/20/2012 12:26 Analyzed: 07/20/2012 13:37

Source: C207983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1000	B	100	ug/L	1000	16	99	90-110			

Matrix Spike Dup (2G20019-MSD1) Prepared: 07/20/2012 12:26 Analyzed: 07/20/2012 13:39

Source: C207983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1000	B	100	ug/L	1000	16	99	90-110	0.07	10	

Batch 2G22001 - NO PREP

Blank (2G22001-BLK1) Prepared: 07/23/2012 08:42 Analyzed: 07/23/2012 08:42

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	25	U	100	ug/L							

LCS (2G22001-BS1) Prepared: 07/23/2012 08:44 Analyzed: 07/23/2012 08:44

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	1200		100	ug/L	1250		94	90-110			

Matrix Spike (2G22001-MS1) Prepared & Analyzed: 07/23/2012 08:47

Source: C207289-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	50000		10000	ug/L	50000	2500 U	100	90-110			

Matrix Spike Dup (2G22001-MSD1) Prepared: 07/23/2012 08:49 Analyzed: 07/23/2012 08:49

Source: C207289-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	48000		10000	ug/L	50000	2500 U	96	90-110	4	10	

Batch 2G23005 - Same

Blank (2G23005-BLK1) Prepared: 07/23/2012 10:50 Analyzed: 07/24/2012 10:47

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phosphorus	24	U	100	ug/L							

LCS (2G23005-BS1) Prepared: 07/23/2012 10:50 Analyzed: 07/24/2012 10:49

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2G23005 - Same

LCS (2G23005-BS1) Continued Prepared: 07/23/2012 10:50 Analyzed: 07/24/2012 10:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phosphorus	1600		100	ug/L	1600		98	80-120			

Matrix Spike (2G23005-MS1) Prepared: 07/23/2012 10:50 Analyzed: 07/24/2012 10:51

Source: C207289-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phosphorus	1600		100	ug/L	640	920	102	80-120			

Matrix Spike Dup (2G23005-MSD1) Prepared: 07/23/2012 10:50 Analyzed: 07/24/2012 10:52

Source: C207289-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phosphorus	1500		100	ug/L	640	920	96	80-120	3	25	

Batch 2G23021 - NO PREP

Blank (2G23021-BLK1) Prepared: 07/23/2012 11:05 Analyzed: 07/23/2012 21:48

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	40	U	5000	ug/L							

LCS (2G23021-BS1) Prepared: 07/23/2012 11:05 Analyzed: 07/23/2012 22:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	48000		5000	ug/L	50000		97	90-110			

Matrix Spike (2G23021-MS1) Prepared: 07/23/2012 11:05 Analyzed: 07/23/2012 22:54

Source: C207717-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	75000		5000	ug/L	20000	53000	108	90-110			

Matrix Spike Dup (2G23021-MSD1) Prepared: 07/23/2012 11:05 Analyzed: 07/23/2012 23:10

Source: C207717-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	74000		5000	ug/L	20000	53000	103	90-110	1	10	

Batch 2G23027 - Same

Blank (2G23027-BLK1) Prepared: 07/23/2012 14:28 Analyzed: 07/23/2012 17:30

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 (2G23027-BS1) Prepared: 07/23/2012 14:28 Analyzed: 07/23/2012 17:30

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2G23027 - Same

LCS (2G23027-BS1) Continued Prepared: 07/23/2012 14:28 Analyzed: 07/23/2012 17:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	510000		10000	ug/L	500000		102	90-110			

Matrix Spike (2G23027-MS1) Prepared: 07/23/2012 14:28 Analyzed: 07/23/2012 17:30

Source: C207655-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	3200000		50000	ug/L	2500000	820000	97	90-110			

Matrix Spike Dup (2G23027-MSD1) Prepared: 07/23/2012 14:28 Analyzed: 07/23/2012 17:30

Source: C207655-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	3300000		50000	ug/L	2500000	820000	98	90-110	1	10	

Batch 2G24003 - NO PREP

LCS (2G24003-BS1) Prepared & Analyzed: 07/24/2012 08:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
pH	7.0		1.0	pH Units	7.00		99	99-101			

Duplicate (2G24003-DUP1) Prepared & Analyzed: 07/24/2012 08:49

Source: C208143-13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
pH	8.2		1.0	pH Units		8.2			0	25	

Batch 2G25016 - NO PREP

Blank (2G25016-BLK1) Prepared & Analyzed: 07/25/2012 10:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Suspended Solids	1000	U	1000	ug/L							

LCS (2G25016-BS1) Prepared & Analyzed: 07/25/2012 10:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Suspended Solids	100		1	mg/L	100		96	90-122			

Duplicate (2G25016-DUP1) Prepared & Analyzed: 07/25/2012 10:19

Source: C207983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Suspended Solids	9000		1000	ug/L		8000			12	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.
Q	Analysis performed outside of method - specified holding time.
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.
QV-01	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.
QV-02	The associated continuing calibration verification standard exhibited low bias; the reported result should be considered to be a minimum estimate.

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102-A Woodwinds Industrial Ct. Cary, NC 27511 (919) 467-3090 Fax (919) 467-3515

Page 1 of 4

Client Name: Shield Engineering, Inc. (SH007)	Project Number: 1110192
Address: 4301 Taggart Creek Road	Project Name/Desc: Albemarle LF
City/ST/Zip: Charlotte, NC 28208	PO # / Billing Info:
Tel: (704) 971-4149 Fax: (704) 394-6968	Reporting Contact: David Wallace
Sampler(s) Name, Affiliation (Print): DANNY HEFNER, JOANNA HARBISON/SHIELD	Billing Contact: Accounts Payable
Sampler(s) Signature: [signature]	Site Location / Time Zone:

Requested Turnaround Times
Note : Rush requests subject to acceptance by the facility
___ Standard
___ Expedited
Due ___/___/___

Lab Workorder: C208143

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	8081B Appendix 2, 8082A Appendix 2, 8151A Appendix 2, 8270D Appendix 2	8260B Appendix 1	8260B Appendix 2	8270D Appendix 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Sn,Ti,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Ti,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Ti,V,Zn	BOD SM5210B	COD SM5220D	Hg	Sample Comments
	8401-MW13	7-19-12	11:07	GRAB	GW	4			X		X					X	
	8401-MW14		10:27		GW	4		X				X					
	8401-MW15		10:01		GW	4		X				X					
	8401-MW16S		10:30		GW	4	X	X	X		X	X				X	
	8401-MW16D		10:40		GW	4		X				X					
	8401-MW17		10:06		GW	4		X				X					
	8401-MW18		09:21		GW	4		X				X					
	8401-MW19		09:44		GW	4		X				X					
	8401-MW22		11:43		GW	4		X				X					
	8401-MW23		11:14		GW	5			X	X	X					X	
	8401-MW26		12:00		GW	4		X				X					
	8401-MW27		12:07		GW	4		X				X					

<-- Total # of Containers

Sample Kit Prepared By: MGS	Date/Time: 7/10/12	Relinquished By: [signature]	Date/Time: 7/19/12 1640	Received By: Susan Penn	Date/Time: 7/19/12 1640
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By: MEStamper	Date/Time: 7/20/12 840
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: C-9 2.1°C C-785 1.4°C		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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Cary, NC 27511
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Client Name: Shield Engineering, Inc. (SH007)	Project Number: 1110192
Address: 4301 Taggart Creek Road	Project Name/Desc: Albemarle LF
City/ST/Zip: Charlotte, NC 28208	PO # / Billing Info:
Tel: (704) 971-4149 Fax: (704) 394-6968	Reporting Contact: David Wallace
Sampler(s) Name, Affiliation (Print):	Billing Contact: Accounts Payable
Sampler(s) Signature:	Site Location / Time Zone:

Requested Analyses: Nitrate Calc 353.2; Nitrite as N 353.2,pH SM4500-H B; NOX 353.2,P; Sulfate 300; TSS SM2540D

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C208143

Preservation (See Codes) (Combine as necessary): N/A SP

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	Sample Comments
	8401-MW13				GW	4	
	8401-MW14				GW	4	
	8401-MW15				GW	4	
	8401-MW16S				GW	4	
	8401-MW16D				GW	4	
	8401-MW17				GW	4	
	8401-MW18				GW	4	
	8401-MW19				GW	4	
	8401-MW22				GW	4	
	8401-MW23				GW	5	
	8401-MW26				GW	4	
	8401-MW27				GW	4	

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
MES	7/10/12			MEStamper	7/20/12 840
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-9 2.1°C C-785 1.4°C

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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Client Name: Shield Engineering, Inc. (SH007)	Project Number: 1110192
Address: 4301 Taggart Creek Road	Project Name/Desc: Albemarle LF
City/ST/Zip: Charlotte, NC 28208	PO # / Billing Info:
Tel: (704) 971-4149 Fax: (704) 394-6968	Reporting Contact: David Wallace
Sampler(s) Name, Affiliation (Print): DANNY HEFNER, JOANNA HARDISON / SHFES	Billing Contact: Accounts Payable
Sampler(s) Signature: [signature]	Site Location / Time Zone: N.C.

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C208143

Requested Analyses

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8081B Appendix 2, 8082A Appendix 2, 8151A Appendix 2, 8270D Appendix 2	8260B Appendix 1	8260B Appendix 2	8270D Appendix 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Se,Sn,Ti,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Se,Ti,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Ti,V,Zn	BOD SM5210B	COD SM5220D	Hg	Sample Comments
	8401-LAGOON	7-19-12	11:30	GRAB	SW	8		X					X	X	X		

Preservation (See Codes) (Combine as necessary)

<-- Total # of Containers

Sample Kit Prepared By: UMES	Date/Time: 7/10/12	Relinquished By: [signature]	Date/Time: 7/19/12 1640	Received By: [signature]	Date/Time: 7/19/12 1640
Comments/Special Reporting Requirements		Relinquished By:	Date/Time:	Received By: UMES Stamper	Date/Time: 7/20/12 840
		Relinquished By:	Date/Time:	Received By:	Date/Time:
		Cooler #'s & Temps on Receipt: C-9 2.1°C C-785 1.4°C		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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Client Name: Shield Engineering, Inc. (SH007)	Project Number: 1110192
Address: 4301 Taggart Creek Road	Project Name/Desc: Albemarle LF
City/ST/Zip: Charlotte, NC 28208	PO # / Billing Info:
Tel: (704) 971-4149 Fax: (704) 394-6968	Reporting Contact: David Wallace
Sampler(s) Name, Affiliation (Print): DANNY HEFNER, JUANITA HARDISON / SHIELD	Billing Contact: Accounts Payable
Sampler(s) Signature: [signature]	Site Location / Time Zone:

Requested Analyses: Nitrate Calc 353.2; Nitrite as N 353.2,pH SM4500-H B; NOX 353.2,P; Sulfate 300; TSS SM2540D

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C208143

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	Nitrate Calc 353.2	Nitrite as N 353.2,pH SM4500-H B	NOX 353.2,P	Sulfate 300	TSS SM2540D						Sample Comments
	8401-LAGOON	7-19-12	1130	GRAB	SW	8	X	X	X	X	X						

<-- Total # of Containers

Sample Kit Prepared By: JMES	Date/Time: 7/10/12	Relinquished By: [signature]	Date/Time: 7/19/12 1640	Received By: [signature]	Date/Time: 7/17/12 1640
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By: JMEStamper	Date/Time: 7/20/12 840
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: C-9 2.1°C C-785 1.4°C		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

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

Tuesday, July 31, 2012

Shield Engineering, Inc. (SH007)

Attn: David Wallace

4301 Taggart Creek Road

Charlotte, NC 28208

RE: Laboratory Results for
Project Number: 1110192, Project Name/Desc: Albemarle Closed LF
ENCO Workorder(s): C208141,C208142

Dear David Wallace,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, July 18, 2012.

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,

Stephanie Franz

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 93.

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PROJECT NARRATIVE

Date: 31 July 2012
Client: Shield Engineering, Inc. (SH007)
Project: Albemarle Closed LF
Lab ID: C208141, C208142

Overview

Environmental Conservation Laboratories, Inc. (ENCO) analyzed all submitted samples in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling by ENCO are discussed in the QC Remarks section below.

Quality Control Samples

No Comments

Quality Control Remarks

No Comments

Other Comments

Selenium by method 6010C was detected in the Bailer Blank; however, this detection did not confirm when the sample was prepped and analyzed via an alternate method, 6020A. Both results are reported.

The analytical data presented in this report are consistent with the methods as referenced in the analytical report. Any exceptions or deviations are noted in the QC remarks section of this narrative or in the Flags/Notes and Definitions section of the report.

Released By:
Environmental Conservation Laboratories, Inc.

Stephanie Franz
Project Manager

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 8401-MW2 **Lab ID: C208141-01** **Sampled: 07/17/12 11:55** **Received: 07/18/12 08:10**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/14/12		07/29/12	12:53	7/30/2012 00:54
EPA 353.2	04/12/15		07/25/12	12:59	7/26/2012 13:39
EPA 6010C	01/13/13		07/18/12	09:33	7/20/2012 12:39
EPA 6020A	01/13/13		07/18/12	09:37	7/19/2012 13:20
EPA 8260B	07/31/12		07/25/12	07:33	7/26/2012 07:55
SM 2130B	07/19/12	11:55	07/18/12	16:34	7/18/2012 16:34
SM 5220D	08/14/12		07/23/12	14:28	7/23/2012 17:30
SM18 4500-S D	07/24/12		07/24/12	15:14	7/24/2012 15:40
SM18 5310B	08/14/12		07/27/12	10:00	7/27/2012 23:35

Client ID: 8401-MW2 **Lab ID: C208141-01RE1** **Sampled: 07/17/12 11:55** **Received: 07/18/12 08:10**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/14/12		07/29/12	12:53	7/30/2012 07:49
EPA 310.2	07/31/12		07/27/12	09:53	7/27/2012 12:34
EPA 6020A	01/13/13		07/18/12	09:37	7/19/2012 14:30

Client ID: 8401-MW3 **Lab ID: C208141-02** **Sampled: 07/17/12 13:08** **Received: 07/18/12 08:10**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/14/12		07/29/12	12:53	7/30/2012 01:44
EPA 353.2	04/12/15		07/25/12	12:59	7/26/2012 13:39
EPA 6010C	01/13/13		07/18/12	09:33	7/20/2012 12:41
EPA 6020A	01/13/13		07/18/12	09:37	7/19/2012 12:21
EPA 8260B	07/31/12		07/25/12	09:32	7/26/2012 11:58
SM 2130B	07/19/12	13:08	07/18/12	16:34	7/18/2012 16:34
SM 5220D	08/14/12		07/23/12	14:28	7/23/2012 17:30
SM18 4500-S D	07/24/12		07/24/12	15:14	7/24/2012 15:40
SM18 5310B	08/14/12		07/27/12	10:00	7/27/2012 23:35

Client ID: 8401-MW3 **Lab ID: C208141-02RE1** **Sampled: 07/17/12 13:08** **Received: 07/18/12 08:10**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/14/12		07/29/12	12:53	7/30/2012 08:06

Client ID: 8401-MW3 **Lab ID: C208141-02RE2** **Sampled: 07/17/12 13:08** **Received: 07/18/12 08:10**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 310.2	07/31/12		07/27/12	09:53	7/27/2012 12:49

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Client ID: 8401-MW4R	Lab ID: C208141-03	Sampled: 07/17/12 12:28	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 12:43
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 13:33
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 12:27

Client ID: 8401-MW5R	Lab ID: C208141-04	Sampled: 07/17/12 12:20	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 12:45
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 13:37
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 12:57

Client ID: 8401-MW6	Lab ID: C208141-05	Sampled: 07/17/12 11:55	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/14/12	07/29/12 12:53	7/30/2012 02:00
EPA 310.2	07/31/12	07/27/12 09:53	7/27/2012 11:56
EPA 353.2	04/12/15	07/25/12 12:59	7/26/2012 13:39
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 12:47
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 13:41
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 13:27
SM 2130B	07/19/12 11:55	07/18/12 16:34	7/18/2012 16:34
SM 5220D	08/14/12	07/23/12 14:28	7/23/2012 17:30
SM18 4500-S D	07/24/12	07/24/12 15:14	7/24/2012 15:40
SM18 5310B	08/14/12	07/27/12 10:00	7/27/2012 23:35

Client ID: 8401-MW7	Lab ID: C208141-06	Sampled: 07/17/12 11:25	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/14/12	07/29/12 12:53	7/30/2012 02:17
EPA 353.2	04/12/15	07/25/12 12:59	7/26/2012 13:39
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 12:49
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 13:44
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 13:56
SM 2130B	07/19/12 11:25	07/18/12 16:34	7/18/2012 16:34
SM 5220D	08/14/12	07/23/12 14:28	7/23/2012 17:30
SM18 4500-S D	07/24/12	07/24/12 15:14	7/24/2012 15:40
SM18 5310B	08/14/12	07/27/12 10:00	7/27/2012 23:35

Client ID: 8401-MW7	Lab ID: C208141-06RE1	Sampled: 07/17/12 11:25	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	08/14/12	07/29/12 12:53	7/30/2012 08:22

Client ID: 8401-MW7	Lab ID: C208141-06RE2	Sampled: 07/17/12 11:25	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 310.2	07/31/12	07/27/12 09:53	7/27/2012 12:50

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Client ID: 8401-MW8D	Lab ID: C208141-07	Sampled: 07/17/12 11:05	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/13/13		07/18/12	09:33	7/20/2012 12:51
EPA 6020A	01/13/13		07/18/12	09:37	7/19/2012 13:48
EPA 8260B	07/31/12		07/25/12	09:32	7/26/2012 14:26

Client ID: 8401-MW9	Lab ID: C208141-08	Sampled: 07/17/12 10:25	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/14/12		07/29/12	12:53	7/30/2012 02:33
EPA 353.2	04/12/15		07/25/12	12:59	7/26/2012 13:39
EPA 6010C	01/13/13		07/18/12	09:33	7/20/2012 12:58
EPA 6020A	01/13/13		07/18/12	09:37	7/19/2012 14:08
EPA 8260B	07/31/12		07/25/12	09:32	7/26/2012 14:55
SM 2130B	07/19/12	10:25	07/18/12	16:34	7/18/2012 16:34
SM 5220D	08/14/12		07/23/12	14:28	7/23/2012 17:30
SM18 4500-S D	07/24/12		07/24/12	15:14	7/24/2012 15:40
SM18 5310B	08/14/12		07/27/12	10:00	7/27/2012 23:35

Client ID: 8401-MW9	Lab ID: C208141-08RE1	Sampled: 07/17/12 10:25	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/14/12		07/29/12	12:53	7/30/2012 08:39
EPA 310.2	07/31/12		07/27/12	09:53	7/27/2012 12:36

Client ID: 8401-MW10	Lab ID: C208141-09	Sampled: 07/17/12 13:00	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/14/12		07/29/12	12:53	7/30/2012 02:50
EPA 353.2	04/12/15		07/25/12	12:59	7/26/2012 13:39
EPA 6010C	01/13/13		07/18/12	09:33	7/20/2012 13:00
EPA 6020A	01/13/13		07/18/12	09:37	7/19/2012 14:12
EPA 8260B	07/31/12		07/25/12	09:32	7/26/2012 15:25
SM 2130B	07/19/12	13:00	07/18/12	16:34	7/18/2012 16:34
SM 5220D	08/14/12		07/23/12	14:28	7/23/2012 17:30
SM18 4500-S D	07/24/12		07/24/12	15:14	7/24/2012 15:40
SM18 5310B	08/14/12		07/27/12	10:00	7/27/2012 23:35

Client ID: 8401-MW10	Lab ID: C208141-09RE1	Sampled: 07/17/12 13:00	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	08/14/12		07/29/12	12:53	7/30/2012 03:07

Client ID: 8401-MW10	Lab ID: C208141-09RE2	Sampled: 07/17/12 13:00	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 310.2	07/31/12		07/27/12	09:53	7/27/2012 12:50

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Client ID: 8401-MW11	Lab ID: C208141-10	Sampled: 07/17/12 12:40	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 13:02
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 14:15
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 15:55
SM 2130B	07/19/12 12:40	07/18/12 16:34	7/18/2012 16:34

Client ID: 8401-MW12	Lab ID: C208141-11	Sampled: 07/17/12 12:46	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 13:04
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 14:19
EPA 7470A	08/14/12	07/18/12 09:43	7/18/2012 16:38
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 16:24
SM 2130B	07/19/12 12:46	07/18/12 16:34	7/18/2012 16:34

Client ID: 8401-MW24	Lab ID: C208141-12	Sampled: 07/17/12 11:12	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 13:07
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 14:23
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 16:54
SM 2130B	07/19/12 11:12	07/18/12 16:34	7/18/2012 16:34

Client ID: 8401-MW25	Lab ID: C208141-13	Sampled: 07/17/12 11:35	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 13:08
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 14:26
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 17:24
SM 2130B	07/19/12 11:35	07/18/12 16:34	7/18/2012 16:34

Client ID: 8401-Field Blank	Lab ID: C208142-01	Sampled: 07/17/12 13:55	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 13:10
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 13:05
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 17:54

Client ID: 8401-Bailer Blank	Lab ID: C208142-02	Sampled: 07/17/12 13:57	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	01/13/13	07/18/12 09:33	7/20/2012 13:12
EPA 6020A	01/13/13	07/18/12 09:37	7/19/2012 13:09
EPA 7470A	08/14/12	07/18/12 09:43	7/18/2012 17:17
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 18:23

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Client ID: 8401-Trip Blank	Lab ID: C208142-03	Sampled: 07/17/12 13:55	Received: 07/18/12 08:10

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	07/31/12	07/25/12 09:32	7/26/2012 18:53

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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 8401-MW2 **Lab ID: C208141-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,4-Dichlorobenzene	0.49	J	1	0.19	1.0	1	ug/L	EPA 8260B	
Acetone	5.9	J	1	1.2	5.0	100	ug/L	EPA 8260B	
Antimony - Total	0.406	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Arsenic - Total	15.9		1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	176		1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total	1.44		1	0.100	1.00	1	ug/L	EPA 6010C	
Chemical Oxygen Demand	300000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	66000	B	1	430	5000	NE	ug/L	EPA 300.0	QB-01
Chlorobenzene	1.1	J	1	0.17	1.0	3	ug/L	EPA 8260B	
Chromium - Total	47.8		1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	95.3		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	63.7		1	1.60	10.0	10	ug/L	EPA 6010C	
Iron - Total	54600		1	22.0	50.0	300	ug/L	EPA 6010C	
Lead - Total	48.4	B	1	1.90	10.0	10	ug/L	EPA 6010C	QB-01
Manganese - Total	6010		1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total	124		1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	130	J	1	25	100	10000	ug/L	EPA 353.2	
Tetrahydrofuran	1.1		1	0.80	1.0	NE	ug/L	EPA 8260B	
Total Organic Carbon	19		1	0.22	1.0	NE	mg/L	SM18 5310B	
Turbidity	10000	D	400	200	400	NE	NTU	SM 2130B	
Vanadium - Total	51.0		1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	170		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW2 **Lab ID: C208141-01RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Sulfate as SO4	150000	JD	2	80	10000	250000	ug/L	EPA 300.0	
Total Alkalinity as CaCO3	260000	D	2	24000	30000	NE	ug/L	EPA 310.2	

Client ID: 8401-MW3 **Lab ID: C208141-02**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	2.5	J	1	0.13	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	2.0		1	0.19	1.0	1	ug/L	EPA 8260B	
Antimony - Total	0.609	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Arsenic - Total	11.9		1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	24.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	36000		1	10000	10000	NE	ug/L	SM 5220D	
Chlorobenzene	7.6		1	0.17	1.0	3	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	0.72	J	1	0.15	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	18.5		1	1.10	10.0	10	ug/L	EPA 6010C	
Iron - Total	629		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	1160		1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total	3.80	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	40	J	1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO4	18000	J	1	40	5000	250000	ug/L	EPA 300.0	
Tetrachloroethene	0.52	J	1	0.17	1.0	1	ug/L	EPA 8260B	
Tetrahydrofuran	2.1		1	0.80	1.0	NE	ug/L	EPA 8260B	
Total Organic Carbon	5.7		1	0.22	1.0	NE	mg/L	SM18 5310B	
Trichloroethene	0.69	J	1	0.15	1.0	1	ug/L	EPA 8260B	
Turbidity	11		1	0.50	1.0	NE	NTU	SM 2130B	

Client ID: 8401-MW3 **Lab ID: C208141-02RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	140000	BD	2	860	10000	NE	ug/L	EPA 300.0	QB-01

Client ID: 8401-MW3 **Lab ID: C208141-02RE2**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Total Alkalinity as CaCO3	440000	D	4	48000	60000	NE	ug/L	EPA 310.2	

Client ID: 8401-MW4R **Lab ID: C208141-03**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	3.20	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	4.88	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Cobalt - Total	3.03	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	2.99	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	8.29	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Zinc - Total	8.65	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW5R **Lab ID: C208141-04**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.287	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Arsenic - Total	8.41	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	8.46	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Cobalt - Total	8.82	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	2.62	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	2.77	JB	1	1.90	10.0	10	ug/L	EPA 6010C	J-01

Client ID: 8401-MW6 **Lab ID: C208141-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	1.4	J	1	0.13	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	0.42	J	1	0.19	1.0	1	ug/L	EPA 8260B	
Barium - Total	1.36	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	19000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	11000	B	1	430	5000	NE	ug/L	EPA 300.0	J-01
Chlorobenzene	0.53	J	1	0.17	1.0	3	ug/L	EPA 8260B	
Iron - Total	330		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	28.8	J	1	1.10	10.0	50	ug/L	EPA 6010C	
Methylene chloride	1.5		1	0.23	1.0	1	ug/L	EPA 8260B	
Nickel - Total	3.03	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	9000	J	1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO4	9800	J	1	40	5000	250000	ug/L	EPA 300.0	
Tetrachloroethene	0.79	J	1	0.17	1.0	1	ug/L	EPA 8260B	
Tetrahydrofuran	0.99	J	1	0.80	1.0	NE	ug/L	EPA 8260B	
Total Alkalinity as CaCO3	31000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Organic Carbon	2.8		1	0.22	1.0	NE	mg/L	SM18 5310B	
Trichlorofluoromethane	3.4		1	0.24	1.0	1	ug/L	EPA 8260B	
Turbidity	20		1	0.50	1.0	NE	NTU	SM 2130B	

Client ID: 8401-MW7 **Lab ID: C208141-06**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	1.6	J	1	0.13	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	2.5		1	0.19	1.0	1	ug/L	EPA 8260B	
Antimony - Total	0.293	J	1	0.220	2.00	6	ug/L	EPA 6020A	

Client ID: 8401-MW7 **Lab ID: C208141-06**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	5.46	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	19.4	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	2.0		1	0.15	1.0	1	ug/L	EPA 8260B	
Cadmium - Total	3.98		1	0.360	1.00	1	ug/L	EPA 6010C	
Chemical Oxygen Demand	34000		1	10000	10000	NE	ug/L	SM 5220D	
Chlorobenzene	6.8		1	0.17	1.0	3	ug/L	EPA 8260B	
Chromium - Total	1.03	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	1.2	J	1	0.15	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	5.44	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Iron - Total	37.3	J	1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	1200		1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total	6.74	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	33	J	1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO4	5100	J	1	40	5000	250000	ug/L	EPA 300.0	
Tetrahydrofuran	1.7		1	0.80	1.0	NE	ug/L	EPA 8260B	
Total Organic Carbon	7.6		1	0.22	1.0	NE	mg/L	SM18 5310B	
Turbidity	11		1	0.50	1.0	NE	NTU	SM 2130B	
Vanadium - Total	3.62	J	1	1.40	10.0	25	ug/L	EPA 6010C	

Client ID: 8401-MW7 **Lab ID: C208141-06RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	140000	BD	2	860	10000	NE	ug/L	EPA 300.0	QB-01

Client ID: 8401-MW7 **Lab ID: C208141-06RE2**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Total Alkalinity as CaCO3	490000	D	4	48000	60000	NE	ug/L	EPA 310.2	

Client ID: 8401-MW8D **Lab ID: C208141-07**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.334	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total	10.0	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Cadmium - Total	0.420	J	1	0.360	1.00	1	ug/L	EPA 6010C	
Cobalt - Total	10.3		1	1.10	10.0	10	ug/L	EPA 6010C	
Nickel - Total	2.95	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Tetrachloroethene	0.71	J	1	0.17	1.0	1	ug/L	EPA 8260B	
Vanadium - Total	1.90	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	6.65	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW9 **Lab ID: C208141-08**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	2.9	J	1	0.13	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	1.1		1	0.19	1.0	1	ug/L	EPA 8260B	
Barium - Total	10.2	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	25000		1	10000	10000	NE	ug/L	SM 5220D	
Chlorobenzene	1.8	J	1	0.17	1.0	3	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	5.3		1	0.15	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	1.22	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Iron - Total	362		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	45.7	J	1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total	4.04	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Sulfate as SO4	8400	J	1	40	5000	250000	ug/L	EPA 300.0	

Client ID: 8401-MW9 **Lab ID: C208141-08**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Tetrachloroethene	7.2		1	0.17	1.0	1	ug/L	EPA 8260B	
Tetrahydrofuran	2.5		1	0.80	1.0	NE	ug/L	EPA 8260B	
Total Organic Carbon	3.4		1	0.22	1.0	NE	mg/L	SM18 5310B	
Trichloroethene	4.6		1	0.15	1.0	1	ug/L	EPA 8260B	
Turbidity	160	D	5	2.5	5.0	NE	NTU	SM 2130B	

Client ID: 8401-MW9 **Lab ID: C208141-08RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	120000	BD	2	860	10000	NE	ug/L	EPA 300.0	QB-01
Total Alkalinity as CaCO3	210000	D	2	24000	30000	NE	ug/L	EPA 310.2	

Client ID: 8401-MW10 **Lab ID: C208141-09**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	0.55	J	1	0.13	1.0	5	ug/L	EPA 8260B	
Barium - Total	58.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	67000		1	10000	10000	NE	ug/L	SM 5220D	
Chromium - Total	1.47	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	2.57	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	3.85	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Iron - Total	124	J	1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	741		1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total	12.1	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	14000		1	25	100	10000	ug/L	EPA 353.2	
Sulfate as SO4	13000	J	1	40	5000	250000	ug/L	EPA 300.0	
Tetrahydrofuran	1.0		1	0.80	1.0	NE	ug/L	EPA 8260B	
Total Organic Carbon	12		1	0.22	1.0	NE	mg/L	SM18 5310B	
Turbidity	6.9		1	0.50	1.0	NE	NTU	SM 2130B	

Client ID: 8401-MW10 **Lab ID: C208141-09RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chloride	320000	BD	4	1700	20000	NE	ug/L	EPA 300.0	QB-01

Client ID: 8401-MW10 **Lab ID: C208141-09RE2**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Total Alkalinity as CaCO3	490000	D	4	48000	60000	NE	ug/L	EPA 310.2	

Client ID: 8401-MW11 **Lab ID: C208141-10**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	6.7		1	0.13	1.0	5	ug/L	EPA 8260B	
Barium - Total	50.8	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	0.51	J	1	0.15	1.0	1	ug/L	EPA 8260B	
Chloroethane	1.8	J	1	0.23	1.0	10	ug/L	EPA 8260B	
Chromium - Total	13.7		1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	3.0	J	1	0.15	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	7.52	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	5.49	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	31.6	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Turbidity	150	D	5	2.5	5.0	NE	NTU	SM 2130B	
Vanadium - Total	8.81	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Vinyl chloride	0.61	J	1	0.32	1.0	1	ug/L	EPA 8260B	
Zinc - Total	9.12	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW12 **Lab ID: C208141-11**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetone	7.0	J	1	1.2	5.0	100	ug/L	EPA 8260B	
Arsenic - Total	10.8		1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	76.1	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chloroethane	0.70	J	1	0.23	1.0	10	ug/L	EPA 8260B	
Chromium - Total	7.57	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	51.5		1	1.10	10.0	10	ug/L	EPA 6010C	
Nickel - Total	65.8		1	1.80	10.0	50	ug/L	EPA 6010C	
Tin - Total	2.71	J	1	2.10	10.0	100	ug/L	EPA 6010C	
Turbidity	68	D	2	1.0	2.0	NE	NTU	SM 2130B	

Client ID: 8401-MW24 **Lab ID: C208141-12**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	7.87	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Cobalt - Total	3.02	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	4.22	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	2.83	JB	1	1.90	10.0	10	ug/L	EPA 6010C	J-01
Nickel - Total	3.05	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Turbidity	8.7		1	0.50	1.0	NE	NTU	SM 2130B	
Vanadium - Total	2.35	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	3.87	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-MW25 **Lab ID: C208141-13**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	7.40	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	46.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total	0.237	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chromium - Total	18.5		1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	10.7		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	14.4		1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	6.78	JB	1	1.90	10.0	10	ug/L	EPA 6010C	J-01
Nickel - Total	16.6	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Turbidity	390	D	20	10	20	NE	NTU	SM 2130B	
Vanadium - Total	20.5	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	27.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-Field Blank **Lab ID: C208142-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	1.08	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Manganese - Total	1.13	J	1	1.10	10.0	50	ug/L	EPA 6010C	
Zinc - Total	3.88	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 8401-Bailer Blank **Lab ID: C208142-02**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	1.00	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Selenium - Total	5.64	J	1	4.50	10.0	10	ug/L	EPA 6010C	

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ANALYTICAL RESULTS

Description: 8401-MW2 | **Lab Sample ID:** C208141-01 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:55 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 07:55	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 07:55	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 07:55	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 07:55	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 07:55	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 07:55	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**0.49**	J	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 07:55	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 07:55	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 07:55	JKG	
Acetone [67-64-1] ^	**5.9**	J	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 07:55	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 07:55	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 07:55	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 07:55	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 07:55	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 07:55	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Chlorobenzene [108-90-7] ^	**1.1**	J	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 07:55	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 07:55	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 07:55	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 07:55	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 07:55	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 07:55	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 07:55	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Tetrahydrofuran [109-99-9] ^	**1.1**		ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 07:55	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 07:55	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 07:55	JKG	

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Description: 8401-MW2 | **Lab Sample ID:** C208141-01 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:55 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 07:55	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 07:55	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 07:55	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*100 %*	*51-122*	*2G25003*	*EPA 8260B*	*07/26/12 07:55*	*JKG*	
Dibromofluoromethane	*53*	*1*	*50.0*	*105 %*	*68-117*	*2G25003*	*EPA 8260B*	*07/26/12 07:55*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*99 %*	*67-127*	*2G25003*	*EPA 8260B*	*07/26/12 07:55*	*JKG*	

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Description: 8401-MW2 | **Lab Sample ID:** C208141-01 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:55 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	**0.406**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/19/12 13:20	JDH	
Arsenic [7440-38-2] ^	**15.9**		ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 12:39	JDH	
Barium [7440-39-3] ^	**176**		ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 12:39	JDH	
Beryllium [7440-41-7] ^	**1.44**		ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 12:39	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 12:39	JDH	
Chromium [7440-47-3] ^	**47.8**		ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 12:39	JDH	
Cobalt [7440-48-4] ^	**95.3**		ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 12:39	JDH	
Copper [7440-50-8] ^	**63.7**		ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 12:39	JDH	
Iron [7439-89-6] ^	**54600**		ug/L	1	22.0	50.0	300	EPA 6010C	07/20/12 12:39	JDH	
Lead [7439-92-1] ^	**48.4**	B	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:39	JDH	QB-01
Manganese [7439-96-5] ^	**6010**		ug/L	1	1.10	10.0	50	EPA 6010C	07/20/12 12:39	JDH	
Nickel [7440-02-0] ^	**124**		ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 12:39	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 12:39	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:39	JDH	
Thallium [7440-28-0] ^	0.550	UD	ug/L	5	0.550	5.00	5.5	EPA 6020A	07/19/12 14:30	JDH	R-05
Vanadium [7440-62-2] ^	**51.0**		ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 12:39	JDH	
Zinc [7440-66-6] ^	**170**		ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 12:39	JDH	

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Description: 8401-MW2 | **Lab Sample ID:** C208141-01 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:55 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chemical Oxygen Demand [ECL-0035] ^	**300000**		ug/L	1	10000	10000	NE	SM 5220D	07/23/12 17:30	JOC	
Chloride [16887-00-6] ^	**66000**	B	ug/L	1	430	5000	NE	EPA 300.0	07/30/12 00:54	CCB	QB-01
Nitrate as N [14797-55-8] ^	**130**	J	ug/L	1	25	100	10000	EPA 353.2	07/26/12 13:39	CCB	
Sulfate as SO4 [14808-79-8] ^	**150000**	JD	ug/L	2	80	10000	250000	EPA 300.0	07/30/12 07:49	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/24/12 15:40	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**260000**	D	ug/L	2	24000	30000	NE	EPA 310.2	07/27/12 12:34	AJB	
Turbidity [ECL-0177] ^	**10000**	D	NTU	400	200	400	NE	SM 2130B	07/18/12 16:34	JOC	

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Description:	8401-MW2	**Lab Sample ID:**	C208141-01	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 11:55	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**19**		mg/L	1	0.22	1.0	NE	SM18 5310B	07/27/12 23:35	RSA	

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

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Description: 8401-MW3 | **Lab Sample ID:** C208141-02 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 13:08 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 11:58	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 11:58	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
1,1-Dichloroethane [75-34-3] ^	**2.5**	J	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 11:58	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 11:58	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 11:58	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 11:58	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**2.0**		ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 11:58	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 11:58	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 11:58	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 11:58	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 11:58	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 11:58	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 11:58	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 11:58	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 11:58	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Chlorobenzene [108-90-7] ^	**7.6**		ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 11:58	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 11:58	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 11:58	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**0.72**	J	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 11:58	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 11:58	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 11:58	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 11:58	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Tetrachloroethene [127-18-4] ^	**0.52**	J	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Tetrahydrofuran [109-99-9] ^	**2.1**		ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 11:58	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 11:58	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 11:58	JKG	
Trichloroethene [79-01-6] ^	**0.69**	J	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 11:58	JKG	

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Description: 8401-MW3 | **Lab Sample ID:** C208141-02 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 13:08 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 11:58	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 11:58	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*42*	*1*	*50.0*	*83 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 11:58*	*JKG*	
Dibromofluoromethane	*38*	*1*	*50.0*	*75 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 11:58*	*JKG*	
Toluene-d8	*43*	*1*	*50.0*	*86 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 11:58*	*JKG*	

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Description: 8401-MW3 | **Lab Sample ID:** C208141-02 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 13:08 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	**0.609**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/19/12 12:21	JDH	
Arsenic [7440-38-2] ^	**11.9**		ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 12:41	JDH	
Barium [7440-39-3] ^	**24.7**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 12:41	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 12:41	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 12:41	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 12:41	JDH	
Cobalt [7440-48-4] ^	**18.5**		ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 12:41	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 12:41	JDH	
Iron [7439-89-6] ^	**629**		ug/L	1	22.0	50.0	300	EPA 6010C	07/20/12 12:41	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:41	JDH	
Manganese [7439-96-5] ^	**1160**		ug/L	1	1.10	10.0	50	EPA 6010C	07/20/12 12:41	JDH	
Nickel [7440-02-0] ^	**3.80**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 12:41	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 12:41	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:41	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 12:21	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 12:41	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 12:41	JDH	

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Description: 8401-MW3 | **Lab Sample ID:** C208141-02 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 13:08 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chemical Oxygen Demand [ECL-0035] ^	**36000**		ug/L	1	10000	10000	NE	SM 5220D	07/23/12 17:30	JOC	
Chloride [16887-00-6] ^	**140000**	BD	ug/L	2	860	10000	NE	EPA 300.0	07/30/12 08:06	CCB	QB-01
Nitrate as N [14797-55-8] ^	**40**	J	ug/L	1	25	100	10000	EPA 353.2	07/26/12 13:39	CCB	
Sulfate as SO4 [14808-79-8] ^	**18000**	J	ug/L	1	40	5000	250000	EPA 300.0	07/30/12 01:44	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/24/12 15:40	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**440000**	D	ug/L	4	48000	60000	NE	EPA 310.2	07/27/12 12:49	AJB	
Turbidity [ECL-0177] ^	**11**		NTU	1	0.50	1.0	NE	SM 2130B	07/18/12 16:34	JOC	

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Description:	8401-MW3	**Lab Sample ID:**	C208141-02	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 13:08	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**5.7**		mg/L	1	0.22	1.0	NE	SM18 5310B	07/27/12 23:35	RSA	

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

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Description: 8401-MW4R
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-03
Sampled: 07/17/12 12:28
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 12:27	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 12:27	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 12:27	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 12:27	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 12:27	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 12:27	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 12:27	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 12:27	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 12:27	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 12:27	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 12:27	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 12:27	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 12:27	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 12:27	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 12:27	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 12:27	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 12:27	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 12:27	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 12:27	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 12:27	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 12:27	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 12:27	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 12:27	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 12:27	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 12:27	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 12:27	JKG	

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Description: 8401-MW4R
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-03
Sampled: 07/17/12 12:28
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 12:27	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 12:27	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*41*	*1*	*50.0*	*83 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 12:27*	*JKG*	
Dibromofluoromethane	*38*	*1*	*50.0*	*76 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 12:27*	*JKG*	
Toluene-d8	*43*	*1*	*50.0*	*86 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 12:27*	*JKG*	

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Description: 8401-MW4R
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-03
Sampled: 07/17/12 12:28
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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	07/19/12 13:33	JDH	
Arsenic [7440-38-2] ^	**3.20**	J	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 12:43	JDH	
Barium [7440-39-3] ^	**4.88**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 12:43	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 12:43	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 12:43	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 12:43	JDH	
Cobalt [7440-48-4] ^	**3.03**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 12:43	JDH	
Copper [7440-50-8] ^	**2.99**	J	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 12:43	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:43	JDH	
Nickel [7440-02-0] ^	**8.29**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 12:43	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 12:43	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:43	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 13:33	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 12:43	JDH	
Zinc [7440-66-6] ^	**8.65**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 12:43	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: 8401-MW5R
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-04
Sampled: 07/17/12 12:20
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 12:57	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 12:57	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 12:57	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 12:57	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 12:57	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 12:57	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 12:57	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 12:57	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 12:57	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 12:57	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 12:57	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 12:57	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 12:57	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 12:57	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 12:57	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 12:57	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 12:57	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 12:57	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 12:57	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 12:57	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 12:57	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 12:57	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 12:57	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 12:57	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 12:57	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 12:57	JKG	

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Description: 8401-MW5R
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-04
Sampled: 07/17/12 12:20
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 12:57	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 12:57	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*41*	*1*	*50.0*	*81 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 12:57*	*JKG*	
Dibromofluoromethane	*38*	*1*	*50.0*	*77 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 12:57*	*JKG*	
Toluene-d8	*43*	*1*	*50.0*	*87 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 12:57*	*JKG*	

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Description: 8401-MW5R
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-04
Sampled: 07/17/12 12:20
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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] ^	**0.287**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/19/12 13:37	JDH	
Arsenic [7440-38-2] ^	**8.41**	J	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 12:45	JDH	
Barium [7440-39-3] ^	**8.46**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 12:45	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 12:45	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 12:45	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 12:45	JDH	
Cobalt [7440-48-4] ^	**8.82**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 12:45	JDH	
Copper [7440-50-8] ^	**2.62**	J	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 12:45	JDH	
Lead [7439-92-1] ^	**2.77**	JB	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:45	JDH	J-01
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 12:45	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 12:45	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:45	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 13:37	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 12:45	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 12:45	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: 8401-MW6 | **Lab Sample ID:** C208141-05 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:55 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 13:27	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 13:27	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
1,1-Dichloroethane [75-34-3] ^	**1.4**	J	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 13:27	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 13:27	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 13:27	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 13:27	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**0.42**	J	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 13:27	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 13:27	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 13:27	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 13:27	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 13:27	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 13:27	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 13:27	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 13:27	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 13:27	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Chlorobenzene [108-90-7] ^	**0.53**	J	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 13:27	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 13:27	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 13:27	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 13:27	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 13:27	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 13:27	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 13:27	JKG	
Methylene chloride [75-09-2] ^	**1.5**		ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Tetrachloroethene [127-18-4] ^	**0.79**	J	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Tetrahydrofuran [109-99-9] ^	**0.99**	J	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 13:27	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 13:27	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 13:27	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Trichlorofluoromethane [75-69-4] ^	**3.4**		ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 13:27	JKG	

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Description: 8401-MW6 | **Lab Sample ID:** C208141-05 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:55 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 13:27	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 13:27	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*42*	*1*	*50.0*	*83 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 13:27*	*JKG*	
Dibromofluoromethane	*39*	*1*	*50.0*	*77 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 13:27*	*JKG*	
Toluene-d8	*43*	*1*	*50.0*	*85 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 13:27*	*JKG*	

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Description: 8401-MW6 | **Lab Sample ID:** C208141-05 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:55 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/19/12 13:41	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 12:47	JDH	
Barium [7440-39-3] ^	**1.36**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 12:47	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 12:47	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 12:47	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 12:47	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 12:47	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 12:47	JDH	
Iron [7439-89-6] ^	**330**		ug/L	1	22.0	50.0	300	EPA 6010C	07/20/12 12:47	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:47	JDH	
Manganese [7439-96-5] ^	**28.8**	J	ug/L	1	1.10	10.0	50	EPA 6010C	07/20/12 12:47	JDH	
Nickel [7440-02-0] ^	**3.03**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 12:47	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 12:47	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:47	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 13:41	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 12:47	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 12:47	JDH	

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Description: 8401-MW6 | **Lab Sample ID:** C208141-05 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:55 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chemical Oxygen Demand [ECL-0035] ^	**19000**		ug/L	1	10000	10000	NE	SM 5220D	07/23/12 17:30	JOC	
Chloride [16887-00-6] ^	**11000**	B	ug/L	1	430	5000	NE	EPA 300.0	07/30/12 02:00	CCB	J-01
Nitrate as N [14797-55-8] ^	**9000**	J	ug/L	1	25	100	10000	EPA 353.2	07/26/12 13:39	CCB	
Sulfate as SO4 [14808-79-8] ^	**9800**	J	ug/L	1	40	5000	250000	EPA 300.0	07/30/12 02:00	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/24/12 15:40	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**31000**		ug/L	1	12000	15000	NE	EPA 310.2	07/27/12 11:56	AJB	
Turbidity [ECL-0177] ^	**20**		NTU	1	0.50	1.0	NE	SM 2130B	07/18/12 16:34	JOC	

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Description:	8401-MW6	**Lab Sample ID:**	C208141-05	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 11:55	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**2.8**		mg/L	1	0.22	1.0	NE	SM18 5310B	07/27/12 23:35	RSA	

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

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Description: 8401-MW7 | **Lab Sample ID:** C208141-06 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:25 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 13:56	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 13:56	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
1,1-Dichloroethane [75-34-3] ^	**1.6**	J	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 13:56	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 13:56	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 13:56	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 13:56	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**2.5**		ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 13:56	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 13:56	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 13:56	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 13:56	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 13:56	JKG	
Benzene [71-43-2] ^	**2.0**		ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 13:56	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 13:56	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 13:56	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 13:56	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Chlorobenzene [108-90-7] ^	**6.8**		ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 13:56	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 13:56	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 13:56	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**1.2**	J	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 13:56	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 13:56	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 13:56	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 13:56	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Tetrahydrofuran [109-99-9] ^	**1.7**		ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 13:56	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 13:56	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 13:56	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 13:56	JKG	

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Description: 8401-MW7 | **Lab Sample ID:** C208141-06 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:25 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 13:56	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 13:56	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*42*	*1*	*50.0*	*85 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 13:56*	*JKG*	
Dibromofluoromethane	*39*	*1*	*50.0*	*78 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 13:56*	*JKG*	
Toluene-d8	*43*	*1*	*50.0*	*87 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 13:56*	*JKG*	

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Description: 8401-MW7 | **Lab Sample ID:** C208141-06 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:25 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	**0.293**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/19/12 13:44	JDH	
Arsenic [7440-38-2] ^	**5.46**	J	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 12:49	JDH	
Barium [7440-39-3] ^	**19.4**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 12:49	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 12:49	JDH	
Cadmium [7440-43-9] ^	**3.98**		ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 12:49	JDH	
Chromium [7440-47-3] ^	**1.03**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 12:49	JDH	
Cobalt [7440-48-4] ^	**5.44**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 12:49	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 12:49	JDH	
Iron [7439-89-6] ^	**37.3**	J	ug/L	1	22.0	50.0	300	EPA 6010C	07/20/12 12:49	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:49	JDH	
Manganese [7439-96-5] ^	**1200**		ug/L	1	1.10	10.0	50	EPA 6010C	07/20/12 12:49	JDH	
Nickel [7440-02-0] ^	**6.74**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 12:49	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 12:49	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:49	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 13:44	JDH	
Vanadium [7440-62-2] ^	**3.62**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 12:49	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 12:49	JDH	

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Description: 8401-MW7
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-06
Sampled: 07/17/12 11:25
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chemical Oxygen Demand [ECL-0035] ^	**34000**		ug/L	1	10000	10000	NE	SM 5220D	07/23/12 17:30	JOC	
Chloride [16887-00-6] ^	**140000**	BD	ug/L	2	860	10000	NE	EPA 300.0	07/30/12 08:22	CCB	QB-01
Nitrate as N [14797-55-8] ^	**33**	J	ug/L	1	25	100	10000	EPA 353.2	07/26/12 13:39	CCB	
Sulfate as SO4 [14808-79-8] ^	**5100**	J	ug/L	1	40	5000	250000	EPA 300.0	07/30/12 02:17	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/24/12 15:40	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**490000**	D	ug/L	4	48000	60000	NE	EPA 310.2	07/27/12 12:50	AJB	
Turbidity [ECL-0177] ^	**11**		NTU	1	0.50	1.0	NE	SM 2130B	07/18/12 16:34	JOC	

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Description:	8401-MW7	**Lab Sample ID:**	C208141-06	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 11:25	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**7.6**		mg/L	1	0.22	1.0	NE	SM18 5310B	07/27/12 23:35	RSA	

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

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Description: 8401-MW8D | **Lab Sample ID:** C208141-07 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:05 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 14:26	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 14:26	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 14:26	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 14:26	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 14:26	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 14:26	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 14:26	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 14:26	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 14:26	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 14:26	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 14:26	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 14:26	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 14:26	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 14:26	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 14:26	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 14:26	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 14:26	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 14:26	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 14:26	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 14:26	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 14:26	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 14:26	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Tetrachloroethene [127-18-4] ^	**0.71**	J	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 14:26	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 14:26	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 14:26	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 14:26	JKG	

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Description: 8401-MW8D
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-07
Sampled: 07/17/12 11:05
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 14:26	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 14:26	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*42*	*1*	*50.0*	*85 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 14:26*	*JKG*	
Dibromofluoromethane	*39*	*1*	*50.0*	*79 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 14:26*	*JKG*	
Toluene-d8	*44*	*1*	*50.0*	*88 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 14:26*	*JKG*	

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Description: 8401-MW8D
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-07
Sampled: 07/17/12 11:05
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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] ^	**0.334**	J	ug/L	1	0.220	2.00	6	EPA 6020A	07/19/12 13:48	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 12:51	JDH	
Barium [7440-39-3] ^	**10.0**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 12:51	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 12:51	JDH	
Cadmium [7440-43-9] ^	**0.420**	J	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 12:51	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 12:51	JDH	
Cobalt [7440-48-4] ^	**10.3**		ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 12:51	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 12:51	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:51	JDH	
Nickel [7440-02-0] ^	**2.95**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 12:51	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 12:51	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:51	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 13:48	JDH	
Vanadium [7440-62-2] ^	**1.90**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 12:51	JDH	
Zinc [7440-66-6] ^	**6.65**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 12:51	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: 8401-MW9 | **Lab Sample ID:** C208141-08 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 10:25 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 14:55	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 14:55	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
1,1-Dichloroethane [75-34-3] ^	**2.9**	J	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 14:55	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 14:55	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 14:55	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 14:55	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**1.1**		ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 14:55	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 14:55	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 14:55	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 14:55	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 14:55	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 14:55	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 14:55	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 14:55	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 14:55	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Chlorobenzene [108-90-7] ^	**1.8**	J	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 14:55	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 14:55	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 14:55	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**5.3**		ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 14:55	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 14:55	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 14:55	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 14:55	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Tetrachloroethene [127-18-4] ^	**7.2**		ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Tetrahydrofuran [109-99-9] ^	**2.5**		ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 14:55	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 14:55	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 14:55	JKG	
Trichloroethene [79-01-6] ^	**4.6**		ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 14:55	JKG	

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Description: 8401-MW9 | **Lab Sample ID:** C208141-08 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 10:25 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 14:55	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 14:55	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*42*	*1*	*50.0*	*84 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 14:55*	*JKG*	
Dibromofluoromethane	*38*	*1*	*50.0*	*76 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 14:55*	*JKG*	
Toluene-d8	*43*	*1*	*50.0*	*86 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 14:55*	*JKG*	

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Description: 8401-MW9 | **Lab Sample ID:** C208141-08 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 10:25 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/19/12 14:08	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 12:58	JDH	
Barium [7440-39-3] ^	**10.2**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 12:58	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 12:58	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 12:58	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 12:58	JDH	
Cobalt [7440-48-4] ^	**1.22**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 12:58	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 12:58	JDH	
Iron [7439-89-6] ^	**362**		ug/L	1	22.0	50.0	300	EPA 6010C	07/20/12 12:58	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:58	JDH	
Manganese [7439-96-5] ^	**45.7**	J	ug/L	1	1.10	10.0	50	EPA 6010C	07/20/12 12:58	JDH	
Nickel [7440-02-0] ^	**4.04**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 12:58	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 12:58	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 12:58	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 14:08	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 12:58	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 12:58	JDH	

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Description: 8401-MW9
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-08
Sampled: 07/17/12 10:25
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chemical Oxygen Demand [ECL-0035] ^	**25000**		ug/L	1	10000	10000	NE	SM 5220D	07/23/12 17:30	JOC	
Chloride [16887-00-6] ^	**120000**	BD	ug/L	2	860	10000	NE	EPA 300.0	07/30/12 08:39	CCB	QB-01
Nitrate as N [14797-55-8] ^	25	U	ug/L	1	25	100	10000	EPA 353.2	07/26/12 13:39	CCB	
Sulfate as SO4 [14808-79-8] ^	**8400**	J	ug/L	1	40	5000	250000	EPA 300.0	07/30/12 02:33	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/24/12 15:40	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**210000**	D	ug/L	2	24000	30000	NE	EPA 310.2	07/27/12 12:36	AJB	
Turbidity [ECL-0177] ^	**160**	D	NTU	5	2.5	5.0	NE	SM 2130B	07/18/12 16:34	JOC	

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Description:	8401-MW9	**Lab Sample ID:**	C208141-08	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 10:25	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**3.4**		mg/L	1	0.22	1.0	NE	SM18 5310B	07/27/12 23:35	RSA	

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

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Description: 8401-MW10 | **Lab Sample ID:** C208141-09 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 13:00 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 15:25	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 15:25	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
1,1-Dichloroethane [75-34-3] ^	**0.55**	J	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 15:25	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 15:25	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 15:25	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 15:25	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 15:25	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 15:25	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 15:25	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 15:25	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 15:25	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 15:25	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 15:25	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 15:25	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 15:25	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 15:25	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 15:25	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 15:25	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 15:25	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 15:25	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 15:25	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 15:25	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Tetrahydrofuran [109-99-9] ^	**1.0**		ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 15:25	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 15:25	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 15:25	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 15:25	JKG	

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Description: 8401-MW10 | **Lab Sample ID:** C208141-09 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 13:00 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 15:25	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 15:25	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*42*	*1*	*50.0*	*83 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 15:25*	*JKG*	
Dibromofluoromethane	*38*	*1*	*50.0*	*76 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 15:25*	*JKG*	
Toluene-d8	*44*	*1*	*50.0*	*88 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 15:25*	*JKG*	

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Description: 8401-MW10 | **Lab Sample ID:** C208141-09 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 13:00 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/19/12 14:12	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 13:00	JDH	
Barium [7440-39-3] ^	**58.7**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 13:00	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 13:00	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 13:00	JDH	
Chromium [7440-47-3] ^	**1.47**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 13:00	JDH	
Cobalt [7440-48-4] ^	**2.57**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 13:00	JDH	
Copper [7440-50-8] ^	**3.85**	J	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 13:00	JDH	
Iron [7439-89-6] ^	**124**	J	ug/L	1	22.0	50.0	300	EPA 6010C	07/20/12 13:00	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:00	JDH	
Manganese [7439-96-5] ^	**741**		ug/L	1	1.10	10.0	50	EPA 6010C	07/20/12 13:00	JDH	
Nickel [7440-02-0] ^	**12.1**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 13:00	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 13:00	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:00	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 14:12	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 13:00	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 13:00	JDH	

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Description: 8401-MW10 | **Lab Sample ID:** C208141-09 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 13:00 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chemical Oxygen Demand [ECL-0035] ^	**67000**		ug/L	1	10000	10000	NE	SM 5220D	07/23/12 17:30	JOC	
Chloride [16887-00-6] ^	**320000**	BD	ug/L	4	1700	20000	NE	EPA 300.0	07/30/12 03:07	CCB	QB-01
Nitrate as N [14797-55-8] ^	**14000**		ug/L	1	25	100	10000	EPA 353.2	07/26/12 13:39	CCB	
Sulfate as SO4 [14808-79-8] ^	**13000**	J	ug/L	1	40	5000	250000	EPA 300.0	07/30/12 02:50	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	07/24/12 15:40	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**490000**	D	ug/L	4	48000	60000	NE	EPA 310.2	07/27/12 12:50	AJB	
Turbidity [ECL-0177] ^	**6.9**		NTU	1	0.50	1.0	NE	SM 2130B	07/18/12 16:34	JOC	

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Description:	8401-MW10	**Lab Sample ID:**	C208141-09	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 13:00	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**12**		mg/L	1	0.22	1.0	NE	SM18 5310B	07/27/12 23:35	RSA	

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Description: 8401-MW11 | **Lab Sample ID:** C208141-10 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 12:40 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 15:55	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 15:55	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
1,1-Dichloroethane [75-34-3] ^	**6.7**		ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 15:55	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 15:55	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 15:55	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 15:55	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 15:55	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 15:55	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 15:55	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 15:55	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 15:55	JKG	
Benzene [71-43-2] ^	**0.51**	J	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 15:55	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 15:55	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 15:55	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 15:55	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 15:55	JKG	
Chloroethane [75-00-3] ^	**1.8**	J	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 15:55	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 15:55	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**3.0**	J	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 15:55	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 15:55	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 15:55	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 15:55	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 15:55	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 15:55	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 15:55	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 15:55	JKG	

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Description: 8401-MW11 | **Lab Sample ID:** C208141-10 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 12:40 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Vinyl chloride [75-01-4] ^	**0.61**	J	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 15:55	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 15:55	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*43*	*1*	*50.0*	*85 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 15:55*	*JKG*	
Dibromofluoromethane	*41*	*1*	*50.0*	*81 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 15:55*	*JKG*	
Toluene-d8	*44*	*1*	*50.0*	*88 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 15:55*	*JKG*	

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Description: 8401-MW11 | **Lab Sample ID:** C208141-10 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 12:40 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/19/12 14:15	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 13:02	JDH	
Barium [7440-39-3] ^	**50.8**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 13:02	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 13:02	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 13:02	JDH	
Chromium [7440-47-3] ^	**13.7**		ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 13:02	JDH	
Cobalt [7440-48-4] ^	**7.52**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 13:02	JDH	
Copper [7440-50-8] ^	**5.49**	J	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 13:02	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:02	JDH	
Nickel [7440-02-0] ^	**31.6**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 13:02	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 13:02	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:02	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 14:15	JDH	
Vanadium [7440-62-2] ^	**8.81**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 13:02	JDH	
Zinc [7440-66-6] ^	**9.12**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 13:02	JDH	

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Description:	8401-MW11	**Lab Sample ID:**	C208141-10	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 12:40	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Turbidity [ECL-0177] ^	**150**	D	NTU	5	2.5	5.0	NE	SM 2130B	07/18/12 16:34	JOC	

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Description: 8401-MW12 | **Lab Sample ID:** C208141-11 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 12:46 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 16:24	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
1,1-Dichloropropene [563-58-6] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 16:24	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 16:24	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
1,3-Dichloropropane [142-28-9] ^	0.16	U	ug/L	1	0.16	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
2,2-Dichloropropane [594-20-7] ^	0.28	U	ug/L	1	0.28	1.0	15	EPA 8260B	07/26/12 16:24	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 16:24	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 16:24	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	07/26/12 16:24	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 16:24	JKG	
Acetone [67-64-1] ^	**7.0**	J	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 16:24	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	07/26/12 16:24	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	07/26/12 16:24	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 16:24	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 16:24	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 16:24	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 16:24	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 16:24	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 16:24	JKG	
Chloroethane [75-00-3] ^	**0.70**	J	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 16:24	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	07/26/12 16:24	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 16:24	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 16:24	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.20	U	ug/L	1	0.20	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	07/26/12 16:24	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 16:24	JKG	

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Description: 8401-MW12 | **Lab Sample ID:** C208141-11 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 12:46 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	07/26/12 16:24	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	07/26/12 16:24	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	07/26/12 16:24	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Naphthalene [91-20-3] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	07/26/12 16:24	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	07/26/12 16:24	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 16:24	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 16:24	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 16:24	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 16:24	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 16:24	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 16:24	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*42*	*1*	*50.0*	*85 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 16:24*	*JKG*	
Dibromofluoromethane	*40*	*1*	*50.0*	*81 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 16:24*	*JKG*	
Toluene-d8	*44*	*1*	*50.0*	*89 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 16:24*	*JKG*	

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Description: 8401-MW12
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-11
Sampled: 07/17/12 12:46
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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	07/18/12 16:38	T1D	

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Description: 8401-MW12 | **Lab Sample ID:** C208141-11 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 12:46 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/19/12 14:19	JDH	
Arsenic [7440-38-2] ^	**10.8**		ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 13:04	JDH	
Barium [7440-39-3] ^	**76.1**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 13:04	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 13:04	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 13:04	JDH	
Chromium [7440-47-3] ^	**7.57**	J	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 13:04	JDH	
Cobalt [7440-48-4] ^	**51.5**		ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 13:04	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 13:04	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:04	JDH	
Nickel [7440-02-0] ^	**65.8**		ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 13:04	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 13:04	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:04	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 14:19	JDH	
Tin [7440-31-5] ^	**2.71**	J	ug/L	1	2.10	10.0	100	EPA 6010C	07/20/12 13:04	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 13:04	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 13:04	JDH	

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Description:	8401-MW12	**Lab Sample ID:**	C208141-11	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 12:46	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Turbidity [ECL-0177] ^	**68**	D	NTU	2	1.0	2.0	NE	SM 2130B	07/18/12 16:34	JOC	

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

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Description: 8401-MW24 | **Lab Sample ID:** C208141-12 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:12 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 16:54	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 16:54	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 16:54	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 16:54	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 16:54	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 16:54	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 16:54	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 16:54	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 16:54	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 16:54	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 16:54	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 16:54	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 16:54	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 16:54	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 16:54	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 16:54	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 16:54	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 16:54	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 16:54	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 16:54	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 16:54	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 16:54	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 16:54	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 16:54	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 16:54	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 16:54	JKG	

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Description: 8401-MW24 | **Lab Sample ID:** C208141-12 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:12 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 16:54	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 16:54	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*41*	*1*	*50.0*	*82 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 16:54*	*JKG*	
Dibromofluoromethane	*39*	*1*	*50.0*	*78 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 16:54*	*JKG*	
Toluene-d8	*43*	*1*	*50.0*	*86 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 16:54*	*JKG*	

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Description: 8401-MW24 | **Lab Sample ID:** C208141-12 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:12 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/19/12 14:23	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 13:07	JDH	
Barium [7440-39-3] ^	**7.87**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 13:07	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 13:07	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 13:07	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 13:07	JDH	
Cobalt [7440-48-4] ^	**3.02**	J	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 13:07	JDH	
Copper [7440-50-8] ^	**4.22**	J	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 13:07	JDH	
Lead [7439-92-1] ^	**2.83**	JB	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:07	JDH	J-01
Nickel [7440-02-0] ^	**3.05**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 13:07	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 13:07	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:07	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 14:23	JDH	
Vanadium [7440-62-2] ^	**2.35**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 13:07	JDH	
Zinc [7440-66-6] ^	**3.87**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 13:07	JDH	

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Description:	8401-MW24	**Lab Sample ID:**	C208141-12	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 11:12	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Turbidity [ECL-0177] ^	**8.7**		NTU	1	0.50	1.0	NE	SM 2130B	07/18/12 16:34	JOC	

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

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Description: 8401-MW25 | **Lab Sample ID:** C208141-13 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:35 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 17:24	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 17:24	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 17:24	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 17:24	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 17:24	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 17:24	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 17:24	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 17:24	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 17:24	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 17:24	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 17:24	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 17:24	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 17:24	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 17:24	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 17:24	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 17:24	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 17:24	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 17:24	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 17:24	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 17:24	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 17:24	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 17:24	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 17:24	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 17:24	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 17:24	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 17:24	JKG	

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Description: 8401-MW25
Matrix: Ground Water
Project: Albemarle Closed LF

Lab Sample ID: C208141-13
Sampled: 07/17/12 11:35
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208141

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 17:24	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 17:24	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*41*	*1*	*50.0*	*82 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 17:24*	*JKG*	
Dibromofluoromethane	*40*	*1*	*50.0*	*80 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 17:24*	*JKG*	
Toluene-d8	*42*	*1*	*50.0*	*85 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 17:24*	*JKG*	

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Description: 8401-MW25 | **Lab Sample ID:** C208141-13 | **Received:** 07/18/12 08:10

Matrix: Ground Water | **Sampled:** 07/17/12 11:35 | **Work Order:** C208141

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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	07/19/12 14:26	JDH	
Arsenic [7440-38-2] ^	**7.40**	J	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 13:08	JDH	
Barium [7440-39-3] ^	**46.7**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 13:08	JDH	
Beryllium [7440-41-7] ^	**0.237**	J	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 13:08	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 13:08	JDH	
Chromium [7440-47-3] ^	**18.5**		ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 13:08	JDH	
Cobalt [7440-48-4] ^	**10.7**		ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 13:08	JDH	
Copper [7440-50-8] ^	**14.4**		ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 13:08	JDH	
Lead [7439-92-1] ^	**6.78**	JB	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:08	JDH	J-01
Nickel [7440-02-0] ^	**16.6**	J	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 13:08	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 13:08	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:08	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 14:26	JDH	
Vanadium [7440-62-2] ^	**20.5**	J	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 13:08	JDH	
Zinc [7440-66-6] ^	**27.8**		ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 13:08	JDH	

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Description:	8401-MW25	**Lab Sample ID:**	C208141-13	**Received:**	07/18/12 08:10
Matrix:	Ground Water	**Sampled:**	07/17/12 11:35	**Work Order:**	C208141
Project:	Albemarle Closed LF	**Sampled By:**	Danny Hefner / Joanna Ha		

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Turbidity [ECL-0177] ^	**390**	D	NTU	20	10	20	NE	SM 2130B	07/18/12 16:34	JOC	

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

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Description: 8401-Field Blank | **Lab Sample ID:** C208142-01 | **Received:** 07/18/12 08:10

Matrix: Water | **Sampled:** 07/17/12 13:55 | **Work Order:** C208142

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 17:54	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 17:54	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 17:54	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 17:54	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 17:54	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 17:54	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 17:54	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 17:54	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 17:54	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 17:54	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 17:54	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 17:54	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 17:54	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 17:54	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 17:54	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 17:54	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 17:54	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 17:54	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 17:54	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 17:54	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 17:54	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 17:54	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 17:54	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 17:54	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 17:54	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 17:54	JKG	

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Description: 8401-Field Blank
Matrix: Water
Project: Albemarle Closed LF

Lab Sample ID: C208142-01
Sampled: 07/17/12 13:55
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208142

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 17:54	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 17:54	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*40*	*1*	*50.0*	*80 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 17:54*	*JKG*	
Dibromofluoromethane	*39*	*1*	*50.0*	*77 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 17:54*	*JKG*	
Toluene-d8	*42*	*1*	*50.0*	*84 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 17:54*	*JKG*	

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Description: 8401-Field Blank
Matrix: Water
Project: Albemarle Closed LF

Lab Sample ID: C208142-01
Sampled: 07/17/12 13:55
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208142

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	07/19/12 13:05	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 13:10	JDH	
Barium [7440-39-3] ^	**1.08**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 13:10	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 13:10	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 13:10	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 13:10	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 13:10	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 13:10	JDH	
Iron [7439-89-6] ^	22.0	U	ug/L	1	22.0	50.0	300	EPA 6010C	07/20/12 13:10	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:10	JDH	
Manganese [7439-96-5] ^	**1.13**	J	ug/L	1	1.10	10.0	50	EPA 6010C	07/20/12 13:10	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 13:10	JDH	
Selenium [7782-49-2] ^	4.50	U	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 13:10	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:10	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 13:05	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 13:10	JDH	
Zinc [7440-66-6] ^	**3.88**	J	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 13:10	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: 8401-Bailer Blank | **Lab Sample ID:** C208142-02 | **Received:** 07/18/12 08:10

Matrix: Water | **Sampled:** 07/17/12 13:57 | **Work Order:** C208142

Project: Albemarle Closed LF | **Sampled By:** Danny Hefner / Joanna Ha

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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 18:23	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 18:23	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 18:23	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 18:23	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 18:23	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 18:23	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 18:23	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 18:23	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 18:23	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 18:23	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 18:23	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 18:23	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 18:23	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 18:23	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 18:23	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 18:23	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 18:23	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 18:23	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 18:23	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 18:23	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 18:23	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 18:23	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 18:23	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 18:23	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 18:23	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 18:23	JKG	

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Description: 8401-Bailer Blank
Matrix: Water
Project: Albemarle Closed LF

Lab Sample ID: C208142-02
Sampled: 07/17/12 13:57
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208142

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 18:23	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 18:23	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*41*	*1*	*50.0*	*83 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 18:23*	*JKG*	
Dibromofluoromethane	*40*	*1*	*50.0*	*80 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 18:23*	*JKG*	
Toluene-d8	*42*	*1*	*50.0*	*85 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 18:23*	*JKG*	

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Description: 8401-Bailer Blank
Matrix: Water
Project: Albemarle Closed LF

Lab Sample ID: C208142-02
Sampled: 07/17/12 13:57
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208142

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	07/18/12 17:17	T1D	

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Description: 8401-Bailer Blank
Matrix: Water
Project: Albemarle Closed LF

Lab Sample ID: C208142-02
Sampled: 07/17/12 13:57
Sampled By: Danny Hefner / Joanna Ha

Received: 07/18/12 08:10
Work Order: C208142

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	07/19/12 13:09	JDH	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	07/20/12 13:12	JDH	
Barium [7440-39-3] ^	**1.00**	J	ug/L	1	1.00	10.0	100	EPA 6010C	07/20/12 13:12	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	07/20/12 13:12	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	07/20/12 13:12	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	07/20/12 13:12	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	07/20/12 13:12	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	07/20/12 13:12	JDH	
Iron [7439-89-6] ^	22.0	U	ug/L	1	22.0	50.0	300	EPA 6010C	07/20/12 13:12	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:12	JDH	
Manganese [7439-96-5] ^	1.10	U	ug/L	1	1.10	10.0	50	EPA 6010C	07/20/12 13:12	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	07/20/12 13:12	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	07/19/12 13:09	JDH	
Selenium [7782-49-2] ^	**5.64**	J	ug/L	1	4.50	10.0	10	EPA 6010C	07/20/12 13:12	JDH	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	07/20/12 13:12	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	07/19/12 13:09	JDH	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	07/20/12 13:12	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	07/20/12 13:12	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	07/20/12 13:12	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: 8401-Trip Blank | **Lab Sample ID:** C208142-03 | **Received:** 07/18/12 08:10

Matrix: Water | **Sampled:** 07/17/12 13:55 | **Work Order:** C208142

Project: Albemarle Closed LF | **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] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	07/26/12 18:53	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	07/26/12 18:53	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	07/26/12 18:53	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 18:53	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	07/26/12 18:53	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	07/26/12 18:53	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	07/26/12 18:53	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	07/26/12 18:53	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	07/26/12 18:53	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	07/26/12 18:53	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	07/26/12 18:53	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	07/26/12 18:53	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	07/26/12 18:53	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	07/26/12 18:53	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	07/26/12 18:53	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 18:53	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	07/26/12 18:53	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	07/26/12 18:53	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	07/26/12 18:53	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	07/26/12 18:53	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	07/26/12 18:53	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	07/26/12 18:53	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	07/26/12 18:53	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	07/26/12 18:53	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	07/26/12 18:53	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	07/26/12 18:53	JKG	

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Description: 8401-Trip Blank
Matrix: Water
Project: Albemarle Closed LF

Lab Sample ID: C208142-03
Sampled: 07/17/12 13:55
Sampled By: ENCO

Received: 07/18/12 08:10
Work Order: C208142

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
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	07/26/12 18:53	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	07/26/12 18:53	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*42*	*1*	*50.0*	*83 %*	*51-122*	*2G25014*	*EPA 8260B*	*07/26/12 18:53*	*JKG*	
Dibromofluoromethane	*40*	*1*	*50.0*	*80 %*	*68-117*	*2G25014*	*EPA 8260B*	*07/26/12 18:53*	*JKG*	
Toluene-d8	*43*	*1*	*50.0*	*85 %*	*67-127*	*2G25014*	*EPA 8260B*	*07/26/12 18:53*	*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 2G25003 - EPA 5030B_MS

Blank (2G25003-BLK1) Prepared: 07/25/2012 07:33 Analyzed: 07/25/2012 23:07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	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	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	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	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Tetrahydrofuran	0.80	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2G25003 - EPA 5030B_MS

Blank (2G25003-BLK1) Continued Prepared: 07/25/2012 07:33 Analyzed: 07/25/2012 23:07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: 4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*98*	*51-122*			
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*98*	*67-127*			

LCS (2G25003-BS1) Prepared: 07/25/2012 07:33 Analyzed: 07/25/2012 23:37

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		117	75-133			
Benzene	20		1.0	ug/L	20.0		102	81-134			
Chlorobenzene	19		1.0	ug/L	20.0		97	83-117			
Toluene	19		1.0	ug/L	20.0		97	71-118			
Trichloroethene	21		1.0	ug/L	20.0		104	74-119			
Surrogate: 4-Bromofluorobenzene	*50*			*ug/L*	*50.0*		*100*	*51-122*			
Surrogate: Dibromofluoromethane	*53*			*ug/L*	*50.0*		*105*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*99*	*67-127*			

Matrix Spike (2G25003-MS1) Prepared: 07/25/2012 07:33 Analyzed: 07/26/2012 00:06

Source: C208703-07

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	0.21 U	109	75-133			
Benzene	20		1.0	ug/L	20.0	0.15 U	99	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	95	83-117			
Toluene	19		1.0	ug/L	20.0	0.14 U	94	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	102	74-119			
Surrogate: 4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*101*	*51-122*			
Surrogate: Dibromofluoromethane	*52*			*ug/L*	*50.0*		*103*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*100*	*67-127*			

Matrix Spike Dup (2G25003-MSD1) Prepared: 07/25/2012 07:33 Analyzed: 07/26/2012 00:35

Source: C208703-07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.21 U	106	75-133	3	20	
Benzene	20		1.0	ug/L	20.0	0.15 U	99	81-134	0.8	17	
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	93	83-117	2	16	
Toluene	18		1.0	ug/L	20.0	0.14 U	92	71-118	2	17	
Trichloroethene	19		1.0	ug/L	20.0	0.15 U	97	74-119	4	22	
Surrogate: 4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*101*	*51-122*			
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*103*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*99*	*67-127*			

Batch 2G25014 - EPA 5030B_MS

Blank (2G25014-BLK1) Prepared: 07/25/2012 09:32 Analyzed: 07/26/2012 09:31

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2G25014 - EPA 5030B_MS

Blank (2G25014-BLK1) Continued Prepared: 07/25/2012 09:32 Analyzed: 07/26/2012 09:31

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,1-Dichloropropene	0.15	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	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	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,3-Dichloropropane	0.16	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2,2-Dichloropropane	0.28	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
3-Chloropropene	0.11	U	1.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acetonitrile	5.0	U	10	ug/L							
Acrolein	4.0	U	10	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
Chloroprene	0.64	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethyl Methacrylate	0.38	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Isobutyl alcohol	11	U	50	ug/L							
Methacrylonitrile	4.9	U	10	ug/L							
Methyl Methacrylate	0.51	U	1.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2G25014 - EPA 5030B_MS

Blank (2G25014-BLK1) Continued Prepared: 07/25/2012 09:32 Analyzed: 07/26/2012 09:31

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Methylene chloride	0.23	U	1.0	ug/L							
Naphthalene	0.11	U	1.0	ug/L							
Propionitrile	5.0	U	10	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Tetrahydrofuran	0.80	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*43*			*ug/L*	*50.0*		*85*	*51-122*			
Surrogate: Dibromofluoromethane	*39*			*ug/L*	*50.0*		*77*	*68-117*			
Surrogate: Toluene-d8	*44*			*ug/L*	*50.0*		*89*	*67-127*			

LCS (2G25014-BS1) Prepared: 07/25/2012 09:32 Analyzed: 07/26/2012 10:00

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	16		1.0	ug/L	20.0		78	75-133			
Benzene	18		1.0	ug/L	20.0		89	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		103	83-117			
Toluene	20		1.0	ug/L	20.0		100	71-118			
Trichloroethene	21		1.0	ug/L	20.0		105	74-119			
Surrogate: 4-Bromofluorobenzene	*41*			*ug/L*	*50.0*		*83*	*51-122*			
Surrogate: Dibromofluoromethane	*38*			*ug/L*	*50.0*		*75*	*68-117*			
Surrogate: Toluene-d8	*43*			*ug/L*	*50.0*		*86*	*67-127*			

Matrix Spike (2G25014-MS1) Prepared: 07/25/2012 09:32 Analyzed: 07/26/2012 10:30

Source: C208703-08

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	0.21 U	90	75-133			
Benzene	20		1.0	ug/L	20.0	0.15 U	98	81-134			
Chlorobenzene	22		1.0	ug/L	20.0	0.17 U	110	83-117			
Toluene	21		1.0	ug/L	20.0	0.14 U	107	71-118			
Trichloroethene	23		1.0	ug/L	20.0	0.15 U	114	74-119			
Surrogate: 4-Bromofluorobenzene	*42*			*ug/L*	*50.0*		*83*	*51-122*			
Surrogate: Dibromofluoromethane	*39*			*ug/L*	*50.0*		*78*	*68-117*			
Surrogate: Toluene-d8	*44*			*ug/L*	*50.0*		*88*	*67-127*			

Matrix Spike Dup (2G25014-MSD1) Prepared: 07/25/2012 09:32 Analyzed: 07/26/2012 10:59

Source: C208703-08

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2G25014 - EPA 5030B_MS

Matrix Spike Dup (2G25014-MSD1) Continued Prepared: 07/25/2012 09:32 Analyzed: 07/26/2012 10:59

Source: C208703-08

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	0.21 U	83	75-133	8	20	
Benzene	19		1.0	ug/L	20.0	0.15 U	94	81-134	4	17	
Chlorobenzene	22		1.0	ug/L	20.0	0.17 U	108	83-117	1	16	
Toluene	21		1.0	ug/L	20.0	0.14 U	105	71-118	2	17	
Trichloroethene	22		1.0	ug/L	20.0	0.15 U	111	74-119	3	22	
Surrogate: 4-Bromofluorobenzene	*42*			*ug/L*	*50.0*		*84*	*51-122*			
Surrogate: Dibromofluoromethane	*38*			*ug/L*	*50.0*		*77*	*68-117*			
Surrogate: Toluene-d8	*44*			*ug/L*	*50.0*		*88*	*67-127*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 2G18014 - EPA 7470A

Blank (2G18014-BLK1) Prepared: 07/18/2012 09:43 Analyzed: 07/18/2012 16:33

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 (2G18014-BS1) Prepared: 07/18/2012 09:43 Analyzed: 07/18/2012 16:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.51		0.200	ug/L	5.00		90	80-120			

Matrix Spike (2G18014-MS1) Prepared: 07/18/2012 09:43 Analyzed: 07/18/2012 16:40

Source: C208141-11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	3.59		0.200	ug/L	5.00	0.170 U	72	75-125			QM-07

Matrix Spike Dup (2G18014-MSD1) Prepared: 07/18/2012 09:43 Analyzed: 07/18/2012 16:42

Source: C208141-11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	3.53		0.200	ug/L	5.00	0.170 U	71	75-125	2	25	QM-07

Post Spike (2G18014-PS1) Prepared: 07/18/2012 09:43 Analyzed: 07/18/2012 16:44

Source: C208141-11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	2.82		0.200	ug/L	5.00	-0.0370	57	75-125			QM-08

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

Batch 2G18011 - EPA 3005A

Blank (2G18011-BLK1) Prepared: 07/18/2012 09:33 Analyzed: 07/20/2012 12:15

QUALITY CONTROL

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

Batch 2G18011 - EPA 3005A

Blank (2G18011-BLK1) Continued Prepared: 07/18/2012 09:33 Analyzed: 07/20/2012 12:15

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	**2.06**	**J**	10.0	ug/L							
Manganese	1.10	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Selenium	4.50	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Tin	2.10	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (2G18011-BS1) Prepared: 07/18/2012 09:33 Analyzed: 07/20/2012 12:18

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	195		10.0	ug/L	200		98	80-120			
Barium	191		10.0	ug/L	200		96	80-120			
Beryllium	18.8		1.00	ug/L	20.0		94	80-120			
Cadmium	19.3		1.00	ug/L	20.0		96	80-120			
Chromium	189		10.0	ug/L	200		94	80-120			
Cobalt	197		10.0	ug/L	200		99	80-120			
Copper	188		10.0	ug/L	200		94	80-120			
Iron	962		50.0	ug/L	1000		96	80-120			
Lead	194	B	10.0	ug/L	200		97	80-120			
Manganese	189		10.0	ug/L	200		95	80-120			
Nickel	191		10.0	ug/L	200		96	80-120			
Selenium	194		10.0	ug/L	200		97	80-120			
Silver	194		10.0	ug/L	200		97	80-120			
Tin	188		10.0	ug/L	200		94	80-120			
Vanadium	192		10.0	ug/L	200		96	80-120			
Zinc	189		10.0	ug/L	200		95	80-120			

Matrix Spike (2G18011-MS1) Prepared: 07/18/2012 09:33 Analyzed: 07/20/2012 12:23

Source: C208270-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	193		10.0	ug/L	200	2.80 U	96	75-125			
Barium	235		10.0	ug/L	200	37.3	99	75-125			
Beryllium	18.9		1.00	ug/L	20.0	0.100 U	94	75-125			
Cadmium	20.2		1.00	ug/L	20.0	0.360 U	101	75-125			
Chromium	189		10.0	ug/L	200	1.00 U	95	75-125			
Cobalt	196		10.0	ug/L	200	1.10 U	98	75-125			
Copper	227		10.0	ug/L	200	36.6	95	75-125			

QUALITY CONTROL

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

Batch 2G18011 - EPA 3005A

Matrix Spike (2G18011-MS1) Continued Prepared: 07/18/2012 09:33 Analyzed: 07/20/2012 12:23

Source: C208270-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron	2250		50.0	ug/L	1000	1230	102	75-125			
Lead	192	B	10.0	ug/L	200	3.20	94	75-125			
Manganese	314		10.0	ug/L	200	128	93	75-125			
Nickel	204		10.0	ug/L	200	7.31	98	75-125			
Selenium	185		10.0	ug/L	200	4.50 U	92	75-125			
Silver	193		10.0	ug/L	200	1.90 U	96	75-125			
Tin	194		10.0	ug/L	200	5.73	94	75-125			
Vanadium	194		10.0	ug/L	200	1.40 U	97	75-125			
Zinc	525		10.0	ug/L	200	324	100	75-125			

Matrix Spike Dup (2G18011-MSD1) Prepared: 07/18/2012 09:33 Analyzed: 07/20/2012 12:25

Source: C208270-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	199		10.0	ug/L	200	2.80 U	100	75-125	3	20	
Barium	240		10.0	ug/L	200	37.3	101	75-125	2	20	
Beryllium	19.4		1.00	ug/L	20.0	0.100 U	97	75-125	3	20	
Cadmium	20.8		1.00	ug/L	20.0	0.360 U	104	75-125	3	20	
Chromium	194		10.0	ug/L	200	1.00 U	97	75-125	2	20	
Cobalt	201		10.0	ug/L	200	1.10 U	101	75-125	2	20	
Copper	233		10.0	ug/L	200	36.6	98	75-125	3	20	
Iron	2240		50.0	ug/L	1000	1230	101	75-125	0.6	20	
Lead	198	B	10.0	ug/L	200	3.20	97	75-125	3	20	
Manganese	322		10.0	ug/L	200	128	97	75-125	3	20	
Nickel	208		10.0	ug/L	200	7.31	100	75-125	2	20	
Selenium	185		10.0	ug/L	200	4.50 U	92	75-125	0.01	20	
Silver	197		10.0	ug/L	200	1.90 U	98	75-125	2	20	
Tin	199		10.0	ug/L	200	5.73	97	75-125	3	20	
Vanadium	198		10.0	ug/L	200	1.40 U	99	75-125	2	20	
Zinc	518		10.0	ug/L	200	324	97	75-125	1	20	

Post Spike (2G18011-PS1) Prepared: 07/18/2012 09:33 Analyzed: 07/20/2012 12:33

Source: C208270-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.192		0.0100	mg/L	0.200	-0.00364	98	80-120			
Barium	0.233		0.0100	mg/L	0.200	0.0373	98	80-120			
Beryllium	0.0186		0.00100	mg/L	0.0200	-0.000133	94	80-120			
Cadmium	0.0202		0.00100	mg/L	0.0200	0.000173	100	80-120			
Chromium	0.186		0.0100	mg/L	0.200	0.000459	93	80-120			
Cobalt	0.195		0.0100	mg/L	0.200	0.000886	97	80-120			
Copper	0.221		0.0100	mg/L	0.200	0.0366	92	80-120			
Iron	2.23		0.0500	mg/L	1.00	1.23	99	80-120			
Lead	0.191	B	0.0100	mg/L	0.200	0.00320	94	80-120			
Manganese	0.311		0.0100	mg/L	0.200	0.128	92	80-120			
Nickel	0.203		0.0100	mg/L	0.200	0.00731	98	80-120			
Selenium	0.199		0.0100	mg/L	0.200	-0.000975	100	80-120			

QUALITY CONTROL

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

Batch 2G18011 - EPA 3005A

Post Spike (2G18011-PS1) Continued Prepared: 07/18/2012 09:33 Analyzed: 07/20/2012 12:33

Source: C208270-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Silver	0.195		0.0100	mg/L	0.200	-0.00120	98	80-120			
Tin	0.194		0.0100	mg/L	0.200	0.00573	94	80-120			
Vanadium	0.191		0.0100	mg/L	0.200	-0.000196	96	80-120			
Zinc	0.526		0.0100	mg/L	0.200	0.324	101	80-120			

Batch 2G18012 - EPA 3005A

Blank (2G18012-BLK1) Prepared: 07/18/2012 09:37 Analyzed: 07/19/2012 12:06

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 (2G18012-BS1) Prepared: 07/18/2012 09:37 Analyzed: 07/19/2012 12:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	199		2.00	ug/L	200		100	80-120			
Selenium	216		1.00	ug/L	200		108	80-120			
Thallium	210		1.00	ug/L	200		105	80-120			

Matrix Spike (2G18012-MS1) Prepared: 07/18/2012 09:37 Analyzed: 07/19/2012 12:25

Source: C208141-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	211		2.00	ug/L	200	0.609	105	75-125			
Selenium	219		1.00	ug/L	200	0.830 U	109	75-125			
Thallium	189		1.00	ug/L	200	0.110 U	94	75-125			

Matrix Spike Dup (2G18012-MSD1) Prepared: 07/18/2012 09:37 Analyzed: 07/19/2012 12:29

Source: C208141-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	207		2.00	ug/L	200	0.609	103	75-125	2	20	
Selenium	214		1.00	ug/L	200	0.830 U	107	75-125	2	20	
Thallium	186		1.00	ug/L	200	0.110 U	93	75-125	1	20	

Post Spike (2G18012-PS1) Prepared: 07/18/2012 09:37 Analyzed: 07/19/2012 12:32

Source: C208141-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	202		2.00	ug/L	200	0.609	101	80-120			
Selenium	214		1.00	ug/L	200	0.139	107	80-120			
Thallium	185		1.00	ug/L	200	0.0370	92	80-120			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2G18024 - NO PREP

LCS (2G18024-BS1) Prepared: 07/18/2012 15:09 Analyzed: 07/18/2012 15:09

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		100	90-110			

Matrix Spike (2G18024-MS1) Prepared: 07/18/2012 15:12 Analyzed: 07/18/2012 15:12

Source: C208047-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1.1		0.10	mg/L	1.00	0.047	102	90-110			

Matrix Spike Dup (2G18024-MSD1) Prepared: 07/18/2012 15:13 Analyzed: 07/18/2012 15:13

Source: C208047-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1.1		0.10	mg/L	1.00	0.047	103	90-110	1	10	

Batch 2G18025 - NO PREP

Blank (2G18025-BLK1) Prepared & Analyzed: 07/18/2012 16:34

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Turbidity	0.50	U	1.0	NTU							

LCS (2G18025-BS1) Prepared & Analyzed: 07/18/2012 16:34

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Turbidity	20		1.0	NTU	20.1		101	90-110			

Duplicate (2G18025-DUP1) Prepared & Analyzed: 07/18/2012 16:34

Source: C207616-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Turbidity	1.3		1.0	NTU		1.3			2	25	

Batch 2G22002 - NO PREP

LCS (2G22002-BS1) Prepared: 07/23/2012 09:45 Analyzed: 07/23/2012 09:45

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		96	90-110			

Matrix Spike (2G22002-MS1) Prepared: 07/23/2012 09:48 Analyzed: 07/23/2012 09:48

Source: C207980-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	18		2.0	mg/L	10.0	8.1	102	90-110			

Matrix Spike Dup (2G22002-MSD1) Prepared: 07/23/2012 09:50 Analyzed: 07/23/2012 09:50

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2G22002 - NO PREP

Matrix Spike Dup (2G22002-MSD1) Continued Prepared: 07/23/2012 09:50 Analyzed: 07/23/2012 09:50

Source: C207980-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	18		2.0	mg/L	10.0	8.1	102	90-110	0.1	10	

Batch 2G23027 - Same

Blank (2G23027-BLK1) Prepared: 07/23/2012 14:28 Analyzed: 07/23/2012 17:30

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 (2G23027-BS1) Prepared: 07/23/2012 14:28 Analyzed: 07/23/2012 17:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	510000		10000	ug/L	500000		102	90-110			

Matrix Spike (2G23027-MS1) Prepared: 07/23/2012 14:28 Analyzed: 07/23/2012 17:30

Source: C207655-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	3200000		50000	ug/L	2500000	820000	97	90-110			

Matrix Spike Dup (2G23027-MSD1) Prepared: 07/23/2012 14:28 Analyzed: 07/23/2012 17:30

Source: C207655-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	3300000		50000	ug/L	2500000	820000	98	90-110	1	10	

Batch 2G24027 - NO PREP

Blank (2G24027-BLK1) Prepared: 07/24/2012 15:14 Analyzed: 07/24/2012 15:40

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	10	U	100	ug/L							

LCS (2G24027-BS1) Prepared: 07/24/2012 15:14 Analyzed: 07/24/2012 15:40

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.4		0.1	mg/L	0.401		102	80-120			

Matrix Spike (2G24027-MS1) Prepared: 07/24/2012 15:14 Analyzed: 07/24/2012 15:40

Source: C207470-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	440		100	ug/L	401	10 U	109	80-120			

Matrix Spike Dup (2G24027-MSD1) Prepared: 07/24/2012 15:14 Analyzed: 07/24/2012 15:40

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2G24027 - NO PREP

Matrix Spike Dup (2G24027-MSD1) Continued Prepared: 07/24/2012 15:14 Analyzed: 07/24/2012 15:40

Source: C207470-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	440		100	ug/L	401	10 U	109	80-120	0.1	25	

Batch 2G27012 - NO PREP

Blank (2G27012-BLK1) Prepared: 07/27/2012 09:53 Analyzed: 07/27/2012 11:44

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 (2G27012-BS1) Prepared: 07/27/2012 09:53 Analyzed: 07/27/2012 11:45

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	97000		15000	ug/L	100000		97	80-120			

Matrix Spike (2G27012-MS1) Prepared: 07/27/2012 09:53 Analyzed: 07/27/2012 11:47

Source: C207616-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	140000		15000	ug/L	37800	99000	108	80-120			

Matrix Spike Dup (2G27012-MSD1) Prepared: 07/27/2012 09:53 Analyzed: 07/27/2012 11:47

Source: C207616-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	140000		15000	ug/L	37800	99000	109	80-120	0.2	25	

Batch 2G29002 - NO PREP

Blank (2G29002-BLK1) Prepared: 07/29/2012 12:53 Analyzed: 07/29/2012 20:47

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	40	U	5000	ug/L							

LCS (2G29002-BS1) Prepared: 07/29/2012 12:53 Analyzed: 07/29/2012 21:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	50000	B	5000	ug/L	50000		100	90-110			
Sulfate as SO4	48000		5000	ug/L	50000		96	90-110			

Matrix Spike (2G29002-MS1) Prepared: 07/29/2012 12:53 Analyzed: 07/29/2012 21:20

Source: C203113-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	98000	B	5000	ug/L	20000	77000	103	90-110			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2G29002 - NO PREP

Matrix Spike (2G29002-MS1) Continued Prepared: 07/29/2012 12:53 Analyzed: 07/29/2012 21:20

Source: C203113-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	19000		5000	ug/L	20000	2000	83	90-110			QM-05

Matrix Spike Dup (2G29002-MSD1) Prepared: 07/29/2012 12:53 Analyzed: 07/29/2012 21:36

Source: C203113-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	97000	B	5000	ug/L	20000	77000	101	90-110	0.5	10	
Sulfate as SO4	18000		5000	ug/L	20000	2000	80	90-110	3	10	QM-05

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2G27002 - NO PREP

Blank (2G27002-BLK1) Prepared: 07/27/2012 10:00 Analyzed: 07/27/2012 23:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	0.22	U	1.0	mg/L							

LCS (2G27002-BS1) Prepared: 07/27/2012 10:00 Analyzed: 07/27/2012 23:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	40		1.0	mg/L	40.0		100	85-115			

Matrix Spike (2G27002-MS1) Prepared: 07/27/2012 10:00 Analyzed: 07/27/2012 23:35

Source: A203529-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	42		1.0	mg/L	40.0	0.82	102	85-115			

Matrix Spike Dup (2G27002-MSD1) Prepared: 07/27/2012 10:00 Analyzed: 07/27/2012 23:35

Source: A203529-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	39		1.0	mg/L	40.0	0.82	96	85-115	6	21	

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.
J-01	Result is estimated due to positive results in the associated method blank.
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.
QM-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).
R-05	The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

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Client Name	Shield Engineering, Inc. (SH007)
Address	4301 Taggart Creek Road
City/ST/Zip	Charlotte, NC 28208
Tel	(704) 971-4149
Fax	(704) 394-6968
Sampler(s) Name, Affiliation (Print)	DANNY HEFNER, JOANNA HARBISON/SHIELD
Sampler(s) Signature	
Project Number	1110192
Project Name/Desc	Albemarle Closed LF
PO # / Billing Info	
Reporting Contact	David Wallace
Billing Contact	Accounts Payable
Site Location / Time Zone	

Requested Analyses

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard

___ Expedited

Due ___/___/___

Lab Workorder C208141

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	8260B Appendix 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Ni,Pb,Sb,Se,Sn,Tl,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Se,Sn,Tl,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Se,Tl,V,Zn	Alkalinity 310.2,Chloride 300,Nitrite as N 353.2,Turbidity SM2130B	COD SM5220D	Hg	Nitrate Calc 353.2	NOX 353.2	Sample Comments
	~~8401-MW1~~	~~7-17-12~~	~~DASH~~		GW	9	X		X			X	X		X	X	
	8401-MW2	7-17-12	1155	GRAB	GW	9	X		X			X	X		X	X	
	8401-MW3		1308		GW	9	X		X			X	X		X	X	
	8401-MW4R		1228		GW	4	X				X						
	8401-MW5R		1220		GW	4	X				X						
	8401-MW6		11:55		GW	9	X		X			X	X		X	X	
	8401-MW7		11:25		GW	9	X		X			X	X		X	X	
	8401-MW8D		11:05		GW	4	X				X						
	8401-MW9		10:25		GW	9	X		X			X	X		X	X	
	8401-MW10		13:00		GW	9	X		X			X	X		X	X	
	8401-MW11		12:40		GW	5	X				X						
	8401-MW12		12:46		GW	5		X		X				X			

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time 7-17-12 16:30	Received By	Date/Time 7/17/12 1630
Comments/Special Reporting Requirements		Relinquished By DASH	Date/Time	Received By	Date/Time 7/18/12 810
		Relinquished By	Date/Time	Received By	Date/Time

Cooler #'s & Temps on Receipt C-40 0.5°C C-214 0.9°C

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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Page 3 of 4

Client Name	Shield Engineering, Inc. (SH007)
Address	4301 Taggart Creek Road
City/ST/Zip	Charlotte, NC 28208
Tel	(704) 971-4149
Fax	(704) 394-6968
Sampler(s) Name, Affiliation (Print)	DANNY HEFNER, JOANNA HARBISON / SHIELD
Sampler(s) Signature	
Project Number	1110192
Project Name/Desc	Albemarle Closed LF
PO # / Billing Info	
Reporting Contact	David Wallace
Billing Contact	Accounts Payable
Site Location / Time Zone	

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C208141

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	8260B Appendix 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Ni,Pb,Sb,Se,Se,Tl,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Se,Sn,Tl,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Se,Tl,V,Zn	Alkalinity 310.2,Chloride 300,Nitrite as N 353.2,Turbidity SM2130B	COD SM5220D	Hg	Nitrate Calc 353.2	NOX 353.2	Sample Comments
	8401-MW24	7-17-12	11:12	GRAB	GW	5	X				X						
	8401-MW25	7-17-12	11:35	GRAB	GW	5	X				X						

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time 7/17/12 1630	Received By	Date/Time 7/17/12 1732
Comments/Special Reporting Requirements		Relinquished By DASH	Date/Time	Received By	Date/Time 7/18/12 810
		Relinquished By	Date/Time	Received By	Date/Time

Cooler #'s & Temps on Receipt: C-40 0.5°C C-214 0.9°C

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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Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Page ____ of ____

Client Name: Shield Engineering, Inc. (SH007)	Project Number: 1110192
Address: 4301 Taggart Creek Road	Project Name/Desc: Albemarle LF Blanks
City/ST/Zip: Charlotte, NC 28208	PO # / Billing Info:
Tel: (704) 971-4149 Fax: (704) 394-6968	Reporting Contact: David Wallace
Sampler(s) Name, Affiliation (Print): DANNY HEFNER, JOANNA HARBISON/SHIELD	Billing Contact: Accounts Payable
Sampler(s) Signature:	Site Location / Time Zone:

Requested Analyses: 8260B Appendix 1; Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Sn,Tl,V,Zn; Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn; Hg

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C208142

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,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Sn,Tl,V,Zn	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn	Hg							Sample Comments
	8401-Field Blank	7-17-12	1355	GRAB	WA	4	X		X								
	8401-Bailer Blank	7-17-12	1357	GRAB	WA	4	X	X		X							
	8401-Trip Blank	7-17-12		GRAB	WA	2	X										

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 7/17/12 1630	Received By: [signature]	Date/Time: 7/17/12 1630
Comments/Special Reporting Requirements		Relinquished By: DASH	Date/Time	Received By: MEStampen	Date/Time: 7/18/12 810
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: C-785 0.5°C		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