Semi-Annual Water Quality Monitoring Report

Prepared for

Cherokee County Closed Unlined MSWLF
Marble, North Carolina

August 2011

Permit Number: 20-01
MESCO Project Number: G11006.0

Submittal Date: February 7, 2012

P.O. BOX 97
Garner, NC 27529
License No. C-0281

Municipal Services Garner, NC
Engineering Company, P.A. Boone, NC
Municipal Engineering Services Company, P.A.
Garner and Boone, North Carolina

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

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

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

Instructions:

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

Solid Waste Monitoring Data Submittal Information

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

Municipal Engineering Services Company, PA

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

Name: Jonathan Pfohl Phone: (919) 772-5393

E-mail: jpfohl@mesco.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Cherokee County Closed MSWLF	Fairview Road (SR 1515) Marble, NC 28905	20-01	.1600	August 24 & 25, 2011

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

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

Steven R. Gandy, Ph.D., P.E. Senior Project Manager (919) 772-5393

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

Signature Date 2-7-2012

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA PROFESSIONAL SEAL 031020 ENGINEER STEVEN RAY GANDY

PO Box 97, Garner, NC 27529

Facility Representative Address

C-0281

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

Revised 6/2009

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License No. C-0281

CIVIL/SANITARY/ENVIRONMENTAL ENGINEERS

SOLID WASTE MANAGEMENT

Municipal Services Engineering Company, P.A.

SITE PLANNING/SUBDIVISIONS

SUBSURFACE UTILITY ENGINEERING (SUE)

Mr. Ervin Lane
Solid Waste Section
Division of Waste Management
North Carolina Department of Environment and Natural Resources
401 Oberlin Road, Suite 150
Raleigh, NC 27605

Re: Semi-Annual Water Quality Monitoring Report
Cherokee County Closed Unlined MSWLF
Permit No. 20-01
MESCO Project No. G11006.0

Dear Mr. Lane:

Introduction

The Cherokee County Closed Unlined Municipal Solid Waste Landfill (MSWLF) located in Marble NC, that operated under permit #20-01, is required to submit semi-annual compliance reports as a condition of the water quality monitoring program. Municipal Engineering Services Company, P.A. (MESCO) personnel of Garner NC performed this monitoring event on February 22, 2011 in accordance with the semi-annual monitoring schedule prescribed by the NC Solid Waste Section (SWS) rules/regulations.

As specified in rule 15A NCAC 13B.0601 and the SWS Environmental Monitoring Report Form, this report contains sampling procedures, field and laboratory results, groundwater and surface water characterization, and findings. Detections compared to standards tables, a hyrdrogeologic properties table, a monitoring network field observations table, field parameter data results, potentiometric map, quality assurance/quality control data, and laboratory analytical data results with chains-of-custody (C-O-C) are included.

Sampling Procedure

MESCO personnel performed this sampling event using portable monitoring methodology in accordance with the site-specific approved SAP contained in the March 1994 *Transition Plan.* Monitoring locations are shown on the potentiometric map, **Plate 1**. This sampling event consisted of water sample collection from seven down/crossgradient groundwater monitoring wells (MW-1, MW-3, MW-4R, MW-5, MW-6, MW-6R and MW-7), two background wells (MW-2 and MW-2R), four surface water points (SW-1, SW-2, SW-4 and SW-5) and three off-site residential water supply wells (Pendergrass, Solesbee, Van Buskirk (Haney)). Quality control measures were implemented including submittal and subsequent quantification of equipment blanks (EB), field blanks (FB) and travel blanks (TB). Locations listed in the SAP plus those added over time were sampled during this event with the exception of the Rathbone residential water supply well. The Rathbone supply well was not sampled because it was disconnected following their conversion to municipal water in 2009.

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Sampling was conducted utilizing methodology outlined in the NCDENR SWS guidance document S*olid Waste Section Guidelines for Groundwater, Soil, and Surface Water Sampling* revised April 2008. Monitoring location function and integrity were visually evaluated and inspection documentation is provided in **Table 5**. The depth to water in each well was electronically gaged prior to purging to quantify the static water level elevation. Low-flow pumping methodology or bailing was utilized to adequately purge the wells a minimum of three times the volume of standing water in the well or until dry. During purging, field parameters pH, specific conductance, temperature, oxidation-reduction potential (ORP), total dissolved solids (TDS), and visual turbidity were recorded. The samples were then placed into laboratory-prepared, pre-preserved containers via a new disposable polyethylene bailer. Samples were collected/separated based on likelihood of potential cross-contamination, kept on ice, and transported to a NC-certified laboratory under proper C-O-C protocol within the specified hold times for each analysis.

Field Parameter Data

A field parameter data summary is presented in **Table 6** and the field sampling parameter data sheets are enclosed in **Appendix B**.

Laboratory Results

Environmental Conservation Laboratories (ENCO) of Cary NC performed the laboratory analysis of the groundwater samples for the Appendix II list of constituents. The surface water samples were tested for the Appendix I list of parameters. A sampling and analysis table summarizing the locations, constituents, and methods is presented on **Table 1**.

Water samples were reported to the laboratory specific Method Detection Limits (MDL), which are quantifiable at or below the current Solid Waste Section detection limits (SWSL). **Table 2** summarizes constituents detected in the water samples in concentrations above the current SWSL, Groundwater Protection Standards (GWP), North Carolina Groundwater Standards (2L) or the North Carolina Surface Water Standards (2B) for the applicable trout water body. **Table 3** lists the Appendix II exclusive constituents (defined in this report as not also included in Appendix I) detected above the MDL. Laboratory results and C-O-Cs are presented in **Appendix A**.

Quality Control Samples

Total arsenic was detected in the FB and the laboratory associated method blanks in concentrations below the SWSL and 2L Standard. The Appendix II semi-volatile organic compound (SVOC) bis(2-ethylhexyl)phthalate was detected in the laboratory method blanks associated with the groundwater samples in levels above the established SWSL and 2L Standard. The laboratory flagged the detections of arsenic and bis(2-ethylhexyl)phthalate as common laboratory contaminants therefore these detections are considered laboratory induced artifact contamination and not attributed to a release.

Groundwater Samples

No metals were detected in concentrations above their respective 2L Standard during this event.

VOCs were reported in concentrations in exceedance of their respective 2L Standard in samples collected from MW-1 (1,4-dichlorobenzene), MW-4R (benzene and vinyl chloride), MW-5 (1,4-dichlorobenzene) and MW-6 (benzene and 1,4-dichlorobenzene).

No Appendix II exclusive analytes were detected in quantifiable concentrations (>SWSL). Although, bis(2-ethylhexyl)phthalate was detected in an estimated concentration above its respective 2L Standard in four samples, they are considered laboratory induced artifact contamination.

Surfacewater Samples

No constituents were detected in any of the surface water samples in concentrations over the SWSL or the applicable 2B Standard for a trout stream.

Groundwater and Surfacewater Characterization

MESCO prepared a single-day potentiometric map from groundwater elevations of the uppermost aquifer collected during this event (**Plate 1**). Groundwater flow rates and directions were calculated and are included on **Table 4**. Groundwater flows in a general northwesterly direction towards the Valley River discharge feature with rates ranging from approximately 28 feet/year (MW-6) to 653 feet/year (MW-3), averaging approximately 197 feet/year. The flow directions and gradients are consistent with historical observations. During sample collection, the Valley River was visually observed to be of normal seasonal volume and flow with low turbidity.

Findings

Localized portions of the uppermost aquifer continues to be impacted by relatively low levels of VOCs consisting almost exclusively of aromatics. During this event, samples collected from monitoring wells MW-1, MW-4R, MW-5 and MW-6 contained one or two quantifiable Appendix I VOCs in concentrations exceeding their respective 2L Standards. VOCs detected during this event have previously been found at their respective location and concentrations remain within their respective historically identified levels. It appears the extent of VOC migration within the upper aquifer is likely isolated within the compliance boundary and has apparently not effected the Valley River discharge feature.

Closing

The Cherokee County Closed Unlined MSWLF will continue semi-annual water quality monitoring and the next sampling event is tentatively scheduled to be performed in February 2012. If you have any questions or comments regarding this report, please contact us at (919) 772-5393 or by email at jpfohl@mesco.com.

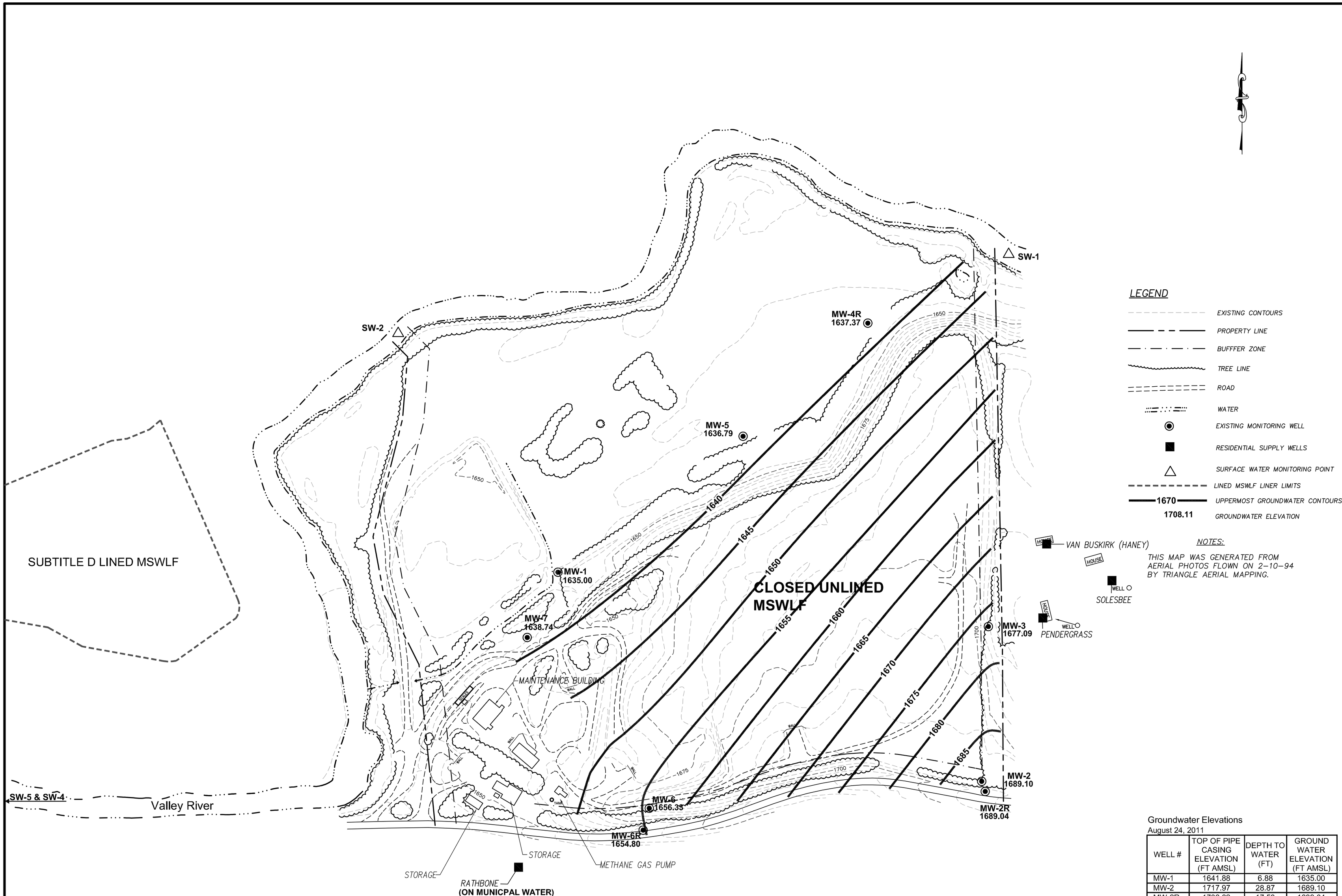
Sincerely,
MUNICIPAL ENGINEERING SERVICES CO., P.A.

Jonathan Pfohl
Environmental Specialist

Steven R. Gandy, Ph.D, P.E.
Senior Project Manager

Enclosures
cc: Mr. Jeff Clark
Cherokee County

Figures



Groundwater Elevations
August 24, 2011

WELL #	TOP OF PIPE CASING ELEVATION (FT AMSL)	DEPTH TO WATER (FT)	GROUND WATER ELEVATION (FT AMSL)
MW-1	1641.88	6.88	1635.00
MW-2	1717.97	28.87	1689.10
MW-2R	1706.62	17.58	1689.04
MW-3	1688.57	11.48	1677.09
MW-4R	1647.19	9.82	1637.37
MW-5	1644.61	7.82	1636.79
MW-6	1687.95	31.62	1656.33
MW-6R	1665.81	11.01	1654.80
MW-7	1646.85	8.11	1638.74

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CLOSED UNLINED
MUNICIPAL SOLID WASTE LANDFILL
CHEROKEE COUNTY
NORTH CAROLINA

DATE	BY	REV.	DESCRIPTION

SINGLE DAY POTENTIOMETRIC MAP
UPPERMOST AQUIFER

SCALE: 1" = 100'
DATE: 11/29/11
DRWN. BY: J. PFOHL
CHKD. BY: S. GANDY
PROJECT NUMBER G11006.0
DRAWING NO. PLATE 1
SHEET NO. 1 OF 1

Tables

Table 1
Sampling and Analysis Summary
August 24-25, 2011

		App. I		App. II								Field Parameter						
	Reason Not Sampled	VOCs	Total Metals	VOCs	Total Metals	Pesticides	Herbicides-Chlorinated	Polychlorinated biphenyl (PCB)	Semivolatile Organics (SVOCs)	Total Cyanide	Sulfide	Dissolved Oxygen (DO)	Oxidation Reduction Potential (ORP)	Temperature	Conductivity	Total Dissolved Solids (TDS)	pH	Turbidity
		Lab EPA 8260B	Lab EPA 6000/7000	Lab EPA 8260B	Lab EPA 6000/7000	Lab EPA 8081B	Lab SW8151A	Lab EPA 8082A	Lab EPA 8270D	Lab EPA 9014	Lab SM18 4500-S D	Field Meter	Field Meter	Field Meter	Field Meter	Field Meter	Field Meter	Field Visual
MW-1				x	x	x	x	x	x	x	x		x	x	x	x	x	x
MW-2				x	x	x	x	x	x	x	x		x	x	x	x	x	x
MW-2R				x	x	x	x	x	x	x	x		x	x	x	x	x	x
MW-3				x	x	x	x	x	x	x	x		x	x	x	x	x	x
MW-4R				x	x	x	x	x	x	x	x		x	x	x	x	x	x
MW-5				x	x	x	x	x	x	x	x		x	x	x	x	x	x
MW-6				x	x	x	x	x	x	x	x		x	x	x	x	x	x
MW-6R				x	x	x	x	x	x	x	x		x	x	x	x	x	x
MW-7				x	x	x	x	x	x	x	x		x	x	x	x	x	x
Pendergrass				x	x	x	x	x	x	x	x		x	x	x	x	x	x
Solesbee				x	x	x	x	x	x	x	x		x	x	x	x	x	x
Van Buskirk (Haney)				x	x	x	x	x	x	x	x		x	x	x	x	x	x
SW-1		x	x									x	x	x	x	x	x	x
SW-2		x	x									x	x	x	x	x	x	x
SW-4		x	x									x	x	x	x	x	x	x
SW-5		x			x							x	x	x	x	x	x	x
EB				x	x	x	x	x	x	x	x							
FB				x	x													
TB				x														

App I & II = List from current 40 CFR 258

Table 2
Detections Above SWSL, GWP, 2L, or 2B (Appendix I)
August 24 & 25, 2011

Well ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [2]	SWSL [3]	2L [4]	2B [5]	GWP [6]	Exceedance	Preliminary Cause [7]
MW-1	**1,4-Dichlorobenzene**	**8/25/11**	**8.6**	**ug/L**	**0.79**	**1**	**6**			**2.6**	**L &/or LFG**
MW-1	Chlorobenzene	8/25/11	10	ug/L	0.74	3	50				
MW-1	Cobalt Total	8/25/11	30.2	ug/L	1.10	10	NE		70		
MW-2	Barium Total	8/24/11	166	ug/L	1.00	100	700				
MW-2	Cobalt Total	8/24/11	130	ug/L	1.10	10	NE		70		
MW-2	Nickel Total	8/24/11	52.2	ug/L	1.80	50	100				
MW-2	Zinc Total	8/24/11	62	ug/L	3.80	10	1050				
MW-2R	Cobalt Total	8/24/11	13.3	ug/L	1.10	10	NE		70		
MW-2R	Zinc Total	8/24/11	38.6	ug/L	3.80	10	1050				
MW-3	Barium Total	8/24/11	211	ug/L	1.00	100	700				
MW-3	Cobalt Total	8/24/11	27.7	ug/L	1.10	10	NE		70		
MW-4R	1,4-Dichlorobenzene	8/24/11	3.8	ug/L	0.79	1	6				
MW-4R	Barium Total	8/24/11	101	ug/L	1.00	100	700				
MW-4R	**Benzene**	**8/24/11**	**1.6**	**ug/L**	**0.68**	**1**	**1**			**0.6**	**L &/or LFG**
MW-4R	Selenium Total	8/24/11	10.4	ug/L	0.830	10	20				
MW-4R	**Vinyl chloride**	**8/24/11**	**1.6**	**ug/L**	**0.60**	**1**	**0.03**			**1.57**	**L &/or LFG**
MW-4R	Zinc Total	8/24/11	32.4	ug/L	3.80	10	1050				
MW-5	**1,4-Dichlorobenzene**	**8/24/11**	**13**	**ug/L**	**0.79**	**1**	**6**			**7**	**L &/or LFG**
MW-5	Chlorobenzene	8/24/11	13	ug/L	0.74	3	50				
MW-5	Zinc Total	8/24/11	17.4	ug/L	3.80	10	1050				
MW-6	**1,4-Dichlorobenzene**	**8/24/11**	**11**	**ug/L**	**0.79**	**1**	**6**			**5**	**L &/or LFG**
MW-6	**Benzene**	**8/24/11**	**1.5**	**ug/L**	**0.68**	**1**	**1**			**0.5**	**L &/or LFG**
MW-6	Chlorobenzene	8/24/11	6.5	ug/L	0.74	3	50				
MW-6	Cobalt Total	8/24/11	28.5	ug/L	1.10	10	NE		70		
MW-6	Zinc Total	8/24/11	17.7	ug/L	3.80	10	1050				
MW-7	1,4-Dichlorobenzene	8/25/11	1	ug/L	0.79	1	6				
Pendergrass	Copper Total	8/24/11	22.9	ug/L	1.60	10	NE		70		
Pendergrass	Zinc Total	8/24/11	20.7	ug/L	3.80	10	1050				
Van Buskirk (Haney)	Zinc Total	8/24/11	14.9	ug/L	3.80	10	1050				

1 Table contains Appendix I constituents detected at or above established SWSL, GWP, 2L, or 2B

[2] MDL = Method Detection Limit

[3] SWSL = Solid Waste Section Reporting Limit

[4] 2L = North Carolina 15A NCAC 2L Groundwater Quality Standard

[5] 2B = North Carolina 15 NCAC 2B Surface Water Quality Standard for this Specific Stream Classification

[6] GWP = Groundwater Protection Standard

[7] Preliminary Cause = Refers to a preliminary analysis of the cause and/or source of a detection over the respective 2L/2B Standard.
A definitive source of the detection was not determined as part of this report.

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

NE = Not Established

L = Leachate

LFG = Landfill Gas

BOLD = Concentration > 2L, or 2B Standard

Table 3
Detections Above MDL (Appendix II Exclusive)
August 24 & 25, 2011

Well ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [2]	SWSL [3]	2L [4]	GWP [5]	Exceedance	Preliminary Cause [6]
MW-1	Tin Total	8/25/11	6.34 j	ug/L	2.10	100	NE	NE		
MW-2R	Dinoseb	8/24/11	0.46 j	ug/L	0.32	1	NE	7		
MW-3	Dichlorodifluoromethane	8/24/11	0.75 j	ug/L	0.56	5	1400			
MW-4R	2,4-D	8/24/11	0.53 j	ug/L	0.15	2	70			
MW-4R	m-&p-Cresol (combined)	8/24/11	1.7 j	ug/L	1.6	10	NE	NE		
MW-5	Tin Total	8/24/11	2.87 j	ug/L	2.10	100	NE	NE		
MW-6	Bis(2-ethylhexyl)phthalate	8/24/11	2.2 j	ug/L	1.7	15	3	NE		
MW-6	Dibenzofuran	8/24/11	3.4 j	ug/L	1.4	10	NE	28		
MW-6	Naphthalene	8/24/11	1.8 j	ug/L	0.46	10	6			
MW-6R	**Bis(2-ethylhexyl)phthalate**	**8/24/11**	**7.5 j**	**ug/L**	**1.7**	**15**	**3**	**NE**	**4.5**	**A**
MW-6R	Tin Total	8/24/11	2.51 j	ug/L	2.10	100	NE	NE		
MW-7	**Bis(2-ethylhexyl)phthalate**	**8/25/11**	**5.9 j**	**ug/L**	**1.7**	**15**	**3**	**NE**	**2.9**	**A**
Pendergrass	Bis(2-ethylhexyl)phthalate	8/24/11	2.3 j	ug/L	1.7	15	3	NE		
Solesbee	**Bis(2-ethylhexyl)phthalate**	**8/24/11**	**5.8 j**	**ug/L**	**1.7**	**15**	**3**	**NE**	**2.8**	**A**
Van Buskirk (Haney)	**Bis(2-ethylhexyl)phthalate**	**8/24/11**	**4.8 j**	**ug/L**	**1.7**	**15**	**3**	**NE**	**1.8**	**A**

1 Table contains Appendix II exclusive constituents detected at or above the MDL.

[2] MDL = Method Detection Limit

[3] SWSL = Solid Waste Section Reporting Limit

[4] 2L = North Carolina 15A NCAC 2L Groundwater Quality Standard

[5] GWP = Groundwater Protection Standard

[6] Preliminary Cause = Refers to a preliminary analysis of the cause and/or source of a detection over the respective 2L/2B Standard.
A definitive source of the detection was not determined as part of this report.

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

NE = Not Established

A = Artifact Contamination from Laboratory (also detected in laboratory associated method blanks)

BOLD = Concentration > 2L, or 2B Standard

Table 4
Hydrologic Properties at Monitoring Well Locations
August 24, 2011

Monitoring Well	Hydraulic Conductivity (cm/sec)	Effective Porosity (%)	Hydraulic Gradient (ft/ft)	Linear Velocity (ft/yr)	Flow Direction	Depth to Groundwater (ft btoc)	Groundwater Potentiometric Elevation (ft amsl)	Screened Interval Lithology
MW-1	5.50E-04	15	0.04	157	N37W	6.88	1635.00	PWR
MW-2	4.40E-04	15	0.06	173	N57W	28.87	1689.10	Silty Clay
MW-2R	n/a	n/a	0.04	n/a	N57W	17.58	1689.04	Silty Clay
MW-3	1.50E-03	15	0.06	653	N50W	11.48	1677.09	Silty Clay
MW-4R	3.50E-04	15	0.05	127	N44W	9.82	1637.37	Clayey Sand/Schist
MW-5	1.20E-04	20	0.05	33	N45W	7.82	1636.79	Sand
MW-6	5.10E-05	15	0.08	28	S89W	31.62	1656.33	Sandy Silt
MW-6R	n/a	n/a	0.21	n/a	S81W	11.01	1654.80	Sandy Silt
MW-7	2.90E-04	5	0.03	204	N33W	8.11	1638.74	Clayey Sand/Phyllite
Minimum	5.10E-05	5	0.03	28	-	6.88	1635.00	-
Average	4.72E-04	14	0.07	197	-	14.80	1657.14	-
Maximum	1.50E-03	20	0.21	653	-	31.62	1689.10	-

NOTE: Data for conductivities and effective porosity from GAI Consultants' Water Sampling Reports.
Hydrologic gradient from August 24, 2011 groundwater elevations.
Flow rate (Q) is defined by the equation:

where

$$Q = -\frac{K}{n_e} \cdot \frac{dh}{dl}$$

K = hydraulic conductivity
ne = effective porosity
dh = head difference
dl = horizontal distance

Table 5
Field Observations of Monitoring Locations
August 24 & 25, 2011

Sample Location	Viable Monitoring Location	Lack of Any Evidence of Tampering	Locked	Hinge/Hasp Operational	Tagged or Labeled	Concrete Surface Pad Effective	Degree of Visual Turbidity of Collected Sample	Comments
MW-1	Yes	Yes	Yes	Yes	Yes	Yes	Clear	
MW-2	Yes	Yes	Yes	Yes	Yes	Yes	Slight	
MW-2R	Yes	Yes	Yes	Yes	Yes	Yes	Slight	
MW-3	Yes	Yes	Yes	Yes	Yes	Covered	Clear	Slight Constriction
MW-4R	Yes	Yes	Yes	Yes	Yes	Yes	Clear	
MW-5	Yes	Yes	Yes	Yes	Yes	Yes	Clear	
MW-6	Yes	Yes	Yes	Yes	Yes	Yes	Clear	
MW-6R	Yes	Yes	Yes	Yes	Yes	Yes	Slight	
MW-7	Yes	Yes	Yes	Yes	Yes	Yes	Clear	
Pendergrass	Yes	-	-	-	-	-	Clear	Sample from back hose bib
Solesbee	Yes	-	-	-	-	-	Clear	Sample from well head
Van Buskirk (Haney)	Yes	-	-	-	-	-	Clear	Sample taken from new back hose bib
SW-1	Yes	-	-	-	-	-	Clear	Normal Volume & Flow
SW-2	Yes	-	-	-	-	-	Clear	Normal Volume & Flow
SW-4	Yes	-	-	-	-	-	Clear	Normal Volume & Flow
SW-5	Yes	-	-	-	-	-	Clear	Normal Volume & Flow

Any unusual field conditions, observations, or events:

Ditch running east to west just north of MW-3 along property line regraded/dewatered by County since February 2011.

Table 6
Field Parameter Data Summary
August 24 & 25, 2011

Location	Depth to Water *	Water Elevation	TOC Elevation	Temp.	ORP	DO	pH	Specific Conductance	TDS	Turbidity
Units	**ft (btoc)**	**ft (amsl)**	**ft (amsl)**	**C**	**mV**	**mg/L**	**SU**	**umhos/cm**	**mg/L**	**Visual**
MW-1	6.88	1635.00	1641.88	15.2	95	NR	6.34	803	403	Clear
MW-2	28.87	1689.10	1717.97	15.8	5	NR	5.86	122	59	Slight
MW-2R	17.58	1689.04	1706.62	15.5	315	NR	4.78	53	26	Slight
MW-3	11.48	1677.09	1688.57	15.1	-95	NR	6.42	263	131	Clear
MW-4R	9.82	1637.37	1647.19	15.1	-41	NR	6.31	412	205	Clear
MW-5	7.82	1636.79	1644.61	16.1	155	NR	5.68	311	156	Clear
MW-6	31.62	1656.33	1687.95	17.0	62	NR	5.63	131	65	Clear
MW-6R	11.01	1654.80	1665.81	15.9	309	NR	5.34	337	153	Slight
MW-7	8.11	1638.74	1646.85	16.9	-68	NR	6.40	346	173	Clear
Minimum	6.88	1635.00	1641.88	15.1	-95	NR	4.78	53	26	Clear
Average	14.80	1657.14	1671.94	15.8	82	NR	5.86	309	152	Clear
Maximum	31.62	1689.10	1717.97	17.0	315	NR	6.42	803	403	Slight
Pendergrass	NR	NR	NR	16.8	213	NR	6.03	18	9	Clear
Solesbee	NR	NR	NR	16.3	-84	NR	6.83	103	49	Clear
Van Buskirk (Haney)	NR	NR	NR	16.2	233	NR	5.86	42	21	Clear
Minimum	NR	NR	NR	16.2	-84	NR	5.86	18	9	Clear
Average	NR	NR	NR	16.4	121	NR	6.24	54	26	Clear
Maximum	NR	NR	NR	16.8	233	NR	6.83	103	49	Clear
SW-1	NR	NR	NR	19.5	266	9.9	7.11	83	41	Clear
SW-2	NR	NR	NR	19.6	271	10.1	7.04	68	34	Clear
SW-4	NR	NR	NR	19.4	280	9.8	6.98	72	36	Clear
SW-5	NR	NR	NR	19.3	218	10.3	6.99	80	39	Clear
Minimum	NR	NR	NR	19.3	218	9.8	6.98	68	34	Clear
Average	NR	NR	NR	19.5	259	10.0	7.03	76	38	Clear
Maximum	NR	NR	NR	19.6	280	10.3	7.11	83	41	Clear

* = Depth to water recorded on August 24, 2011

NR = No Reading Attempted

Appendix A
Laboratory Analysis Reports
Chains of Custody

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

Tuesday, September 20, 2011

Municipal Engineering Services (MU001)

Attn: Jonathan Pfohl

P.O. Box 97

Garner, NC 27529

RE: Laboratory Results for
Project Number: G100007.0 Closed, Project Name/Desc: Cherokee Closed
ENCO Workorder: C109983

Dear Jonathan Pfohl,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, August 26, 2011.

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

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

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

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

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 159.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: MW-1 **Lab ID: C109983-01** **Sampled: 08/25/11 08:30** **Received: 08/26/11 10:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/21/12		08/30/11	10:08	8/31/2011 10:02
EPA 6020A	02/21/12		08/30/11	10:16	9/17/2011 14:07
EPA 7470A	09/22/11		08/30/11	10:01	8/31/2011 13:10
EPA 8081B	09/01/11	10/09/11	08/30/11	07:13	9/2/2011 20:36
EPA 8082A	08/24/12	08/24/12	08/30/11	07:20	9/2/2011 20:36
EPA 8151A	09/01/11	10/07/11	08/28/11	13:00	8/30/2011 17:31
EPA 8260B	09/08/11		08/31/11	11:15	9/1/2011 14:01
EPA 8270D	09/01/11	10/09/11	08/30/11	16:30	9/13/2011 00:23
SM18 4500-S D	09/01/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/08/11		09/06/11	10:28	9/7/2011 12:16

Client ID: MW-2 **Lab ID: C109983-02** **Sampled: 08/24/11 09:00** **Received: 08/26/11 10:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:17
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:10
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:13
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 20:49
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 20:49
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 17:57
EPA 8260B	09/07/11		08/31/11	11:15	9/1/2011 14:31
EPA 8270D	08/31/11	10/09/11	08/30/11	16:30	9/13/2011 00:48
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/31/11	09:44	9/1/2011 08:17

Client ID: MW-2R **Lab ID: C109983-03** **Sampled: 08/24/11 15:10** **Received: 08/26/11 10:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:28
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:21
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:16
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 21:03
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 21:03
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 18:23
EPA 8260B	09/07/11		08/31/11	11:15	9/1/2011 15:00
EPA 8270D	08/31/11	10/09/11	08/30/11	16:30	9/13/2011 01:14
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/31/11	09:44	9/1/2011 08:19

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Client ID: MW-3	Lab ID: C109983-04	Sampled: 08/24/11 12:15	Received: 08/26/11 10:30

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:29
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:25
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:19
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 21:16
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 21:16
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 18:49
EPA 8260B	09/07/11		08/31/11	11:15	9/1/2011 15:30
EPA 8270D	08/31/11	10/09/11	08/30/11	16:30	9/13/2011 01:39
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/31/11	09:44	9/1/2011 08:21

Client ID: MW-4R	Lab ID: C109983-05	Sampled: 08/24/11 11:25	Received: 08/26/11 10:30

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:31
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:29
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:22
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 21:42
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 21:42
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 19:16
EPA 8260B	09/07/11		08/31/11	11:26	9/1/2011 01:22
EPA 8270D	08/31/11	10/09/11	08/30/11	16:30	9/13/2011 02:05
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/31/11	09:44	9/1/2011 08:23

Client ID: MW-5	Lab ID: C109983-06	Sampled: 08/24/11 10:30	Received: 08/26/11 10:30

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:34
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:32
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:24
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 21:56
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 21:56
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 19:42
EPA 8260B	09/07/11		08/31/11	11:26	9/1/2011 01:51
EPA 8270D	08/31/11	10/09/11	08/30/11	16:30	9/13/2011 02:31
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/30/11	17:08	9/1/2011 08:25

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Client ID: MW-6	Lab ID: C109983-07	Sampled: 08/24/11 09:45	Received: 08/26/11 10:30

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:36
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:36
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:28
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 22:09
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 22:09
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 20:08
EPA 8260B	09/07/11		08/31/11	11:26	9/1/2011 02:20
EPA 8270D	08/31/11	10/10/11	08/31/11	11:00	9/13/2011 02:56
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/30/11	17:08	9/1/2011 08:31

Client ID: MW-6R	Lab ID: C109983-08	Sampled: 08/24/11 14:30	Received: 08/26/11 10:30

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:38
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:39
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:32
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 22:22
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 22:22
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 20:34
EPA 8260B	09/07/11		08/31/11	11:26	9/1/2011 02:49
EPA 8270D	08/31/11	10/10/11	08/31/11	11:00	9/13/2011 03:22
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/30/11	17:08	9/1/2011 08:33

Client ID: MW-7	Lab ID: C109983-09	Sampled: 08/25/11 09:00	Received: 08/26/11 10:30

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/21/12		08/30/11	10:08	8/31/2011 10:40
EPA 6020A	02/21/12		08/30/11	10:16	9/17/2011 14:43
EPA 7470A	09/22/11		08/30/11	10:01	8/31/2011 13:35
EPA 8081B	09/01/11	10/09/11	08/30/11	07:13	9/2/2011 22:35
EPA 8082A	08/24/12	08/24/12	08/30/11	07:20	9/2/2011 22:35
EPA 8151A	09/01/11	10/07/11	08/28/11	13:00	8/30/2011 21:00
EPA 8260B	09/08/11		08/31/11	11:26	9/1/2011 03:18
EPA 8270D	09/01/11	10/10/11	08/31/11	11:00	9/13/2011 03:47
SM18 4500-S D	09/01/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/08/11		09/06/11	10:28	9/7/2011 12:18

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Client ID: Pendergrass	Lab ID: C109983-10	Sampled: 08/24/11 15:45	Received: 08/26/11 10:30

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:42
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:46
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:43
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 22:49
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 22:49
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 21:26
EPA 8260B	09/07/11		08/31/11	11:26	9/1/2011 03:47
EPA 8270D	08/31/11	10/10/11	08/31/11	11:00	9/13/2011 04:13
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/30/11	17:08	9/1/2011 08:35

Client ID: Solesbee	Lab ID: C109983-11	Sampled: 08/24/11 16:10	Received: 08/26/11 10:30

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:44
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:50
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:46
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 23:02
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 23:02
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 21:53
EPA 8260B	09/07/11		08/31/11	11:26	9/1/2011 04:16
EPA 8270D	08/31/11	10/10/11	08/31/11	11:00	9/13/2011 04:38
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/30/11	17:08	9/1/2011 08:37

Client ID: Van Buskirk (Haney)	Lab ID: C109983-12	Sampled: 08/24/11 16:35	Received: 08/26/11 10:30

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12		08/30/11	10:08	8/31/2011 10:45
EPA 6020A	02/20/12		08/30/11	10:16	9/17/2011 14:53
EPA 7470A	09/21/11		08/30/11	10:01	8/31/2011 13:49
EPA 8081B	08/31/11	10/09/11	08/30/11	07:13	9/2/2011 23:15
EPA 8082A	08/23/12	08/23/12	08/30/11	07:20	9/2/2011 23:15
EPA 8151A	08/31/11	10/07/11	08/28/11	13:00	8/30/2011 22:19
EPA 8260B	09/07/11		08/31/11	11:26	9/1/2011 04:45
EPA 8270D	08/31/11	10/10/11	08/31/11	11:00	9/13/2011 05:04
SM18 4500-S D	08/31/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/07/11		08/30/11	17:08	9/1/2011 08:39

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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: MW-1 **Lab ID: C109983-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,2-Dichlorobenzene	0.72	J	1	0.11	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	8.6		1	0.79	1.0	1	ug/L	EPA 8260B	
Barium - Total	59.0	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	0.97	J	1	0.68	1.0	1	ug/L	EPA 8260B	
Chlorobenzene	10		1	0.74	1.0	3	ug/L	EPA 8260B	
Chromium - Total	5.15	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	30.2		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	3.19	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	12.7	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Total	2.34	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Total	2.76	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Tin - Total	6.34	J	1	2.10	10.0	100	ug/L	EPA 6010C	
Zinc - Total	6.51	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: MW-2 **Lab ID: C109983-02**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	0.69	J	1	0.080	1.0	5	ug/L	EPA 8260B	
Arsenic - Total	3.29	JB	1	2.80	10.0	10	ug/L	EPA 6010C	J
Barium - Total	166		1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total	0.804	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chromium - Total	4.31	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	0.82	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	130		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	6.14	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total	5.36	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	52.2		1	1.80	10.0	50	ug/L	EPA 6010C	
Silver - Total	2.21	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Thallium - Total	0.766	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Vanadium - Total	1.93	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	62.0		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: MW-2R **Lab ID: C109983-03**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	7.94	JB	1	2.80	10.0	10	ug/L	EPA 6010C	J
Barium - Total	33.3	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total	0.100	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Cobalt - Total	13.3		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	2.79	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Dinoseb	0.46	J	1	0.32	0.50	1	ug/L	EPA 8151A	
Nickel - Total	13.3	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Thallium - Total	0.181	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Zinc - Total	38.6		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: MW-3 **Lab ID: C109983-04**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	211		1	1.00	10.0	100	ug/L	EPA 6010C	
Cobalt - Total	27.7		1	1.10	10.0	10	ug/L	EPA 6010C	
Dichlorodifluoromethane	0.75	J	1	0.56	1.0	5	ug/L	EPA 8260B	
Silver - Total	3.81	J	1	1.90	10.0	10	ug/L	EPA 6010C	

Client ID: MW-4R **Lab ID: C109983-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	0.46	J	1	0.080	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	3.8		1	0.79	1.0	1	ug/L	EPA 8260B	
2,4-D	0.53	J	1	0.15	0.50	2	ug/L	EPA 8151A	
3 & 4-Methylphenol	1.7	J	1	1.6	10	10	ug/L	EPA 8270D	
Barium - Total	101		1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	1.6		1	0.68	1.0	1	ug/L	EPA 8260B	
Chromium - Total	3.09	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	3.1	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	2.18	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Selenium - Total	10.4		1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Total	3.30	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Vinyl chloride	1.6		1	0.60	1.0	1	ug/L	EPA 8260B	
Zinc - Total	32.4		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: MW-5 **Lab ID: C109983-06**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,2-Dichlorobenzene	0.71	J	1	0.11	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	13		1	0.79	1.0	1	ug/L	EPA 8260B	
Barium - Total	43.9	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	0.87	J	1	0.68	1.0	1	ug/L	EPA 8260B	
Beryllium - Total	0.462	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chlorobenzene	13		1	0.74	1.0	3	ug/L	EPA 8260B	
Chromium - Total	3.78	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	2.8	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	4.23	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Nickel - Total	10.9	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Total	4.51	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Total	1.93	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Tin - Total	2.87	J	1	2.10	10.0	100	ug/L	EPA 6010C	
Zinc - Total	17.4		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: MW-6 **Lab ID: C109983-07**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,4-Dichlorobenzene	11		1	0.79	1.0	1	ug/L	EPA 8260B	
Acetone	8.3	J	1	1.2	5.0	100	ug/L	EPA 8260B	
Barium - Total	33.3	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	1.5		1	0.68	1.0	1	ug/L	EPA 8260B	
Bis(2-ethylhexyl)phthalate	2.2	JB	1	1.7	5.0	15	ug/L	EPA 8270D	B
Chlorobenzene	6.5		1	0.74	1.0	3	ug/L	EPA 8260B	
Chromium - Total	2.24	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	2.5	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	28.5		1	1.10	10.0	10	ug/L	EPA 6010C	
Dibenzofuran	3.4	J	1	1.4	10	10	ug/L	EPA 8270D	
Naphthalene	1.8	J	1	0.46	1.0	10	ug/L	EPA 8260B	
Silver - Total	2.34	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Zinc - Total	17.7		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: MW-6R **Lab ID: C109983-08**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	35.5	J	1	1.00	10.0	100	ug/L	EPA 6010C	

Client ID: MW-6R **Lab ID: C109983-08**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Beryllium - Total	0.521	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Bis(2-ethylhexyl)phthalate	7.5	JB	1	1.7	5.0	15	ug/L	EPA 8270D	B
Chromium - Total	2.35	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	1.62	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	3.21	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	4.12	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Tin - Total	2.51	J	1	2.10	10.0	100	ug/L	EPA 6010C	
Vanadium - Total	1.74	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	9.89	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: MW-7 **Lab ID: C109983-09**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,4-Dichlorobenzene	1.0		1	0.79	1.0	1	ug/L	EPA 8260B	
Arsenic - Total	3.08	JB	1	2.80	10.0	10	ug/L	EPA 6010C	J
Barium - Total	52.5	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Bis(2-ethylhexyl)phthalate	5.9	JB	1	1.7	5.0	15	ug/L	EPA 8270D	B
Chlorobenzene	0.80	J	1	0.74	1.0	3	ug/L	EPA 8260B	
Chromium - Total	1.79	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	3.43	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Silver - Total	2.67	J	1	1.90	10.0	10	ug/L	EPA 6010C	

Client ID: Pendergrass **Lab ID: C109983-10**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	6.94	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Bis(2-ethylhexyl)phthalate	2.3	JB	1	1.7	5.0	15	ug/L	EPA 8270D	B
Copper - Total	22.9		1	1.60	10.0	10	ug/L	EPA 6010C	
Zinc - Total	20.7		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: Solesbee **Lab ID: C109983-11**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	2.16	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Bis(2-ethylhexyl)phthalate	5.8	JB	1	1.7	5.0	15	ug/L	EPA 8270D	B

Client ID: Van Buskirk (Haney) **Lab ID: C109983-12**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	27.0	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total	0.139	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Bis(2-ethylhexyl)phthalate	4.8	JB	1	1.7	5.0	15	ug/L	EPA 8270D	B
Copper - Total	4.25	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Zinc - Total	14.9		1	3.80	10.0	10	ug/L	EPA 6010C	

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ANALYTICAL RESULTS

Description: MW-1 **Lab Sample ID:** C109983-01 **Received:** 08/26/11 10:30

Matrix: Ground Water **Sampled:** 08/25/11 08:30 **Work Order:** C109983

Project: Cherokee Closed **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 14:01	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 14:01	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 14:01	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 14:01	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 14:01	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 14:01	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 14:01	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
1,2-Dichlorobenzene [95-50-1] ^	**0.72**	J	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 14:01	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 14:01	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
1,4-Dichlorobenzene [106-46-7] ^	**8.6**		ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 14:01	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 14:01	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 14:01	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 14:01	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 14:01	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 14:01	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 14:01	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 14:01	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 14:01	jkg	
Benzene [71-43-2] ^	**0.97**	J	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 14:01	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 14:01	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 14:01	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 14:01	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Chlorobenzene [108-90-7] ^	**10**		ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 14:01	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 14:01	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 14:01	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 14:01	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 14:01	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 14:01	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 14:01	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 14:01	jkg	

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Description: MW-1 | **Lab Sample ID:** C109983-01 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 08:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/01/11 14:01	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 14:01	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	09/01/11 14:01	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 14:01	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 14:01	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 14:01	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 14:01	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 14:01	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 14:01	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 14:01	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 14:01	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 14:01	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*41*	*1*	*50.0*	*83 %*	*51-122*	*1H31024*	*EPA 8260B*	*09/01/11 14:01*	*jkg*	
Dibromofluoromethane	*40*	*1*	*50.0*	*80 %*	*68-117*	*1H31024*	*EPA 8260B*	*09/01/11 14:01*	*jkg*	
Toluene-d8	*42*	*1*	*50.0*	*84 %*	*69-110*	*1H31024*	*EPA 8260B*	*09/01/11 14:01*	*jkg*	

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Description: MW-1 | **Lab Sample ID:** C109983-01 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 08:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 00:23	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 00:23	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 00:23	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 00:23	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 00:23	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 00:23	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 00:23	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 00:23	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 00:23	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 00:23	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 00:23	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 00:23	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 00:23	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 00:23	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 00:23	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 00:23	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 00:23	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 00:23	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 00:23	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 00:23	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:23	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 00:23	DFM	

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Description: MW-1 | **Lab Sample ID:** C109983-01 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 08:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 00:23	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	1.7	U	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 00:23	DFM	
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 00:23	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 00:23	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 00:23	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 00:23	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 00:23	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 00:23	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 00:23	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 00:23	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 00:23	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 00:23	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 00:23	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 00:23	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 00:23	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 00:23	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 00:23	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	

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Description: MW-1 | **Lab Sample ID:** C109983-01 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 08:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 00:23	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:23	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 00:23	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 00:23	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:23	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:23	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 00:23	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:23	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 00:23	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*98*	*1*	*100*	*98 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 00:23*	*DFM*	
2-Fluorobiphenyl	*41*	*1*	*50.0*	*82 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 00:23*	*DFM*	
2-Fluorophenol	*62*	*1*	*100*	*62 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 00:23*	*DFM*	
Nitrobenzene-d5	*40*	*1*	*50.0*	*80 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 00:23*	*DFM*	
Phenol-d5	*54*	*1*	*100*	*54 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 00:23*	*DFM*	
Terphenyl-d14	*45*	*1*	*50.0*	*91 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 00:23*	*DFM*	

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Description: MW-1 | **Lab Sample ID:** C109983-01 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 08:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 20:36	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 20:36	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 20:36	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 20:36	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 20:36	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 20:36	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 20:36	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 20:36	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 20:36	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 20:36	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 20:36	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 20:36	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 20:36	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 20:36	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 20:36	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 20:36	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 20:36	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 20:36	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 20:36	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 20:36	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 20:36	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*101 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 20:36*	*MSZ*	
Decachlorobiphenyl	*1.0*	*1*	*1.00*	*103 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 20:36*	*MSZ*	

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Description: MW-1 | **Lab Sample ID:** C109983-01 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 08:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 20:36	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 20:36	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 20:36	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 20:36	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 20:36	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 20:36	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*101 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 20:36*	*MSZ*	
Decachlorobiphenyl	*1.0*	*1*	*1.00*	*103 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 20:36*	*MSZ*	

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Description:	MW-1	**Lab Sample ID:**	C109983-01	**Received:**	08/26/11 10:30
Matrix:	Ground Water	**Sampled:**	08/25/11 08:30	**Work Order:**	C109983
Project:	Cherokee Closed	**Sampled By:**	Jonathan Pfohl		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:10	NLH	

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Description: MW-1 | **Lab Sample ID:** C109983-01 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 08:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/17/11 14:07	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:02	JDH	
Barium [7440-39-3] ^	**59.0**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:02	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:02	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:02	JDH	
Chromium [7440-47-3] ^	**5.15**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:02	JDH	
Cobalt [7440-48-4] ^	**30.2**		ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:02	JDH	
Copper [7440-50-8] ^	**3.19**	J	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:02	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:02	JDH	
Nickel [7440-02-0] ^	**12.7**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:02	JDH	
Selenium [7782-49-2] ^	**2.34**	J	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:07	VLO	
Silver [7440-22-4] ^	**2.76**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:02	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:07	VLO	
Tin [7440-31-5] ^	**6.34**	J	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:02	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:02	JDH	
Zinc [7440-66-6] ^	**6.51**	J	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:02	JDH	

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Description: MW-1 | **Lab Sample ID:** C109983-01 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 08:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/07/11 12:16	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: MW-1
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-01
Sampled: 08/25/11 08:30
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 17:31	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 17:31	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 17:31	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 17:31	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 17:31	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.4*	*1*	*2.00*	*68 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 17:31*	*RGG*	

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

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Description: MW-2 | **Lab Sample ID:** C109983-02 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 14:31	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
1,1-Dichloroethane [75-34-3] ^	**0.69**	J	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 14:31	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 14:31	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 14:31	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 14:31	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 14:31	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 14:31	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 14:31	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 14:31	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 14:31	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 14:31	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 14:31	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 14:31	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 14:31	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 14:31	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 14:31	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 14:31	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 14:31	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 14:31	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	**0.82**	J	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 14:31	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 14:31	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 14:31	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 14:31	jkg	

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Description: MW-2 | **Lab Sample ID:** C109983-02 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/01/11 14:31	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 14:31	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 14:31	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 14:31	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 14:31	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 14:31	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 14:31	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 14:31	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 14:31	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 14:31	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*41*	*1*	*50.0*	*82 %*	*51-122*	*1H31024*	*EPA 8260B*	*09/01/11 14:31*	*jkg*	
Dibromofluoromethane	*40*	*1*	*50.0*	*81 %*	*68-117*	*1H31024*	*EPA 8260B*	*09/01/11 14:31*	*jkg*	
Toluene-d8	*42*	*1*	*50.0*	*83 %*	*69-110*	*1H31024*	*EPA 8260B*	*09/01/11 14:31*	*jkg*	

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Description: MW-2 | **Lab Sample ID:** C109983-02 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 00:48	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 00:48	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 00:48	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 00:48	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 00:48	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 00:48	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 00:48	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 00:48	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 00:48	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 00:48	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 00:48	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 00:48	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 00:48	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 00:48	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 00:48	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 00:48	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 00:48	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 00:48	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 00:48	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 00:48	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:48	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 00:48	DFM	

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Description: MW-2 | **Lab Sample ID:** C109983-02 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 00:48	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	1.7	U	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 00:48	DFM	
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 00:48	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 00:48	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 00:48	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 00:48	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 00:48	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 00:48	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 00:48	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 00:48	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 00:48	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 00:48	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 00:48	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 00:48	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 00:48	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 00:48	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 00:48	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	

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Description: MW-2 | **Lab Sample ID:** C109983-02 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 00:48	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 00:48	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 00:48	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 00:48	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 00:48	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 00:48	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 00:48	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 00:48	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 00:48	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*82*	*1*	*100*	*82 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 00:48*	*DFM*	
2-Fluorobiphenyl	*39*	*1*	*50.0*	*79 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 00:48*	*DFM*	
2-Fluorophenol	*60*	*1*	*100*	*60 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 00:48*	*DFM*	
Nitrobenzene-d5	*37*	*1*	*50.0*	*75 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 00:48*	*DFM*	
Phenol-d5	*48*	*1*	*100*	*48 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 00:48*	*DFM*	
Terphenyl-d14	*41*	*1*	*50.0*	*83 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 00:48*	*DFM*	

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Description: MW-2 | **Lab Sample ID:** C109983-02 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 20:49	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 20:49	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 20:49	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 20:49	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 20:49	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 20:49	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 20:49	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 20:49	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 20:49	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 20:49	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 20:49	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 20:49	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 20:49	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 20:49	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 20:49	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 20:49	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 20:49	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 20:49	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 20:49	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 20:49	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 20:49	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*102 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 20:49*	*MSZ*	
Decachlorobiphenyl	*0.88*	*1*	*1.00*	*88 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 20:49*	*MSZ*	

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Description: MW-2 | **Lab Sample ID:** C109983-02 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 20:49	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 20:49	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 20:49	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 20:49	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 20:49	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 20:49	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*102 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 20:49*	*MSZ*	
Decachlorobiphenyl	*0.88*	*1*	*1.00*	*88 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 20:49*	*MSZ*	

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Description:	MW-2	**Lab Sample ID:**	C109983-02	**Received:**	08/26/11 10:30
Matrix:	Ground Water	**Sampled:**	08/24/11 09:00	**Work Order:**	C109983
Project:	Cherokee Closed	**Sampled By:**	Jonathan Pfohl		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:13	NLH	

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Description: MW-2 | **Lab Sample ID:** C109983-02 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/17/11 14:10	VLO	
Arsenic [7440-38-2] ^	**3.29**	JB	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:17	JDH	J
Barium [7440-39-3] ^	**166**		ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:17	JDH	
Beryllium [7440-41-7] ^	**0.804**	J	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:17	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:17	JDH	
Chromium [7440-47-3] ^	**4.31**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:17	JDH	
Cobalt [7440-48-4] ^	**130**		ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:17	JDH	
Copper [7440-50-8] ^	**6.14**	J	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:17	JDH	
Lead [7439-92-1] ^	**5.36**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:17	JDH	
Nickel [7440-02-0] ^	**52.2**		ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:17	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:10	VLO	
Silver [7440-22-4] ^	**2.21**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:17	JDH	
Thallium [7440-28-0] ^	**0.766**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:10	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:17	JDH	
Vanadium [7440-62-2] ^	**1.93**	J	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:17	JDH	
Zinc [7440-66-6] ^	**62.0**		ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:17	JDH	

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Description: MW-2
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-02
Sampled: 08/24/11 09:00
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:17	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: MW-2 | **Lab Sample ID:** C109983-02 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 17:57	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 17:57	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 17:57	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 17:57	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 17:57	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.6*	*1*	*2.00*	*80 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 17:57*	*RGG*	

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

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Description: MW-2R | **Lab Sample ID:** C109983-03 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 15:10 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 15:00	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 15:00	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 15:00	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 15:00	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 15:00	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 15:00	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 15:00	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 15:00	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 15:00	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 15:00	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 15:00	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 15:00	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 15:00	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 15:00	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 15:00	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 15:00	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 15:00	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 15:00	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 15:00	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 15:00	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 15:00	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 15:00	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 15:00	jkg	

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Description: MW-2R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-03
Sampled: 08/24/11 15:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/01/11 15:00	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 15:00	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 15:00	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 15:00	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 15:00	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 15:00	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 15:00	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 15:00	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 15:00	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 15:00	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*41*	*1*	*50.0*	*82 %*	*51-122*	*1H31024*	*EPA 8260B*	*09/01/11 15:00*	*jkg*	
Dibromofluoromethane	*40*	*1*	*50.0*	*79 %*	*68-117*	*1H31024*	*EPA 8260B*	*09/01/11 15:00*	*jkg*	
Toluene-d8	*41*	*1*	*50.0*	*83 %*	*69-110*	*1H31024*	*EPA 8260B*	*09/01/11 15:00*	*jkg*	

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Description: MW-2R | **Lab Sample ID:** C109983-03 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 15:10 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 01:14	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 01:14	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 01:14	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 01:14	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 01:14	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 01:14	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 01:14	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 01:14	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 01:14	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 01:14	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 01:14	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 01:14	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 01:14	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 01:14	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 01:14	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 01:14	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 01:14	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 01:14	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 01:14	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 01:14	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:14	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 01:14	DFM	

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Description: MW-2R | **Lab Sample ID:** C109983-03 | **Received:** 08/26/11 10:30
Matrix: Ground Water | **Sampled:** 08/24/11 15:10 | **Work Order:** C109983
Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 01:14	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	1.7	U	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 01:14	DFM	
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 01:14	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 01:14	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 01:14	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 01:14	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 01:14	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 01:14	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 01:14	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 01:14	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 01:14	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 01:14	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 01:14	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 01:14	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 01:14	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 01:14	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 01:14	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	

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Description: MW-2R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-03
Sampled: 08/24/11 15:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 01:14	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:14	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 01:14	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 01:14	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:14	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:14	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 01:14	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:14	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 01:14	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*93*	*1*	*100*	*93 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 01:14*	*DFM*	
2-Fluorobiphenyl	*43*	*1*	*50.0*	*85 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 01:14*	*DFM*	
2-Fluorophenol	*70*	*1*	*100*	*70 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 01:14*	*DFM*	
Nitrobenzene-d5	*41*	*1*	*50.0*	*82 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 01:14*	*DFM*	
Phenol-d5	*62*	*1*	*100*	*62 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 01:14*	*DFM*	
Terphenyl-d14	*48*	*1*	*50.0*	*95 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 01:14*	*DFM*	

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Description: MW-2R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-03
Sampled: 08/24/11 15:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 21:03	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 21:03	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 21:03	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 21:03	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 21:03	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 21:03	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 21:03	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 21:03	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 21:03	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 21:03	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 21:03	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 21:03	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 21:03	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 21:03	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 21:03	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 21:03	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 21:03	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 21:03	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 21:03	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 21:03	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 21:03	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*106 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 21:03*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*106 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 21:03*	*MSZ*	

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Description: MW-2R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-03
Sampled: 08/24/11 15:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 21:03	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 21:03	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 21:03	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 21:03	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 21:03	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 21:03	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*106 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 21:03*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*106 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 21:03*	*MSZ*	

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Description: MW-2R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-03
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Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:16	NLH	

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Description: MW-2R
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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	09/17/11 14:21	VLO	
Arsenic [7440-38-2] ^	**7.94**	JB	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:28	JDH	J
Barium [7440-39-3] ^	**33.3**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:28	JDH	
Beryllium [7440-41-7] ^	**0.100**	J	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:28	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:28	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:28	JDH	
Cobalt [7440-48-4] ^	**13.3**		ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:28	JDH	
Copper [7440-50-8] ^	**2.79**	J	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:28	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:28	JDH	
Nickel [7440-02-0] ^	**13.3**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:28	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:21	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:28	JDH	
Thallium [7440-28-0] ^	**0.181**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:21	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:28	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:28	JDH	
Zinc [7440-66-6] ^	**38.6**		ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:28	JDH	

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Description: MW-2R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-03
Sampled: 08/24/11 15:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:19	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: MW-2R
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Lab Sample ID: C109983-03
Sampled: 08/24/11 15:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 18:23	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 18:23	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 18:23	RGG	
Dinoseb [88-85-7] ^	**0.46**	J	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 18:23	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 18:23	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.7*	*1*	*2.00*	*83 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 18:23*	*RGG*	

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

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Description: MW-3 | **Lab Sample ID:** C109983-04 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 12:15 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 15:30	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 15:30	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 15:30	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 15:30	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 15:30	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 15:30	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 15:30	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 15:30	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 15:30	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 15:30	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 15:30	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 15:30	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 15:30	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 15:30	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 15:30	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 15:30	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 15:30	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 15:30	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 15:30	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 15:30	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 15:30	jkg	
Dichlorodifluoromethane [75-71-8] ^	**0.75**	J	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 15:30	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 15:30	jkg	

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Description: MW-3 | **Lab Sample ID:** C109983-04 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 12:15 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/01/11 15:30	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 15:30	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 15:30	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 15:30	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 15:30	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 15:30	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 15:30	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 15:30	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 15:30	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 15:30	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*42*	*1*	*50.0*	*84 %*	*51-122*	*1H31024*	*EPA 8260B*	*09/01/11 15:30*	*jkg*	
Dibromofluoromethane	*40*	*1*	*50.0*	*79 %*	*68-117*	*1H31024*	*EPA 8260B*	*09/01/11 15:30*	*jkg*	
Toluene-d8	*41*	*1*	*50.0*	*83 %*	*69-110*	*1H31024*	*EPA 8260B*	*09/01/11 15:30*	*jkg*	

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Description: MW-3 | **Lab Sample ID:** C109983-04 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 12:15 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 01:39	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 01:39	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 01:39	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 01:39	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 01:39	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 01:39	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 01:39	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 01:39	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 01:39	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 01:39	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 01:39	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 01:39	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 01:39	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 01:39	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 01:39	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 01:39	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 01:39	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 01:39	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 01:39	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 01:39	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:39	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 01:39	DFM	

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Description: MW-3 | **Lab Sample ID:** C109983-04 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 12:15 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 01:39	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	1.7	U	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 01:39	DFM	
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 01:39	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 01:39	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 01:39	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 01:39	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 01:39	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 01:39	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 01:39	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 01:39	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 01:39	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 01:39	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 01:39	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 01:39	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 01:39	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 01:39	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 01:39	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	

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Description: MW-3 | **Lab Sample ID:** C109983-04 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 12:15 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 01:39	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 01:39	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 01:39	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 01:39	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 01:39	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 01:39	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 01:39	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 01:39	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 01:39	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*99*	*1*	*100*	*99 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 01:39*	*DFM*	
2-Fluorobiphenyl	*43*	*1*	*50.0*	*86 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 01:39*	*DFM*	
2-Fluorophenol	*66*	*1*	*100*	*66 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 01:39*	*DFM*	
Nitrobenzene-d5	*42*	*1*	*50.0*	*84 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 01:39*	*DFM*	
Phenol-d5	*53*	*1*	*100*	*53 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 01:39*	*DFM*	
Terphenyl-d14	*46*	*1*	*50.0*	*92 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 01:39*	*DFM*	

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Description: MW-3 | **Lab Sample ID:** C109983-04 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 12:15 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 21:16	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 21:16	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 21:16	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 21:16	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 21:16	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 21:16	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 21:16	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 21:16	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 21:16	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 21:16	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 21:16	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 21:16	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 21:16	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 21:16	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 21:16	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 21:16	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 21:16	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 21:16	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 21:16	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 21:16	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 21:16	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*107 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 21:16*	*MSZ*	
Decachlorobiphenyl	*0.95*	*1*	*1.00*	*95 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 21:16*	*MSZ*	

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Description: MW-3 | **Lab Sample ID:** C109983-04 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 12:15 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 21:16	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 21:16	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 21:16	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 21:16	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 21:16	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 21:16	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*107 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 21:16*	*MSZ*	
Decachlorobiphenyl	*0.95*	*1*	*1.00*	*95 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 21:16*	*MSZ*	

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Description:	MW-3	**Lab Sample ID:**	C109983-04	**Received:**	08/26/11 10:30
Matrix:	Ground Water	**Sampled:**	08/24/11 12:15	**Work Order:**	C109983
Project:	Cherokee Closed	**Sampled By:**	Jonathan Pfohl		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:19	NLH	

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Description: MW-3 | **Lab Sample ID:** C109983-04 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 12:15 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/17/11 14:25	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:29	JDH	
Barium [7440-39-3] ^	**211**		ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:29	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:29	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:29	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:29	JDH	
Cobalt [7440-48-4] ^	**27.7**		ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:29	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:29	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:29	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:29	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:25	VLO	
Silver [7440-22-4] ^	**3.81**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:29	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:25	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:29	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:29	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:29	JDH	

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Description: MW-3
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-04
Sampled: 08/24/11 12:15
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:21	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: MW-3 | **Lab Sample ID:** C109983-04 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 12:15 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 18:49	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 18:49	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 18:49	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 18:49	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 18:49	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.6*	*1*	*2.00*	*81 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 18:49*	*RGG*	

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

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Description: MW-4R | **Lab Sample ID:** C109983-05 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 11:25 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 01:22	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
1,1-Dichloroethane [75-34-3] ^	**0.46**	J	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 01:22	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 01:22	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**3.8**		ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 01:22	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 01:22	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 01:22	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 01:22	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 01:22	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 01:22	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 01:22	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 01:22	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 01:22	JKG	
Benzene [71-43-2] ^	**1.6**		ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 01:22	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 01:22	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 01:22	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 01:22	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 01:22	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 01:22	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 01:22	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**3.1**	J	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 01:22	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 01:22	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 01:22	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 01:22	JKG	

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Description: MW-4R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-05
Sampled: 08/24/11 11:25
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/01/11 01:22	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 01:22	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 01:22	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 01:22	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 01:22	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 01:22	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 01:22	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 01:22	JKG	
Vinyl chloride [75-01-4] ^	**1.6**		ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 01:22	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 01:22	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*95 %*	*51-122*	*1H31025*	*EPA 8260B*	*09/01/11 01:22*	*JKG*	
Dibromofluoromethane	*45*	*1*	*50.0*	*90 %*	*68-117*	*1H31025*	*EPA 8260B*	*09/01/11 01:22*	*JKG*	
Toluene-d8	*47*	*1*	*50.0*	*94 %*	*69-110*	*1H31025*	*EPA 8260B*	*09/01/11 01:22*	*JKG*	

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Description: MW-4R | **Lab Sample ID:** C109983-05 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 11:25 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 02:05	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 02:05	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 02:05	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 02:05	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 02:05	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:05	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 02:05	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 02:05	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:05	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 02:05	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	**1.7**	J	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 02:05	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 02:05	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 02:05	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 02:05	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 02:05	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 02:05	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 02:05	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 02:05	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 02:05	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 02:05	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:05	DFM	QV-02

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Description: MW-4R | **Lab Sample ID:** C109983-05 | **Received:** 08/26/11 10:30
Matrix: Ground Water | **Sampled:** 08/24/11 11:25 | **Work Order:** C109983
Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 02:05	DFM	
Benzo(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 02:05	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	1.7	U	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 02:05	DFM	
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 02:05	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 02:05	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:05	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 02:05	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 02:05	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 02:05	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 02:05	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 02:05	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 02:05	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 02:05	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 02:05	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 02:05	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:05	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 02:05	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 02:05	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	

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Description: MW-4R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-05
Sampled: 08/24/11 11:25
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/13/11 02:05	DFM	
o-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 02:05	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:05	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 02:05	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 02:05	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:05	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:05	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 02:05	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:05	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 02:05	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*97*	*1*	*100*	*97 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 02:05*	*DFM*	
2-Fluorobiphenyl	*41*	*1*	*50.0*	*83 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 02:05*	*DFM*	
2-Fluorophenol	*64*	*1*	*100*	*64 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 02:05*	*DFM*	
Nitrobenzene-d5	*39*	*1*	*50.0*	*79 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 02:05*	*DFM*	
Phenol-d5	*51*	*1*	*100*	*51 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 02:05*	*DFM*	
Terphenyl-d14	*46*	*1*	*50.0*	*92 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 02:05*	*DFM*	

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Description: MW-4R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-05
Sampled: 08/24/11 11:25
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 21:42	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 21:42	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 21:42	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 21:42	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 21:42	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 21:42	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 21:42	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 21:42	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 21:42	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 21:42	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 21:42	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 21:42	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 21:42	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 21:42	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 21:42	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 21:42	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 21:42	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 21:42	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 21:42	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 21:42	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 21:42	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*107 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 21:42*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*106 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 21:42*	*MSZ*	

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Description: MW-4R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-05
Sampled: 08/24/11 11:25
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 21:42	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 21:42	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 21:42	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 21:42	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 21:42	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 21:42	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*107 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 21:42*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*106 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 21:42*	*MSZ*	

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Description: MW-4R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-05
Sampled: 08/24/11 11:25
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:22	NLH	

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Description: MW-4R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-05
Sampled: 08/24/11 11:25
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/17/11 14:29	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:31	JDH	
Barium [7440-39-3] ^	**101**		ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:31	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:31	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:31	JDH	
Chromium [7440-47-3] ^	**3.09**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:31	JDH	
Cobalt [7440-48-4] ^	**2.18**	J	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:31	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:31	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:31	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:31	JDH	
Selenium [7782-49-2] ^	**10.4**		ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:29	VLO	
Silver [7440-22-4] ^	**3.30**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:31	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:29	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:31	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:31	JDH	
Zinc [7440-66-6] ^	**32.4**		ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:31	JDH	

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Description: MW-4R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-05
Sampled: 08/24/11 11:25
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:23	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: MW-4R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-05
Sampled: 08/24/11 11:25
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 19:16	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 19:16	RGG	
2,4-D [94-75-7] ^	**0.53**	J	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 19:16	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 19:16	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 19:16	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.5*	*1*	*2.00*	*73 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 19:16*	*RGG*	

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

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Description: MW-5 | **Lab Sample ID:** C109983-06 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 10:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 01:51	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 01:51	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 01:51	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
1,2-Dichlorobenzene [95-50-1] ^	**0.71**	J	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**13**		ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 01:51	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 01:51	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 01:51	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 01:51	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 01:51	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 01:51	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 01:51	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 01:51	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 01:51	JKG	
Benzene [71-43-2] ^	**0.87**	J	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 01:51	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 01:51	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 01:51	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 01:51	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Chlorobenzene [108-90-7] ^	**13**		ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 01:51	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 01:51	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 01:51	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**2.8**	J	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 01:51	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 01:51	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 01:51	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 01:51	JKG	

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Description: MW-5 | **Lab Sample ID:** C109983-06 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 10:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/01/11 01:51	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 01:51	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 01:51	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 01:51	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 01:51	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 01:51	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 01:51	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 01:51	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 01:51	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 01:51	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*51-122*	*1H31025*	*EPA 8260B*	*09/01/11 01:51*	*JKG*	
Dibromofluoromethane	*45*	*1*	*50.0*	*89 %*	*68-117*	*1H31025*	*EPA 8260B*	*09/01/11 01:51*	*JKG*	
Toluene-d8	*46*	*1*	*50.0*	*93 %*	*69-110*	*1H31025*	*EPA 8260B*	*09/01/11 01:51*	*JKG*	

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Description: MW-5 | **Lab Sample ID:** C109983-06 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 10:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 02:31	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 02:31	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 02:31	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 02:31	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 02:31	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:31	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 02:31	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 02:31	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:31	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 02:31	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 02:31	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 02:31	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 02:31	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 02:31	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 02:31	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 02:31	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 02:31	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 02:31	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 02:31	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 02:31	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:31	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 02:31	DFM	

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Description: MW-5 | **Lab Sample ID:** C109983-06 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 10:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 02:31	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	1.7	U	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 02:31	DFM	
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 02:31	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 02:31	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:31	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 02:31	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 02:31	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 02:31	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 02:31	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 02:31	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 02:31	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 02:31	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 02:31	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 02:31	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:31	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 02:31	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 02:31	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	

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Description: MW-5 | **Lab Sample ID:** C109983-06 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 10:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 02:31	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:31	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 02:31	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 02:31	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:31	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:31	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 02:31	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:31	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 02:31	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*100*	*1*	*100*	*101 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 02:31*	*DFM*	
2-Fluorobiphenyl	*43*	*1*	*50.0*	*85 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 02:31*	*DFM*	
2-Fluorophenol	*65*	*1*	*100*	*65 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 02:31*	*DFM*	
Nitrobenzene-d5	*42*	*1*	*50.0*	*83 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 02:31*	*DFM*	
Phenol-d5	*52*	*1*	*100*	*52 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 02:31*	*DFM*	
Terphenyl-d14	*47*	*1*	*50.0*	*94 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 02:31*	*DFM*	

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Description: MW-5 | **Lab Sample ID:** C109983-06 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 10:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 21:56	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 21:56	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 21:56	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 21:56	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 21:56	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 21:56	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 21:56	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 21:56	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 21:56	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 21:56	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 21:56	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 21:56	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 21:56	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 21:56	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 21:56	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 21:56	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 21:56	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 21:56	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 21:56	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 21:56	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 21:56	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*103 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 21:56*	*MSZ*	
Decachlorobiphenyl	*0.98*	*1*	*1.00*	*98 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 21:56*	*MSZ*	

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Description: MW-5 | **Lab Sample ID:** C109983-06 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 10:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 21:56	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 21:56	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 21:56	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 21:56	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 21:56	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 21:56	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*103 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 21:56*	*MSZ*	
Decachlorobiphenyl	*0.98*	*1*	*1.00*	*98 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 21:56*	*MSZ*	

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Description:	MW-5	**Lab Sample ID:**	C109983-06	**Received:**	08/26/11 10:30
Matrix:	Ground Water	**Sampled:**	08/24/11 10:30	**Work Order:**	C109983
Project:	Cherokee Closed	**Sampled By:**	Jonathan Pfohl		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:24	NLH	

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Description: MW-5 | **Lab Sample ID:** C109983-06 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 10:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/17/11 14:32	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:34	JDH	
Barium [7440-39-3] ^	**43.9**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:34	JDH	
Beryllium [7440-41-7] ^	**0.462**	J	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:34	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:34	JDH	
Chromium [7440-47-3] ^	**3.78**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:34	JDH	
Cobalt [7440-48-4] ^	**4.23**	J	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:34	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:34	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:34	JDH	
Nickel [7440-02-0] ^	**10.9**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:34	JDH	
Selenium [7782-49-2] ^	**4.51**	J	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:32	VLO	
Silver [7440-22-4] ^	**1.93**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:34	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:32	VLO	
Tin [7440-31-5] ^	**2.87**	J	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:34	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:34	JDH	
Zinc [7440-66-6] ^	**17.4**		ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:34	JDH	

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Description: MW-5
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-06
Sampled: 08/24/11 10:30
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:25	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: MW-5 | **Lab Sample ID:** C109983-06 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 10:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 19:42	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 19:42	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 19:42	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 19:42	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 19:42	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.6*	*1*	*2.00*	*81 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 19:42*	*RGG*	

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

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Description: MW-6 | **Lab Sample ID:** C109983-07 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:45 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 02:20	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 02:20	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 02:20	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**11**		ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 02:20	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 02:20	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 02:20	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 02:20	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 02:20	JKG	
Acetone [67-64-1] ^	**8.3**	J	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 02:20	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 02:20	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 02:20	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 02:20	JKG	
Benzene [71-43-2] ^	**1.5**		ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 02:20	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 02:20	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 02:20	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 02:20	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Chlorobenzene [108-90-7] ^	**6.5**		ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 02:20	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 02:20	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 02:20	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**2.5**	J	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 02:20	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 02:20	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 02:20	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 02:20	JKG	

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Description: MW-6 | **Lab Sample ID:** C109983-07 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:45 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/01/11 02:20	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 02:20	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 02:20	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Naphthalene [91-20-3] ^	**1.8**	J	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 02:20	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 02:20	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 02:20	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 02:20	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 02:20	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 02:20	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 02:20	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*95 %*	*51-122*	*1H31025*	*EPA 8260B*	*09/01/11 02:20*	*JKG*	
Dibromofluoromethane	*46*	*1*	*50.0*	*91 %*	*68-117*	*1H31025*	*EPA 8260B*	*09/01/11 02:20*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*96 %*	*69-110*	*1H31025*	*EPA 8260B*	*09/01/11 02:20*	*JKG*	

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Description: MW-6 | **Lab Sample ID:** C109983-07 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:45 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 02:56	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 02:56	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 02:56	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 02:56	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 02:56	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:56	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 02:56	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 02:56	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:56	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 02:56	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 02:56	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 02:56	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 02:56	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 02:56	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 02:56	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 02:56	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 02:56	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 02:56	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 02:56	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 02:56	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:56	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 02:56	DFM	

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Description: MW-6 | **Lab Sample ID:** C109983-07 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:45 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 02:56	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	**2.2**	JB	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 02:56	DFM	B
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
Dibenzofuran [132-64-9] ^	**3.4**	J	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 02:56	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 02:56	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:56	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 02:56	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 02:56	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 02:56	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 02:56	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 02:56	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 02:56	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 02:56	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 02:56	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 02:56	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 02:56	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 02:56	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 02:56	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	

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Description: MW-6 | **Lab Sample ID:** C109983-07 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:45 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 02:56	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 02:56	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 02:56	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 02:56	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 02:56	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 02:56	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 02:56	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 02:56	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 02:56	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*94*	*1*	*100*	*94 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 02:56*	*DFM*	
2-Fluorobiphenyl	*42*	*1*	*50.0*	*84 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 02:56*	*DFM*	
2-Fluorophenol	*65*	*1*	*100*	*65 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 02:56*	*DFM*	
Nitrobenzene-d5	*40*	*1*	*50.0*	*81 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 02:56*	*DFM*	
Phenol-d5	*56*	*1*	*100*	*56 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 02:56*	*DFM*	
Terphenyl-d14	*44*	*1*	*50.0*	*87 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 02:56*	*DFM*	

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Description: MW-6 | **Lab Sample ID:** C109983-07 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:45 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 22:09	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 22:09	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 22:09	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 22:09	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 22:09	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 22:09	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 22:09	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 22:09	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 22:09	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 22:09	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 22:09	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 22:09	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 22:09	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 22:09	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 22:09	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 22:09	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 22:09	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 22:09	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 22:09	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 22:09	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 22:09	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.79*	*1*	*1.00*	*79 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 22:09*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*108 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 22:09*	*MSZ*	

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Description: MW-6
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-07
Sampled: 08/24/11 09:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 22:09	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 22:09	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 22:09	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 22:09	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 22:09	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 22:09	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.79*	*1*	*1.00*	*79 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 22:09*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*108 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 22:09*	*MSZ*	

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Description: MW-6
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-07
Sampled: 08/24/11 09:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:28	NLH	

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Description: MW-6 | **Lab Sample ID:** C109983-07 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 09:45 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/17/11 14:36	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:36	JDH	
Barium [7440-39-3] ^	**33.3**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:36	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:36	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:36	JDH	
Chromium [7440-47-3] ^	**2.24**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:36	JDH	
Cobalt [7440-48-4] ^	**28.5**		ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:36	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:36	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:36	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:36	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:36	VLO	
Silver [7440-22-4] ^	**2.34**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:36	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:36	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:36	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:36	JDH	
Zinc [7440-66-6] ^	**17.7**		ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:36	JDH	

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Description: MW-6
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-07
Sampled: 08/24/11 09:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:31	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: MW-6
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-07
Sampled: 08/24/11 09:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 20:08	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 20:08	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 20:08	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 20:08	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 20:08	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.9*	*1*	*2.00*	*93 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 20:08*	*RGG*	

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

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Description: MW-6R | **Lab Sample ID:** C109983-08 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 14:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 02:49	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 02:49	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 02:49	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 02:49	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 02:49	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 02:49	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 02:49	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 02:49	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 02:49	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 02:49	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 02:49	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 02:49	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 02:49	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 02:49	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 02:49	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 02:49	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 02:49	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 02:49	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 02:49	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 02:49	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 02:49	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 02:49	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 02:49	JKG	

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Description: MW-6R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-08
Sampled: 08/24/11 14:30
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/01/11 02:49	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 02:49	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 02:49	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 02:49	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 02:49	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 02:49	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 02:49	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 02:49	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 02:49	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 02:49	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*95 %*	*51-122*	*1H31025*	*EPA 8260B*	*09/01/11 02:49*	*JKG*	
Dibromofluoromethane	*44*	*1*	*50.0*	*89 %*	*68-117*	*1H31025*	*EPA 8260B*	*09/01/11 02:49*	*JKG*	
Toluene-d8	*47*	*1*	*50.0*	*93 %*	*69-110*	*1H31025*	*EPA 8260B*	*09/01/11 02:49*	*JKG*	

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Description: MW-6R | **Lab Sample ID:** C109983-08 | **Received:** 08/26/11 10:30
Matrix: Ground Water | **Sampled:** 08/24/11 14:30 | **Work Order:** C109983
Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 03:22	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 03:22	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 03:22	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 03:22	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 03:22	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 03:22	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 03:22	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 03:22	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 03:22	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 03:22	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 03:22	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 03:22	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 03:22	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 03:22	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 03:22	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 03:22	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 03:22	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 03:22	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 03:22	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 03:22	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:22	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 03:22	DFM	

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Description: MW-6R | **Lab Sample ID:** C109983-08 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 14:30 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 03:22	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	**7.5**	JB	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 03:22	DFM	B
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 03:22	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 03:22	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 03:22	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 03:22	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 03:22	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 03:22	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 03:22	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 03:22	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 03:22	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 03:22	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 03:22	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 03:22	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 03:22	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 03:22	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 03:22	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	

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Description: MW-6R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-08
Sampled: 08/24/11 14:30
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 03:22	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:22	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 03:22	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 03:22	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:22	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:22	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 03:22	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:22	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 03:22	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*79*	*1*	*100*	*79 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 03:22*	*DFM*	
2-Fluorobiphenyl	*38*	*1*	*50.0*	*76 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 03:22*	*DFM*	
2-Fluorophenol	*52*	*1*	*100*	*52 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 03:22*	*DFM*	
Nitrobenzene-d5	*35*	*1*	*50.0*	*69 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 03:22*	*DFM*	
Phenol-d5	*41*	*1*	*100*	*41 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 03:22*	*DFM*	
Terphenyl-d14	*42*	*1*	*50.0*	*85 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 03:22*	*DFM*	

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Description: MW-6R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-08
Sampled: 08/24/11 14:30
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 22:22	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 22:22	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 22:22	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 22:22	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 22:22	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 22:22	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 22:22	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 22:22	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 22:22	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 22:22	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 22:22	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 22:22	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 22:22	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 22:22	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 22:22	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 22:22	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 22:22	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 22:22	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 22:22	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 22:22	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 22:22	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*104 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 22:22*	*MSZ*	
Decachlorobiphenyl	*1.0*	*1*	*1.00*	*104 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 22:22*	*MSZ*	

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Description: MW-6R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-08
Sampled: 08/24/11 14:30
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 22:22	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 22:22	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 22:22	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 22:22	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 22:22	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 22:22	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*104 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 22:22*	*MSZ*	
Decachlorobiphenyl	*1.0*	*1*	*1.00*	*104 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 22:22*	*MSZ*	

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Description:	MW-6R	**Lab Sample ID:**	C109983-08	**Received:**	08/26/11 10:30
Matrix:	Ground Water	**Sampled:**	08/24/11 14:30	**Work Order:**	C109983
Project:	Cherokee Closed	**Sampled By:**	Jonathan Pfohl		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:32	NLH	

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Description: MW-6R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-08
Sampled: 08/24/11 14:30
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/17/11 14:39	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:38	JDH	
Barium [7440-39-3] ^	**35.5**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:38	JDH	
Beryllium [7440-41-7] ^	**0.521**	J	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:38	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:38	JDH	
Chromium [7440-47-3] ^	**2.35**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:38	JDH	
Cobalt [7440-48-4] ^	**1.62**	J	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:38	JDH	
Copper [7440-50-8] ^	**3.21**	J	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:38	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:38	JDH	
Nickel [7440-02-0] ^	**4.12**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:38	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:39	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:38	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:39	VLO	
Tin [7440-31-5] ^	**2.51**	J	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:38	JDH	
Vanadium [7440-62-2] ^	**1.74**	J	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:38	JDH	
Zinc [7440-66-6] ^	**9.89**	J	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:38	JDH	

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Description: MW-6R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-08
Sampled: 08/24/11 14:30
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:33	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: MW-6R
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-08
Sampled: 08/24/11 14:30
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 20:34	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 20:34	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 20:34	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 20:34	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 20:34	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*0.75*	*1*	*2.00*	*38 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 20:34*	*RGG*	*QS-05*

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

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Description: MW-7 | **Lab Sample ID:** C109983-09 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 03:18	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 03:18	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 03:18	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**1.0**		ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 03:18	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 03:18	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 03:18	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 03:18	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 03:18	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 03:18	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 03:18	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 03:18	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 03:18	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 03:18	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 03:18	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 03:18	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 03:18	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Chlorobenzene [108-90-7] ^	**0.80**	J	ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 03:18	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 03:18	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 03:18	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 03:18	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 03:18	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 03:18	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 03:18	JKG	

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Description: MW-7 | **Lab Sample ID:** C109983-09 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/01/11 03:18	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 03:18	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 03:18	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 03:18	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 03:18	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 03:18	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 03:18	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 03:18	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 03:18	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 03:18	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*51-122*	*1H31025*	*EPA 8260B*	*09/01/11 03:18*	*JKG*	
Dibromofluoromethane	*46*	*1*	*50.0*	*92 %*	*68-117*	*1H31025*	*EPA 8260B*	*09/01/11 03:18*	*JKG*	
Toluene-d8	*47*	*1*	*50.0*	*94 %*	*69-110*	*1H31025*	*EPA 8260B*	*09/01/11 03:18*	*JKG*	

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Description: MW-7 | **Lab Sample ID:** C109983-09 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 03:47	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 03:47	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 03:47	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 03:47	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 03:47	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 03:47	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 03:47	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 03:47	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 03:47	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 03:47	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 03:47	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 03:47	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 03:47	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 03:47	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 03:47	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 03:47	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 03:47	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 03:47	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 03:47	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 03:47	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:47	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 03:47	DFM	

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Description: MW-7 | **Lab Sample ID:** C109983-09 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 03:47	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	**5.9**	JB	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 03:47	DFM	B
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 03:47	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 03:47	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 03:47	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 03:47	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 03:47	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 03:47	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 03:47	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 03:47	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 03:47	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 03:47	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 03:47	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 03:47	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 03:47	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 03:47	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 03:47	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	

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Description: MW-7 | **Lab Sample ID:** C109983-09 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 03:47	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 03:47	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 03:47	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 03:47	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 03:47	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 03:47	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 03:47	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 03:47	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 03:47	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*94*	*1*	*100*	*94 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 03:47*	*DFM*	
2-Fluorobiphenyl	*42*	*1*	*50.0*	*85 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 03:47*	*DFM*	
2-Fluorophenol	*57*	*1*	*100*	*57 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 03:47*	*DFM*	
Nitrobenzene-d5	*38*	*1*	*50.0*	*76 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 03:47*	*DFM*	
Phenol-d5	*46*	*1*	*100*	*46 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 03:47*	*DFM*	
Terphenyl-d14	*47*	*1*	*50.0*	*94 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 03:47*	*DFM*	

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Description: MW-7 | **Lab Sample ID:** C109983-09 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 22:35	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 22:35	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 22:35	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 22:35	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 22:35	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 22:35	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 22:35	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 22:35	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 22:35	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 22:35	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 22:35	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 22:35	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 22:35	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 22:35	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 22:35	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 22:35	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 22:35	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 22:35	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 22:35	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 22:35	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 22:35	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*104 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 22:35*	*MSZ*	
Decachlorobiphenyl	*0.76*	*1*	*1.00*	*76 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 22:35*	*MSZ*	

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Description: MW-7 | **Lab Sample ID:** C109983-09 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 22:35	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 22:35	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 22:35	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 22:35	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 22:35	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 22:35	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*104 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 22:35*	*MSZ*	
Decachlorobiphenyl	*0.76*	*1*	*1.00*	*76 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 22:35*	*MSZ*	

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Description:	MW-7	**Lab Sample ID:**	C109983-09	**Received:**	08/26/11 10:30
Matrix:	Ground Water	**Sampled:**	08/25/11 09:00	**Work Order:**	C109983
Project:	Cherokee Closed	**Sampled By:**	Jonathan Pfohl		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:35	NLH	

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Description: MW-7 | **Lab Sample ID:** C109983-09 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/25/11 09:00 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/17/11 14:43	VLO	
Arsenic [7440-38-2] ^	**3.08**	JB	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:40	JDH	J
Barium [7440-39-3] ^	**52.5**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:40	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:40	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:40	JDH	
Chromium [7440-47-3] ^	**1.79**	J	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:40	JDH	
Cobalt [7440-48-4] ^	**3.43**	J	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:40	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:40	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:40	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:40	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:43	VLO	
Silver [7440-22-4] ^	**2.67**	J	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:40	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:43	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:40	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:40	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:40	JDH	

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Description: MW-7
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-09
Sampled: 08/25/11 09:00
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/07/11 12:18	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: MW-7
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-09
Sampled: 08/25/11 09:00
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 21:00	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 21:00	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 21:00	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 21:00	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 21:00	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.6*	*1*	*2.00*	*79 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 21:00*	*RGG*	

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

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Description: Pendergrass
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-10
Sampled: 08/24/11 15:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 03:47	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 03:47	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 03:47	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 03:47	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 03:47	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 03:47	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 03:47	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 03:47	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 03:47	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 03:47	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 03:47	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 03:47	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 03:47	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 03:47	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 03:47	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 03:47	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 03:47	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 03:47	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 03:47	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 03:47	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 03:47	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 03:47	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 03:47	JKG	

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Description: Pendergrass
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-10
Sampled: 08/24/11 15:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/01/11 03:47	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 03:47	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 03:47	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 03:47	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 03:47	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 03:47	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 03:47	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 03:47	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 03:47	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 03:47	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*51-122*	*1H31025*	*EPA 8260B*	*09/01/11 03:47*	*JKG*	
Dibromofluoromethane	*45*	*1*	*50.0*	*91 %*	*68-117*	*1H31025*	*EPA 8260B*	*09/01/11 03:47*	*JKG*	
Toluene-d8	*46*	*1*	*50.0*	*92 %*	*69-110*	*1H31025*	*EPA 8260B*	*09/01/11 03:47*	*JKG*	

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Description: Pendergrass
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-10
Sampled: 08/24/11 15:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/13/11 04:13	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 04:13	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 04:13	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 04:13	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 04:13	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 04:13	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 04:13	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 04:13	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 04:13	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 04:13	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 04:13	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 04:13	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 04:13	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 04:13	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 04:13	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 04:13	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 04:13	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 04:13	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 04:13	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 04:13	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:13	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 04:13	DFM	

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Description: Pendergrass
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-10
Sampled: 08/24/11 15:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 04:13	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	**2.3**	JB	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 04:13	DFM	B
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 04:13	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 04:13	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 04:13	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 04:13	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 04:13	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 04:13	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 04:13	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 04:13	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 04:13	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 04:13	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 04:13	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 04:13	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 04:13	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 04:13	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 04:13	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	

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Description: Pendergrass
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-10
Sampled: 08/24/11 15:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 04:13	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:13	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 04:13	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 04:13	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:13	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:13	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 04:13	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:13	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 04:13	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*84*	*1*	*100*	*84 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 04:13*	*DFM*	
2-Fluorobiphenyl	*39*	*1*	*50.0*	*79 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 04:13*	*DFM*	
2-Fluorophenol	*56*	*1*	*100*	*56 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 04:13*	*DFM*	
Nitrobenzene-d5	*36*	*1*	*50.0*	*72 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 04:13*	*DFM*	
Phenol-d5	*48*	*1*	*100*	*48 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 04:13*	*DFM*	
Terphenyl-d14	*43*	*1*	*50.0*	*85 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 04:13*	*DFM*	

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Description: Pendergrass
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-10
Sampled: 08/24/11 15:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 22:49	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 22:49	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 22:49	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 22:49	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 22:49	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 22:49	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 22:49	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 22:49	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 22:49	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 22:49	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 22:49	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 22:49	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 22:49	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 22:49	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 22:49	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 22:49	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 22:49	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 22:49	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 22:49	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 22:49	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 22:49	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*111 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 22:49*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*110 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 22:49*	*MSZ*	

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Description: Pendergrass
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-10
Sampled: 08/24/11 15:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 22:49	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 22:49	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 22:49	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 22:49	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 22:49	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 22:49	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*111 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 22:49*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*110 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 22:49*	*MSZ*	

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Description:	Pendergrass	**Lab Sample ID:**	C109983-10	**Received:**	08/26/11 10:30
Matrix:	Ground Water	**Sampled:**	08/24/11 15:45	**Work Order:**	C109983
Project:	Cherokee Closed	**Sampled By:**	Jonathan Pfohl		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:43	NLH	

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Description: Pendergrass
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-10
Sampled: 08/24/11 15:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/17/11 14:46	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:42	JDH	
Barium [7440-39-3] ^	**6.94**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:42	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:42	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:42	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:42	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:42	JDH	
Copper [7440-50-8] ^	**22.9**		ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:42	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:42	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:42	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:46	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:42	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:46	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:42	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:42	JDH	
Zinc [7440-66-6] ^	**20.7**		ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:42	JDH	

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Description: Pendergrass
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-10
Sampled: 08/24/11 15:45
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:35	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description:	Pendergrass	**Lab Sample ID:**	C109983-10	**Received:**	08/26/11 10:30
Matrix:	Ground Water	**Sampled:**	08/24/11 15:45	**Work Order:**	C109983
Project:	Cherokee Closed	**Sampled By:**	Jonathan Pfohl		

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 21:26	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 21:26	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 21:26	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 21:26	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 21:26	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.6*	*1*	*2.00*	*79 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 21:26*	*RGG*	

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

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Description: Solesbee | **Lab Sample ID:** C109983-11 | **Received:** 08/26/11 10:30
Matrix: Ground Water | **Sampled:** 08/24/11 16:10 | **Work Order:** C109983
Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 04:16	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 04:16	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 04:16	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 04:16	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 04:16	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 04:16	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 04:16	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 04:16	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 04:16	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 04:16	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 04:16	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 04:16	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 04:16	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 04:16	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 04:16	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 04:16	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 04:16	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 04:16	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 04:16	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 04:16	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 04:16	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 04:16	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 04:16	JKG	

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Description: Solesbee
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-11
Sampled: 08/24/11 16:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/01/11 04:16	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 04:16	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 04:16	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 04:16	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 04:16	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 04:16	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 04:16	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 04:16	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 04:16	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 04:16	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*51-122*	*1H31025*	*EPA 8260B*	*09/01/11 04:16*	*JKG*	
Dibromofluoromethane	*46*	*1*	*50.0*	*92 %*	*68-117*	*1H31025*	*EPA 8260B*	*09/01/11 04:16*	*JKG*	
Toluene-d8	*47*	*1*	*50.0*	*93 %*	*69-110*	*1H31025*	*EPA 8260B*	*09/01/11 04:16*	*JKG*	

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Description: Solesbee | **Lab Sample ID:** C109983-11 | **Received:** 08/26/11 10:30
Matrix: Ground Water | **Sampled:** 08/24/11 16:10 | **Work Order:** C109983
Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 04:38	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 04:38	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 04:38	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 04:38	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 04:38	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 04:38	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 04:38	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 04:38	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 04:38	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 04:38	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 04:38	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 04:38	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 04:38	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 04:38	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 04:38	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 04:38	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 04:38	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 04:38	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 04:38	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 04:38	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:38	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 04:38	DFM	

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Description: Solesbee
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-11
Sampled: 08/24/11 16:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 04:38	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	**5.8**	JB	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 04:38	DFM	B
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 04:38	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 04:38	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 04:38	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 04:38	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 04:38	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 04:38	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 04:38	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 04:38	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 04:38	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 04:38	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 04:38	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 04:38	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 04:38	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 04:38	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 04:38	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	

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Sampled: 08/24/11 16:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 04:38	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 04:38	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 04:38	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 04:38	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 04:38	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 04:38	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 04:38	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 04:38	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 04:38	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*83*	*1*	*100*	*83 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 04:38*	*DFM*	
2-Fluorobiphenyl	*39*	*1*	*50.0*	*78 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 04:38*	*DFM*	
2-Fluorophenol	*55*	*1*	*100*	*55 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 04:38*	*DFM*	
Nitrobenzene-d5	*36*	*1*	*50.0*	*73 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 04:38*	*DFM*	
Phenol-d5	*44*	*1*	*100*	*44 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 04:38*	*DFM*	
Terphenyl-d14	*42*	*1*	*50.0*	*84 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 04:38*	*DFM*	

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Lab Sample ID: C109983-11
Sampled: 08/24/11 16:10
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Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 23:02	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 23:02	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 23:02	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 23:02	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 23:02	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 23:02	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 23:02	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 23:02	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 23:02	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 23:02	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 23:02	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 23:02	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 23:02	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 23:02	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 23:02	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 23:02	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 23:02	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 23:02	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 23:02	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 23:02	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 23:02	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*101 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 23:02*	*MSZ*	
Decachlorobiphenyl	*0.90*	*1*	*1.00*	*90 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 23:02*	*MSZ*	

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Lab Sample ID: C109983-11
Sampled: 08/24/11 16:10
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Work Order: C109983

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 23:02	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 23:02	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 23:02	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 23:02	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 23:02	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 23:02	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*101 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 23:02*	*MSZ*	
Decachlorobiphenyl	*0.90*	*1*	*1.00*	*90 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 23:02*	*MSZ*	

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Project: Cherokee Closed

Lab Sample ID: C109983-11
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Work Order: C109983

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:46	NLH	

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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	09/17/11 14:50	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:44	JDH	
Barium [7440-39-3] ^	**2.16**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:44	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:44	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:44	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:44	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:44	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:44	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:44	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:44	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:50	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:44	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:50	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:44	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:44	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:44	JDH	

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Description: Solesbee
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-11
Sampled: 08/24/11 16:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:37	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: Solesbee
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-11
Sampled: 08/24/11 16:10
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 21:53	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 21:53	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 21:53	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 21:53	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 21:53	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.7*	*1*	*2.00*	*86 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 21:53*	*RGG*	

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

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Description: Van Buskirk (Haney) | **Lab Sample ID:** C109983-12 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 16:35 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/01/11 04:45	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 04:45	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/01/11 04:45	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/01/11 04:45	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/01/11 04:45	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/01/11 04:45	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/01/11 04:45	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/01/11 04:45	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/01/11 04:45	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/01/11 04:45	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/01/11 04:45	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/01/11 04:45	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/01/11 04:45	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/01/11 04:45	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/01/11 04:45	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/01/11 04:45	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/01/11 04:45	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/01/11 04:45	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/01/11 04:45	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/01/11 04:45	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/01/11 04:45	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/01/11 04:45	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/01/11 04:45	JKG	

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Description: Van Buskirk (Haney)
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-12
Sampled: 08/24/11 16:35
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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	09/01/11 04:45	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/01/11 04:45	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/01/11 04:45	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/01/11 04:45	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/01/11 04:45	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/01/11 04:45	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/01/11 04:45	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/01/11 04:45	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/01/11 04:45	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/01/11 04:45	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*95 %*	*51-122*	*1H31025*	*EPA 8260B*	*09/01/11 04:45*	*JKG*	
Dibromofluoromethane	*46*	*1*	*50.0*	*92 %*	*68-117*	*1H31025*	*EPA 8260B*	*09/01/11 04:45*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*95 %*	*69-110*	*1H31025*	*EPA 8260B*	*09/01/11 04:45*	*JKG*	

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Description: Van Buskirk (Haney) | **Lab Sample ID:** C109983-12 | **Received:** 08/26/11 10:30
Matrix: Ground Water | **Sampled:** 08/24/11 16:35 | **Work Order:** C109983
Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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	09/13/11 05:04	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 05:04	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 05:04	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 05:04	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 05:04	DFM	QV-01
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 05:04	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 05:04	DFM	
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 05:04	DFM	QV-01
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 05:04	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 05:04	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 05:04	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 05:04	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 05:04	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 05:04	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 05:04	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 05:04	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 05:04	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 05:04	DFM	
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 05:04	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 05:04	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 05:04	DFM	QV-02
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 05:04	DFM	

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Description: Van Buskirk (Haney) | **Lab Sample ID:** C109983-12 | **Received:** 08/26/11 10:30

Matrix: Ground Water | **Sampled:** 08/24/11 16:35 | **Work Order:** C109983

Project: Cherokee Closed | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 05:04	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	**4.8**	JB	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 05:04	DFM	B
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 05:04	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 05:04	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 05:04	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 05:04	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 05:04	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 05:04	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 05:04	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 05:04	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 05:04	DFM	
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 05:04	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 05:04	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 05:04	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 05:04	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 05:04	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 05:04	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	

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Description: Van Buskirk (Haney)
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-12
Sampled: 08/24/11 16:35
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 05:04	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 05:04	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 05:04	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 05:04	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 05:04	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 05:04	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 05:04	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 05:04	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 05:04	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*94*	*1*	*100*	*94 %*	*10-179*	*1H30025*	*EPA 8270D*	*09/13/11 05:04*	*DFM*	
2-Fluorobiphenyl	*41*	*1*	*50.0*	*83 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 05:04*	*DFM*	
2-Fluorophenol	*60*	*1*	*100*	*60 %*	*10-110*	*1H30025*	*EPA 8270D*	*09/13/11 05:04*	*DFM*	
Nitrobenzene-d5	*39*	*1*	*50.0*	*79 %*	*10-149*	*1H30025*	*EPA 8270D*	*09/13/11 05:04*	*DFM*	
Phenol-d5	*48*	*1*	*100*	*48 %*	*10-88*	*1H30025*	*EPA 8270D*	*09/13/11 05:04*	*DFM*	
Terphenyl-d14	*48*	*1*	*50.0*	*96 %*	*10-188*	*1H30025*	*EPA 8270D*	*09/13/11 05:04*	*DFM*	

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Description: Van Buskirk (Haney)
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-12
Sampled: 08/24/11 16:35
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 23:15	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 23:15	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 23:15	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 23:15	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 23:15	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 23:15	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 23:15	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 23:15	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 23:15	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 23:15	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 23:15	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 23:15	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 23:15	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 23:15	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 23:15	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 23:15	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 23:15	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 23:15	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 23:15	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 23:15	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 23:15	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*100 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 23:15*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*114 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 23:15*	*MSZ*	

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Description: Van Buskirk (Haney)
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-12
Sampled: 08/24/11 16:35
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 23:15	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 23:15	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 23:15	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 23:15	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 23:15	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 23:15	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*100 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 23:15*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*114 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 23:15*	*MSZ*	

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Description:	Van Buskirk (Haney)	**Lab Sample ID:**	C109983-12	**Received:**	08/26/11 10:30
Matrix:	Ground Water	**Sampled:**	08/24/11 16:35	**Work Order:**	C109983
Project:	Cherokee Closed	**Sampled By:**	Jonathan Pfohl		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:49	NLH	

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Description: Van Buskirk (Haney)
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Lab Sample ID: C109983-12
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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	09/17/11 14:53	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:45	JDH	
Barium [7440-39-3] ^	**27.0**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:45	JDH	
Beryllium [7440-41-7] ^	**0.139**	J	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:45	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:45	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:45	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:45	JDH	
Copper [7440-50-8] ^	**4.25**	J	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:45	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:45	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:45	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 14:53	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:45	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 14:53	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:45	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:45	JDH	
Zinc [7440-66-6] ^	**14.9**		ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:45	JDH	

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Description: Van Buskirk (Haney)
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Project: Cherokee Closed

Lab Sample ID: C109983-12
Sampled: 08/24/11 16:35
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	3.9	U	ug/L	1	3.9	10	10	SM4500-CN/E	09/01/11 08:39	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: Van Buskirk (Haney)
Matrix: Ground Water
Project: Cherokee Closed

Lab Sample ID: C109983-12
Sampled: 08/24/11 16:35
Sampled By: Jonathan Pfohl

Received: 08/26/11 10:30
Work Order: C109983

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	08/30/11 22:19	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 22:19	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	08/30/11 22:19	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	08/30/11 22:19	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	08/30/11 22:19	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.6*	*1*	*2.00*	*82 %*	*68-139*	*1H28005*	*EPA 8151A*	*08/30/11 22:19*	*RGG*	

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 1H31024 - EPA 5030B_MS

Blank (1H31024-BLK1) Prepared: 08/31/2011 11:15 Analyzed: 09/01/2011 06:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,1-Dichloropropene	0.66	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.58	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,3-Dichlorobenzene	0.79	U	1.0	ug/L							
1,3-Dichloropropane	0.67	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2,2-Dichloropropane	0.56	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	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
Chloroprene	0.64	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Dichlorodifluoromethane	0.56	U	1.0	ug/L							
Ethyl Methacrylate	0.38	U	1.0	ug/L							
Ethylbenzene	0.62	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 1H31024 - EPA 5030B_MS

Blank (1H31024-BLK1) Continued Prepared: 08/31/2011 11:15 Analyzed: 09/01/2011 06:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Methylene chloride	0.14	U	1.0	ug/L							
Naphthalene	0.46	U	1.0	ug/L							
Propionitrile	5.0	U	10	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*42*			*ug/L*	*50.0*		*84*	*51-122*			
Surrogate: Dibromofluoromethane	*40*			*ug/L*	*50.0*		*79*	*68-117*			
Surrogate: Toluene-d8	*41*			*ug/L*	*50.0*		*82*	*69-110*			

LCS (1H31024-BS1) Prepared: 08/31/2011 11:15 Analyzed: 09/01/2011 06:38

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0		95	75-133			
Benzene	18		1.0	ug/L	20.0		90	81-134			
Chlorobenzene	19		1.0	ug/L	20.0		93	83-117			
Toluene	19		1.0	ug/L	20.0		94	71-118			
Trichloroethene	18		1.0	ug/L	20.0		92	75-115			
Surrogate: 4-Bromofluorobenzene	*42*			*ug/L*	*50.0*		*83*	*51-122*			
Surrogate: Dibromofluoromethane	*40*			*ug/L*	*50.0*		*80*	*68-117*			
Surrogate: Toluene-d8	*42*			*ug/L*	*50.0*		*84*	*69-110*			

Matrix Spike (1H31024-MS1) Prepared: 08/31/2011 11:15 Analyzed: 09/01/2011 07:07

Source: C109625-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.60 U	102	75-133			
Benzene	19		1.0	ug/L	20.0	0.74	91	81-134			
Chlorobenzene	33		1.0	ug/L	20.0	14	95	83-117			
Toluene	20		1.0	ug/L	20.0	0.85 U	99	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.72 U	99	75-115			
Surrogate: 4-Bromofluorobenzene	*44*			*ug/L*	*50.0*		*88*	*51-122*			
Surrogate: Dibromofluoromethane	*40*			*ug/L*	*50.0*		*81*	*68-117*			
Surrogate: Toluene-d8	*41*			*ug/L*	*50.0*		*83*	*69-110*			

Matrix Spike Dup (1H31024-MSD1) Prepared: 08/31/2011 11:15 Analyzed: 09/01/2011 07:37

Source: C109625-03

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1H31024 - EPA 5030B_MS

Matrix Spike Dup (1H31024-MSD1) Continued Prepared: 08/31/2011 11:15 Analyzed: 09/01/2011 07:37

Source: C109625-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.60 U	99	75-133	3	20	
Benzene	19		1.0	ug/L	20.0	0.74	91	81-134	0.6	17	
Chlorobenzene	34		1.0	ug/L	20.0	14	96	83-117	0.6	16	
Toluene	20		1.0	ug/L	20.0	0.85 U	98	71-118	1	17	
Trichloroethene	19		1.0	ug/L	20.0	0.72 U	94	75-115	5	18	
Surrogate: 4-Bromofluorobenzene	*43*			*ug/L*	*50.0*		*85*	*51-122*			
Surrogate: Dibromofluoromethane	*40*			*ug/L*	*50.0*		*80*	*68-117*			
Surrogate: Toluene-d8	*41*			*ug/L*	*50.0*		*82*	*69-110*			

Batch 1H31025 - EPA 5030B_MS

Blank (1H31025-BLK1) Prepared: 08/31/2011 11:26 Analyzed: 08/31/2011 22:56

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,1-Dichloropropene	0.66	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.58	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,3-Dichlorobenzene	0.79	U	1.0	ug/L							
1,3-Dichloropropane	0.67	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2,2-Dichloropropane	0.56	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	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1H31025 - EPA 5030B_MS

Blank (1H31025-BLK1) Continued Prepared: 08/31/2011 11:26 Analyzed: 08/31/2011 22:56

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
Chloroprene	0.64	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Dichlorodifluoromethane	0.56	U	1.0	ug/L							
Ethyl Methacrylate	0.38	U	1.0	ug/L							
Ethylbenzene	0.62	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	0.14	U	1.0	ug/L							
Naphthalene	0.46	U	1.0	ug/L							
Propionitrile	5.0	U	10	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*95*	*51-122*			
Surrogate: Dibromofluoromethane	*44*			*ug/L*	*50.0*		*89*	*68-117*			
Surrogate: Toluene-d8	*46*			*ug/L*	*50.0*		*93*	*69-110*			

LCS (1H31025-BS1) Prepared: 08/31/2011 11:26 Analyzed: 08/31/2011 23:25

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0		100	75-133			
Benzene	20		1.0	ug/L	20.0		99	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		101	83-117			
Toluene	22		1.0	ug/L	20.0		108	71-118			
Trichloroethene	21		1.0	ug/L	20.0		105	75-115			
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*95*	*51-122*			
Surrogate: Dibromofluoromethane	*45*			*ug/L*	*50.0*		*90*	*68-117*			
Surrogate: Toluene-d8	*47*			*ug/L*	*50.0*		*95*	*69-110*			

Matrix Spike (1H31025-MS1) Prepared: 08/31/2011 11:26 Analyzed: 08/31/2011 23:54

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1H31025 - EPA 5030B_MS

Matrix Spike (1H31025-MS1) Continued Prepared: 08/31/2011 11:26 Analyzed: 08/31/2011 23:54

Source: C110503-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.60 U	96	75-133			
Benzene	20		1.0	ug/L	20.0	0.68 U	100	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.74 U	101	83-117			
Toluene	21		1.0	ug/L	20.0	0.85 U	106	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.72 U	98	75-115			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			
Surrogate: Dibromofluoromethane	*44*			*ug/L*	*50.0*		*88*	*68-117*			
Surrogate: Toluene-d8	*48*			*ug/L*	*50.0*		*97*	*69-110*			

Matrix Spike Dup (1H31025-MSD1) Prepared: 08/31/2011 11:26 Analyzed: 09/01/2011 00:23

Source: C110503-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.60 U	95	75-133	1	20	
Benzene	20		1.0	ug/L	20.0	0.68 U	98	81-134	2	17	
Chlorobenzene	19		1.0	ug/L	20.0	0.74 U	97	83-117	4	16	
Toluene	21		1.0	ug/L	20.0	0.85 U	104	71-118	2	17	
Trichloroethene	19		1.0	ug/L	20.0	0.72 U	95	75-115	3	18	
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*95*	*51-122*			
Surrogate: Dibromofluoromethane	*44*			*ug/L*	*50.0*		*88*	*68-117*			
Surrogate: Toluene-d8	*48*			*ug/L*	*50.0*		*96*	*69-110*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 1H30025 - EPA 3510C_MS

Blank (1H30025-BLK1) Prepared: 08/30/2011 16:30 Analyzed: 09/12/2011 22:15

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							QV-01
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 1H30025 - EPA 3510C_MS

Blank (1H30025-BLK1) Continued Prepared: 08/30/2011 16:30 Analyzed: 09/12/2011 22:15

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							QV-01
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							QV-02
Benzo(g,h,i)perylene	2.4	U	10	ug/L							
Benzo(k)fluoranthene	1.3	U	10	ug/L							QV-02
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	**23**		5.0	ug/L							O-01
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 1H30025 - EPA 3510C_MS

Blank (1H30025-BLK1) Continued Prepared: 08/30/2011 16:30 Analyzed: 09/12/2011 22:15

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							
Methapyrilene	3.5	U	10	ug/L							
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							
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	*65*			*ug/L*	*100*		*65*	*10-179*			
Surrogate: 2-Fluorobiphenyl	*28*			*ug/L*	*50.0*		*56*	*10-149*			
Surrogate: 2-Fluorophenol	*41*			*ug/L*	*100*		*41*	*10-110*			
Surrogate: Nitrobenzene-d5	*27*			*ug/L*	*50.0*		*53*	*10-149*			
Surrogate: Phenol-d5	*34*			*ug/L*	*100*		*34*	*10-88*			
Surrogate: Terphenyl-d14	*33*			*ug/L*	*50.0*		*65*	*10-188*			

LCS (1H30025-BS1) Prepared: 08/30/2011 16:30 Analyzed: 09/12/2011 22:40

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Chlorophenol	31		10	ug/L	50.0		62	40-109			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 1H30025 - EPA 3510C_MS

LCS (1H30025-BS1) Continued Prepared: 08/30/2011 16:30 Analyzed: 09/12/2011 22:40

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Chloro-3-methylphenol	37		10	ug/L	50.0		74	58-121			
4-Nitrophenol	25		10	ug/L	50.0		49	33-105			
Acenaphthene	37		10	ug/L	50.0		74	39-125			
N-Nitroso-di-n-propylamine	35		10	ug/L	50.0		70	48-126			
Phenol	20		10	ug/L	50.0		39	19-78			
Pyrene	39		10	ug/L	50.0		77	44-137			
Surrogate: 2,4,6-Tribromophenol	*95*			*ug/L*	*100*		*95*	*10-179*			
Surrogate: 2-Fluorobiphenyl	*40*			*ug/L*	*50.0*		*81*	*10-149*			
Surrogate: 2-Fluorophenol	*62*			*ug/L*	*100*		*62*	*10-110*			
Surrogate: Nitrobenzene-d5	*37*			*ug/L*	*50.0*		*75*	*10-149*			
Surrogate: Phenol-d5	*52*			*ug/L*	*100*		*52*	*10-88*			
Surrogate: Terphenyl-d14	*43*			*ug/L*	*50.0*		*86*	*10-188*			

Matrix Spike (1H30025-MS1) Prepared: 08/30/2011 16:30 Analyzed: 09/12/2011 23:06

Source: C110503-06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Chlorophenol	33		10	ug/L	50.0	1.2 U	66	40-109			
4-Chloro-3-methylphenol	38		10	ug/L	50.0	1.5 U	76	58-121			
4-Nitrophenol	24		10	ug/L	50.0	2.0 U	47	33-105			
Acenaphthene	38		10	ug/L	50.0	1.4 U	76	39-125			
N-Nitroso-di-n-propylamine	37		10	ug/L	50.0	1.5 U	74	48-126			
Phenol	19		10	ug/L	50.0	1.4 U	39	19-78			
Pyrene	39		10	ug/L	50.0	2.1 U	79	44-137			
Surrogate: 2,4,6-Tribromophenol	*93*			*ug/L*	*100*		*93*	*10-179*			
Surrogate: 2-Fluorobiphenyl	*41*			*ug/L*	*50.0*		*82*	*10-149*			
Surrogate: 2-Fluorophenol	*65*			*ug/L*	*100*		*65*	*10-110*			
Surrogate: Nitrobenzene-d5	*38*			*ug/L*	*50.0*		*77*	*10-149*			
Surrogate: Phenol-d5	*52*			*ug/L*	*100*		*52*	*10-88*			
Surrogate: Terphenyl-d14	*44*			*ug/L*	*50.0*		*87*	*10-188*			

Matrix Spike Dup (1H30025-MSD1) Prepared: 08/30/2011 16:30 Analyzed: 09/12/2011 23:32

Source: C110503-06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Chlorophenol	32		10	ug/L	50.0	1.2 U	64	40-109	3	22	
4-Chloro-3-methylphenol	37		10	ug/L	50.0	1.5 U	74	58-121	2	22	
4-Nitrophenol	23		10	ug/L	50.0	2.0 U	47	33-105	1	27	
Acenaphthene	37		10	ug/L	50.0	1.4 U	73	39-125	4	25	
N-Nitroso-di-n-propylamine	35		10	ug/L	50.0	1.5 U	71	48-126	5	23	
Phenol	19		10	ug/L	50.0	1.4 U	38	19-78	2	18	
Pyrene	38		10	ug/L	50.0	2.1 U	76	44-137	4	24	
Surrogate: 2,4,6-Tribromophenol	*94*			*ug/L*	*100*		*94*	*10-179*			
Surrogate: 2-Fluorobiphenyl	*40*			*ug/L*	*50.0*		*80*	*10-149*			
Surrogate: 2-Fluorophenol	*64*			*ug/L*	*100*		*64*	*10-110*			
Surrogate: Nitrobenzene-d5	*39*			*ug/L*	*50.0*		*78*	*10-149*			
Surrogate: Phenol-d5	*51*			*ug/L*	*100*		*51*	*10-88*			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 1H30025 - EPA 3510C_MS

Matrix Spike Dup (1H30025-MSD1) Continued Prepared: 08/30/2011 16:30 Analyzed: 09/12/2011 23:32

Source: C110503-06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Terphenyl-d14	*43*			*ug/L*	*50.0*		*87*	*10-188*			

Organochlorine Pesticides by GC - Quality Control

Batch 1H30003 - EPA 3510C

Blank (1H30003-BLK1) Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 18:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.044	U	0.050	ug/L							
4,4'-DDE	0.048	U	0.050	ug/L							
4,4'-DDT	0.049	U	0.050	ug/L							
Aldrin	0.038	U	0.050	ug/L							
alpha-BHC	0.027	U	0.050	ug/L							
beta-BHC	0.027	U	0.050	ug/L							
Chlordane (tech)	0.20	U	0.50	ug/L							
Chlordane-alpha	0.048	U	0.050	ug/L							
Chlordane-gamma	0.040	U	0.050	ug/L							
delta-BHC	0.022	U	0.050	ug/L							
Dieldrin	0.0020	U	0.050	ug/L							
Endosulfan I	0.041	U	0.050	ug/L							
Endosulfan II	0.029	U	0.050	ug/L							
Endosulfan sulfate	0.025	U	0.050	ug/L							
Endrin	0.029	U	0.050	ug/L							
Endrin aldehyde	0.031	U	0.050	ug/L							
gamma-BHC	0.022	U	0.050	ug/L							
Heptachlor	0.038	U	0.050	ug/L							
Heptachlor epoxide	0.027	U	0.050	ug/L							
Methoxychlor	0.025	U	0.050	ug/L							
Toxaphene	0.22	U	0.50	ug/L							
Surrogate: 2,4,5,6-TCMX	*1.1*			*ug/L*	*1.00*		*109*	*44-134*			
Surrogate: Decachlorobiphenyl	*1.2*			*ug/L*	*1.00*		*117*	*37-149*			

LCS (1H30003-BS1) Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 18:50

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00		110	37-139			
Dieldrin	1.2		0.050	ug/L	1.00		115	46-132			
Endrin	1.1		0.050	ug/L	1.00		109	43-133			
Surrogate: 2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*102*	*44-134*			
Surrogate: Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*108*	*37-149*			

Matrix Spike (1H30003-MS1) Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 19:03

Source: C110503-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00	0.049 U	114	37-139			

QUALITY CONTROL

Organochlorine Pesticides by GC - Quality Control

Batch 1H30003 - EPA 3510C

Matrix Spike (1H30003-MS1) Continued Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 19:03

Source: C110503-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dieldrin	1.2		0.050	ug/L	1.00	0.0020 U	118	46-132			
Endrin	1.1		0.050	ug/L	1.00	0.029 U	110	43-133			
Surrogate: 2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*102*	*44-134*			
Surrogate: Decachlorobiphenyl	*1.2*			*ug/L*	*1.00*		*116*	*37-149*			

Matrix Spike Dup (1H30003-MSD1) Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 19:16

Source: C110503-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00	0.049 U	110	37-139	4	26	
Dieldrin	1.1		0.050	ug/L	1.00	0.0020 U	114	46-132	4	27	
Endrin	1.1		0.050	ug/L	1.00	0.029 U	108	43-133	3	26	
Surrogate: 2,4,5,6-TCMX	*0.97*			*ug/L*	*1.00*		*97*	*44-134*			
Surrogate: Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*114*	*37-149*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 1H30004 - EPA 3510C

Blank (1H30004-BLK1) Prepared: 08/30/2011 07:20 Analyzed: 09/02/2011 18:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.19	U	0.50	ug/L							
PCB-1221	0.046	U	0.50	ug/L							
PCB-1232	0.028	U	0.50	ug/L							
PCB-1248	0.014	U	0.50	ug/L							
PCB-1254	0.015	U	0.50	ug/L							
PCB-1260	0.13	U	0.50	ug/L							
Surrogate: 2,4,5,6-TCMX	*1.1*			*ug/L*	*1.00*		*109*	*45-151*			
Surrogate: Decachlorobiphenyl	*1.2*			*ug/L*	*1.00*		*117*	*42-159*			

LCS (1H30004-BS1) Prepared: 08/30/2011 07:20 Analyzed: 09/02/2011 19:29

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	7.9		0.50	ug/L	10.0		79	66-149			
PCB-1260	9.2		0.50	ug/L	10.0		92	64-150			
Surrogate: 2,4,5,6-TCMX	*0.83*			*ug/L*	*1.00*		*83*	*45-151*			
Surrogate: Decachlorobiphenyl	*0.99*			*ug/L*	*1.00*		*99*	*42-159*			

Matrix Spike (1H30004-MS1) Prepared: 08/30/2011 07:20 Analyzed: 09/02/2011 19:43

Source: C110503-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	8.0		0.50	ug/L	10.0	0.19 U	80	66-149			
PCB-1260	9.4		0.50	ug/L	10.0	0.13 U	94	64-150			

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 1H30004 - EPA 3510C

Matrix Spike (1H30004-MS1) Continued Prepared: 08/30/2011 07:20 Analyzed: 09/02/2011 19:43

Source: C110503-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: 2,4,5,6-TCMX	*0.88*			*ug/L*	*1.00*		*88*	*45-151*			
Surrogate: Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*108*	*42-159*			

Matrix Spike Dup (1H30004-MSD1) Prepared: 08/30/2011 07:20 Analyzed: 09/02/2011 19:56

Source: C110503-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	7.8		0.50	ug/L	10.0	0.19 U	78	66-149	2	21	
PCB-1260	9.2		0.50	ug/L	10.0	0.13 U	92	64-150	2	18	
Surrogate: 2,4,5,6-TCMX	*0.84*			*ug/L*	*1.00*		*84*	*45-151*			
Surrogate: Decachlorobiphenyl	*1.0*			*ug/L*	*1.00*		*104*	*42-159*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1H30009 - EPA 245.1

Blank (1H30009-BLK1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:21

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 (1H30009-BS1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.68		0.200	ug/L	5.00		94	85-115			

Matrix Spike (1H30009-MS1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:37

Source: C109625-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.78		0.200	ug/L	5.00	0.170 U	96	85-115			

Matrix Spike Dup (1H30009-MSD1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:40

Source: C109625-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.88		0.200	ug/L	5.00	0.170 U	98	85-115	2	15	

Post Spike (1H30009-PS1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:43

Source: C109625-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.74		0.200	ug/L	5.00	-0.0561	96	75-125			

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

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

Batch 1H30012 - EPA 3005A

Blank (1H30012-BLK1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:22

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	**3.11**	**J**	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
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 (1H30012-BS1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 09:59

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	203	B	10.0	ug/L	200		102	80-120			
Barium	204		10.0	ug/L	200		102	80-120			
Beryllium	20.4		1.00	ug/L	20.0		102	80-120			
Cadmium	20.9		1.00	ug/L	20.0		105	80-120			
Chromium	205		10.0	ug/L	200		102	80-120			
Cobalt	210		10.0	ug/L	200		105	80-120			
Copper	201		10.0	ug/L	200		100	80-120			
Lead	204		10.0	ug/L	200		102	80-120			
Nickel	207		10.0	ug/L	200		103	80-120			
Silver	213		10.0	ug/L	200		107	80-120			
Tin	202		10.0	ug/L	200		101	80-120			
Vanadium	207		10.0	ug/L	200		103	80-120			
Zinc	205		10.0	ug/L	200		103	80-120			

Matrix Spike (1H30012-MS1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:05

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	202	B	10.0	ug/L	200	2.80 U	101	75-125			
Barium	271		10.0	ug/L	200	59.0	106	75-125			
Beryllium	21.2		1.00	ug/L	20.0	0.100 U	106	75-125			
Cadmium	21.8		1.00	ug/L	20.0	0.360 U	109	75-125			
Chromium	212		10.0	ug/L	200	5.15	104	75-125			
Cobalt	240		10.0	ug/L	200	30.2	105	75-125			
Copper	215		10.0	ug/L	200	3.19	106	75-125			
Lead	204		10.0	ug/L	200	1.90 U	102	75-125			
Nickel	224		10.0	ug/L	200	12.7	106	75-125			
Silver	223		10.0	ug/L	200	2.76	110	75-125			
Tin	210		10.0	ug/L	200	6.34	102	75-125			
Vanadium	213		10.0	ug/L	200	1.40 U	107	75-125			
Zinc	219		10.0	ug/L	200	6.51	106	75-125			

QUALITY CONTROL

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

Batch 1H30012 - EPA 3005A

Matrix Spike Dup (1H30012-MSD1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:07

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	209	B	10.0	ug/L	200	2.80 U	105	75-125	3	20	
Barium	275		10.0	ug/L	200	59.0	108	75-125	1	20	
Beryllium	21.3		1.00	ug/L	20.0	0.100 U	106	75-125	0.4	20	
Cadmium	22.1		1.00	ug/L	20.0	0.360 U	111	75-125	2	20	
Chromium	214		10.0	ug/L	200	5.15	104	75-125	0.9	20	
Cobalt	244		10.0	ug/L	200	30.2	107	75-125	2	20	
Copper	217		10.0	ug/L	200	3.19	107	75-125	0.9	20	
Lead	208		10.0	ug/L	200	1.90 U	104	75-125	2	20	
Nickel	225		10.0	ug/L	200	12.7	106	75-125	0.5	20	
Silver	225		10.0	ug/L	200	2.76	111	75-125	0.9	20	
Tin	213		10.0	ug/L	200	6.34	103	75-125	2	20	
Vanadium	215		10.0	ug/L	200	1.40 U	107	75-125	0.5	20	
Zinc	223		10.0	ug/L	200	6.51	108	75-125	2	20	

Post Spike (1H30012-PS1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:09

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.205	B	0.0100	mg/L	0.200	-0.00388	105	80-120			
Barium	0.267		0.0100	mg/L	0.200	0.0590	104	80-120			
Beryllium	0.0207		0.00100	mg/L	0.0200	-0.000172	104	80-120			
Cadmium	0.0215		0.00100	mg/L	0.0200	0.000268	106	80-120			
Chromium	0.209		0.0100	mg/L	0.200	0.00515	102	80-120			
Cobalt	0.237		0.0100	mg/L	0.200	0.0302	103	80-120			
Copper	0.212		0.0100	mg/L	0.200	0.00319	104	80-120			
Lead	0.200		0.0100	mg/L	0.200	0.00124	99	80-120			
Nickel	0.219		0.0100	mg/L	0.200	0.0127	103	80-120			
Silver	0.178		0.0100	mg/L	0.200	0.00276	88	80-120			
Tin	0.208		0.0100	mg/L	0.200	0.00634	101	80-120			
Vanadium	0.209		0.0100	mg/L	0.200	-0.000937	105	80-120			
Zinc	0.216		0.0100	mg/L	0.200	0.00651	105	80-120			

Batch 1H30014 - EPA 3005A

Blank (1H30014-BLK1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 11:59

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 (1H30014-BS1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 12:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.0		2.00	ug/L	25.0		100	80-120			
Selenium	23.8		1.00	ug/L	25.0		95	80-120			

QUALITY CONTROL

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

Batch 1H30014 - EPA 3005A

LCS (1H30014-BS1) Continued Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 12:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Thallium	27.1		1.00	ug/L	25.0		109	80-120			

Matrix Spike (1H30014-MS1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 12:10

Source: C109553-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	23.1		2.00	ug/L	25.0	0.220 U	92	75-125			
Selenium	24.2		1.00	ug/L	25.0	0.906	93	75-125			
Thallium	24.1		1.00	ug/L	25.0	0.110 U	96	75-125			

Matrix Spike Dup (1H30014-MSD1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 13:38

Source: C109553-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	23.7		2.00	ug/L	25.0	0.220 U	95	75-125	2	20	
Selenium	24.9		1.00	ug/L	25.0	0.906	96	75-125	3	20	
Thallium	24.2		1.00	ug/L	25.0	0.110 U	97	75-125	0.5	20	

Post Spike (1H30014-PS1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 13:42

Source: C109553-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	29.4		2.00	ug/L	25.0	0.0940	117	80-120			
Selenium	29.2		1.00	ug/L	25.0	0.906	113	80-120			
Thallium	31.2		1.00	ug/L	25.0	-0.00600	125	80-120			QM-08

Classical Chemistry Parameters - Quality Control

Batch 1H29007 - NO PREP

Blank (1H29007-BLK1) Prepared: 08/29/2011 12:22 Analyzed: 08/29/2011 13:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	10	U	100	ug/L							

LCS (1H29007-BS1) Prepared: 08/29/2011 12:22 Analyzed: 08/29/2011 13:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.39		0.10	mg/L	0.401		97	80-120			

Matrix Spike (1H29007-MS1) Prepared: 08/29/2011 12:22 Analyzed: 08/29/2011 13:08

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	-0.009	U	0.10	mg/L	0.401	0.010 U		80-120			QM-05

Matrix Spike Dup (1H29007-MSD1) Prepared: 08/29/2011 12:22 Analyzed: 08/29/2011 13:08

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1H29007 - NO PREP

Matrix Spike Dup (1H29007-MSD1) Continued Prepared: 08/29/2011 12:22 Analyzed: 08/29/2011 13:08

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	-0.007	U	0.10	mg/L	0.401	0.010 U		80-120		25	QM-05

Batch 1H30013 - Same

Blank (1H30013-BLK1) Prepared: 08/30/2011 11:51 Analyzed: 09/01/2011 08:06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	3.9	U	10	ug/L							

LCS (1H30013-BS1) Prepared: 08/30/2011 11:51 Analyzed: 09/01/2011 08:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.14		0.010	mg/L	0.150		95	90-110			

Matrix Spike (1H30013-MS1) Prepared: 08/31/2011 09:44 Analyzed: 09/01/2011 08:10

Source: C105128-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.13		0.010	mg/L	0.150	0.0013	86	90-110			QM-05

Matrix Spike Dup (1H30013-MSD1) Prepared: 08/31/2011 09:44 Analyzed: 09/01/2011 08:12

Source: C105128-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.13		0.010	mg/L	0.150	0.0013	87	90-110	0.9	10	QM-05

Batch 1I06006 - Same

Blank (1I06006-BLK1) Prepared: 09/06/2011 10:28 Analyzed: 09/07/2011 12:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	3.9	U	10	ug/L							

LCS (1I06006-BS1) Prepared: 09/06/2011 10:28 Analyzed: 09/07/2011 12:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.15		0.010	mg/L	0.150		100	90-110			

Matrix Spike (1I06006-MS1) Prepared: 09/06/2011 10:28 Analyzed: 09/07/2011 12:05

Source: C105124-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.15		0.010	mg/L	0.150	0.0025	98	90-110			

Matrix Spike Dup (1I06006-MSD1) Prepared: 09/06/2011 10:28 Analyzed: 09/07/2011 12:08

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1I06006 - Same

Matrix Spike Dup (1I06006-MSD1) Continued Prepared: 09/06/2011 10:28 Analyzed: 09/07/2011 12:08

Source: C105124-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.14		0.010	mg/L	0.150	0.0025	93	90-110	5	10	

QUALITY CONTROL

Chlorinated Herbicides by GC - Quality Control

Batch 1H28005 - EPA 3510C

Blank (1H28005-BLK1) Prepared: 08/28/2011 13:00 Analyzed: 08/30/2011 15:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.14	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.15	U	0.50	ug/L							
2,4-D	0.15	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
Pentachlorophenol	0.13	U	0.50	ug/L							
Surrogate: 2,4-DCAA	*1.8*			*ug/L*	*2.00*		*91*	*68-139*			

LCS (1H28005-BS1) Prepared: 08/28/2011 13:00 Analyzed: 08/30/2011 15:45

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.8		0.50	ug/L	2.00		90	68-154			
2,4-D	1.8		0.50	ug/L	2.00		90	62-144			
Surrogate: 2,4-DCAA	*1.9*			*ug/L*	*2.00*		*95*	*68-139*			

Matrix Spike (1H28005-MS1) Prepared: 08/28/2011 13:00 Analyzed: 08/30/2011 16:12

Source: A104631-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.5		0.50	ug/L	2.00	0.15 U	77	68-154			
2,4-D	2.0		0.50	ug/L	2.00	0.15 U	98	57-132			
Surrogate: 2,4-DCAA	*2.8*			*ug/L*	*2.00*		*138*	*68-139*			

Matrix Spike Dup (1H28005-MSD1) Prepared: 08/28/2011 13:00 Analyzed: 08/30/2011 16:38

Source: A104631-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.4		0.50	ug/L	2.00	0.15 U	72	68-154	6	15	
2,4-D	1.7		0.50	ug/L	2.00	0.15 U	87	57-132	12	21	
Surrogate: 2,4-DCAA	*2.3*			*ug/L*	*2.00*		*114*	*68-139*			

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.
O-01	This compound is a common laboratory contaminant.
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-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).
QS-05	Surrogate recovery biased low and outside control limits due to suspected matrix effects, as evidenced by sample behavior during sample preparation (emulsion formation, excessive foaming).
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.

C109983

others will Follow

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

1015 Passport Way
Cary, NC 27513
(919) 677-1669 Fax (919) 677-9846

Page 1 of 1

Client Name: Municipal Engineering Services (MUNOL)
Address: PO Box 97
City/ST/Zip: Garner, NC 27529
Tel: (919)772-5373 Fax: (919)772-1176
Sampler(s) Name, Affiliation (Print): Jonathan Pfahl, ENESCO
Sampler(s) Signature: [signature]

Project Number:
Project Name/Desc: Cherokee Closed
PO # / Billing Info:
Reporting Contact: Jonathan Pfahl
Billing Contact: Accounts Payable
Facility # (if required):

Requested Analyses: 8081B App 2; 8082A App 2; 8270D App 2; Sulfide SM4500-S-D

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

Lab Workorder:

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8081B App 2	8082A App 2	8270D App 2	Sulfide SM4500-S-D	Sample Comments
	MW-1	8/25/11	8:30	G	WT	3	✓	✓	✓	✓	
	MW-2	8/24/11	9:00								
	MW-2R		3:10								
	MW-3		12:15								
	MW-4R		11:05								
	MW-5		10:30								
	MW-6		9:45								
	MW-6R		2:30								
	MW-7	8/25/11	9:00								
	Pendergrass	8/24/11	3:45								
	Solesbee		4:10								
	Van Buskirk (Haney)		4:35								

<- Total # of Containers

Sample Kit Prepared By: | Date/Time:

Comments: Sent via Fed-ex 8/25/11

Relinquished By	Date/Time	Received By	Date/Time
[signature] / ENESCO	8/25/11 15:30	Briana Gregory	8/26/11 10:30

Cooler #'s & Temps on Receipt: Lt Blue 1.6°C Navy 2.1°C Blue 2.2°C

Condition Upon Receipt: ✓ Acceptable ___ Unacceptable

Matrix: GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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 CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
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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Combine w/ previous samples submitted via Fedex on 8/26/11

Page 1 of 1

Client Name: Municipal Engineering Services (MU001)	Project Number: G100007.0 Closed
Address: P.O. Box 97	Project Name/Desc: Cherokee Closed
City/ST/Zip: Garner, NC 27529	PO # / Billing Info
Tel: (919) 772-5393 Fax: (919) 772-1176	Reporting Contact: Jonathan Pfohl
Sampler(s) Name, Affiliation (Print): Jon Pfohl	Billing Contact: Accounts Payable
Sampler(s) Signature: [signature]	Site Location / Time Zone

Requested Analyses: [redacted] Already submitted; 8260B Appendix 2; Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Sn,Tl,V,Zn; Cyanide Total SM4500-CN E; Hg; [redacted] Already submitted

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C109983

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	[redacted] Already submitted	8260B Appendix 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Sn,Tl,V,Zn	Cyanide Total SM4500-CN E	Hg	[redacted] Already submitted					Sample Comments
	MW-1	8/25/11	8:30	Grab	GW	10	X	X	X	X	X	X					
	MW-2	8/24/11	9:00		GW	10	X	X	X	X	X	X					
	MW-2R		3:10		GW	10	X	X	X	X	X	X					
	MW-3		12:15		GW	10	X	X	X	X	X	X					
	MW-4R		11:25		GW	10	X	X	X	X	X	X					
	MW-5		10:30		GW	10	X	X	X	X	X	X					
	MW-6		9:45		GW	10	X	X	X	X	X	X					
	MW-6R		2:30		GW	10	X	X	X	X	X	X					
	MW-7	8/25/11	9:00		GW	10	X	X	X	X	X	X					
	Pendergrass	8/24/11	3:45		GW	10	X	X	X	X	X	X					
	Solesbee		4:10		GW	10	X	X	X	X	X	X					
	Van Buskirk (Haney)		4:35		GW	10	X	X	X	X	X	X					
							<-- Total # of Containers										

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Briana Gregory	8/11/11	[signature] TMESCO	8/29/11 8:47	[signature]	8/29/11 8:47
Comments/Special Reporting Requirements: C-435 2.5°C; C-437 2.4°C		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: C-785 1.9°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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Environmental Conservation Laboratories, Inc.
102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515
www.encolabs.com

Tuesday, September 20, 2011

Municipal Engineering Services (MU001)

Attn: Jonathan Pfohl

P.O. Box 97

Garner, NC 27529

RE: Laboratory Results for
Project Number: G10007.0 SW, Project Name/Desc: Cherokee Co. SWs
ENCO Workorder: C109985

Dear Jonathan Pfohl,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Monday, August 29, 2011.

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

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

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

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

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 26.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: SW-1 **Lab ID: C109985-01** **Sampled: 08/24/11 16:50** **Received: 08/29/11 08:45**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12	08/30/11	10:08	8/31/2011 10:53
EPA 6020A	02/20/12	09/01/11	10:36	9/19/2011 11:33
EPA 8260B	09/07/11	09/01/11	10:44	9/2/2011 10:06

Client ID: SW-2 **Lab ID: C109985-02** **Sampled: 08/24/11 17:10** **Received: 08/29/11 08:45**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12	08/30/11	10:08	8/31/2011 10:55
EPA 6020A	02/20/12	09/01/11	10:36	9/19/2011 11:04
EPA 8260B	09/07/11	09/01/11	10:44	9/2/2011 10:35

Client ID: SW-4 **Lab ID: C109985-03** **Sampled: 08/24/11 17:25** **Received: 08/29/11 08:45**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12	08/30/11	10:08	8/31/2011 10:56
EPA 6020A	02/20/12	09/01/11	10:36	9/19/2011 11:36
EPA 8260B	09/07/11	09/02/11	08:37	9/2/2011 19:02

Client ID: SW-5 **Lab ID: C109985-04** **Sampled: 08/24/11 17:40** **Received: 08/29/11 08:45**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/20/12	08/30/11	10:08	8/31/2011 10:58
EPA 6020A	02/20/12	09/01/11	10:36	9/19/2011 11:39
EPA 7470A	09/21/11	08/30/11	10:01	8/31/2011 13:52
EPA 8260B	09/07/11	09/02/11	08:37	9/2/2011 19:31

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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: SW-1 **Lab ID: C109985-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	8.64	J	1	1.00	10.0	100	ug/L	EPA 6010C	

Client ID: SW-2 **Lab ID: C109985-02**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	8.86	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Nickel - Total	1.83	J	1	1.80	10.0	50	ug/L	EPA 6010C	

Client ID: SW-4 **Lab ID: C109985-03**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	3.32	JB	1	2.80	10.0	10	ug/L	EPA 6010C	J
Barium - Total	8.67	J	1	1.00	10.0	100	ug/L	EPA 6010C	

Client ID: SW-5 **Lab ID: C109985-04**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	4.17	JB	1	2.80	10.0	10	ug/L	EPA 6010C	J
Barium - Total	9.00	J	1	1.00	10.0	100	ug/L	EPA 6010C	

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ANALYTICAL RESULTS

Description: SW-1 **Lab Sample ID:** C109985-01 **Received:** 08/29/11 08:45

Matrix: Surface Water **Sampled:** 08/24/11 16:50 **Work Order:** C109985

Project: Cherokee Co. SWs **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

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

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Description: SW-1 | **Lab Sample ID:** C109985-01 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 16:50 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 10:06	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/02/11 10:06	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/02/11 10:06	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/02/11 10:06	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*97 %*	*51-122*	*1I01022*	*EPA 8260B*	*09/02/11 10:06*	*JKG*	
Dibromofluoromethane	*48*	*1*	*50.0*	*95 %*	*68-117*	*1I01022*	*EPA 8260B*	*09/02/11 10:06*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*96 %*	*69-110*	*1I01022*	*EPA 8260B*	*09/02/11 10:06*	*JKG*	

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Description: SW-1 | **Lab Sample ID:** C109985-01 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 16:50 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

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	09/19/11 11:33	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:53	JDH	
Barium [7440-39-3] ^	**8.64**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:53	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:53	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:53	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:53	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:53	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:53	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:53	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:53	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/19/11 11:33	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:53	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/19/11 11:33	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:53	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:53	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: SW-2 | **Lab Sample ID:** C109985-02 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 17:10 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

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

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Description: SW-2 | **Lab Sample ID:** C109985-02 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 17:10 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/02/11 10:35	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1I01022*	*EPA 8260B*	*09/02/11 10:35*	*JKG*	
Dibromofluoromethane	*47*	*1*	*50.0*	*93 %*	*68-117*	*1I01022*	*EPA 8260B*	*09/02/11 10:35*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*95 %*	*69-110*	*1I01022*	*EPA 8260B*	*09/02/11 10:35*	*JKG*	

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Description: SW-2 | **Lab Sample ID:** C109985-02 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 17:10 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

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	09/19/11 11:04	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:55	JDH	
Barium [7440-39-3] ^	**8.86**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:55	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:55	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:55	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:55	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:55	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:55	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:55	JDH	
Nickel [7440-02-0] ^	**1.83**	J	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:55	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/19/11 11:04	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:55	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/19/11 11:04	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:55	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:55	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: SW-4 | **Lab Sample ID:** C109985-03 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 17:25 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

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

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Description: SW-4 | **Lab Sample ID:** C109985-03 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 17:25 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/02/11 19:02	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1I02004*	*EPA 8260B*	*09/02/11 19:02*	*JKG*	
Dibromofluoromethane	*48*	*1*	*50.0*	*96 %*	*68-117*	*1I02004*	*EPA 8260B*	*09/02/11 19:02*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*96 %*	*69-110*	*1I02004*	*EPA 8260B*	*09/02/11 19:02*	*JKG*	

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Description: SW-4 | **Lab Sample ID:** C109985-03 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 17:25 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

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	09/19/11 11:36	VLO	
Arsenic [7440-38-2] ^	**3.32**	JB	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:56	JDH	J
Barium [7440-39-3] ^	**8.67**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:56	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:56	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:56	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:56	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:56	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:56	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:56	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:56	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/19/11 11:36	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:56	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/19/11 11:36	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:56	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:56	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: SW-5 | **Lab Sample ID:** C109985-04 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 17:40 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/02/11 19:31	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/02/11 19:31	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/02/11 19:31	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/02/11 19:31	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/02/11 19:31	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/02/11 19:31	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/02/11 19:31	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/02/11 19:31	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/02/11 19:31	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/02/11 19:31	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/02/11 19:31	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/02/11 19:31	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/02/11 19:31	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/02/11 19:31	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/02/11 19:31	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/02/11 19:31	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/02/11 19:31	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/02/11 19:31	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/02/11 19:31	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/02/11 19:31	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/02/11 19:31	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/02/11 19:31	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/02/11 19:31	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/02/11 19:31	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 19:31	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/02/11 19:31	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/02/11 19:31	JKG	

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Description: SW-5 | **Lab Sample ID:** C109985-04 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 17:40 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/02/11 19:31	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*51-122*	*1I02004*	*EPA 8260B*	*09/02/11 19:31*	*JKG*	
Dibromofluoromethane	*48*	*1*	*50.0*	*95 %*	*68-117*	*1I02004*	*EPA 8260B*	*09/02/11 19:31*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*95 %*	*69-110*	*1I02004*	*EPA 8260B*	*09/02/11 19:31*	*JKG*	

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Description: SW-5
Matrix: Surface Water
Project: Cherokee Co. SWs

Lab Sample ID: C109985-04
Sampled: 08/24/11 17:40
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:45
Work Order: C109985

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 13:52	NLH	

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Description: SW-5 | **Lab Sample ID:** C109985-04 | **Received:** 08/29/11 08:45

Matrix: Surface Water | **Sampled:** 08/24/11 17:40 | **Work Order:** C109985

Project: Cherokee Co. SWs | **Sampled By:** Jonathan Pfohl

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	09/19/11 11:39	VLO	
Arsenic [7440-38-2] ^	**4.17**	JB	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 10:58	JDH	J
Barium [7440-39-3] ^	**9.00**	J	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 10:58	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 10:58	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 10:58	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 10:58	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 10:58	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 10:58	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:58	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 10:58	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/19/11 11:39	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 10:58	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/19/11 11:39	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 10:58	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 10:58	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 10:58	JDH	

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 1I01022 - EPA 5030B_MS

Blank (1I01022-BLK1) Prepared: 09/01/2011 10:44 Analyzed: 09/02/2011 00:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Ethylbenzene	0.62	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.14	U	1.0	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1I01022 - EPA 5030B_MS

Blank (1I01022-BLK1) Continued Prepared: 09/01/2011 10:44 Analyzed: 09/02/2011 00:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*93*	*68-117*			
Surrogate: Toluene-d8	*48*			*ug/L*	*50.0*		*96*	*69-110*			

LCS (1I01022-BS1) Prepared: 09/01/2011 10:44 Analyzed: 09/02/2011 01:24

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0		101	75-133			
Benzene	20		1.0	ug/L	20.0		101	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		100	83-117			
Toluene	21		1.0	ug/L	20.0		103	71-118			
Trichloroethene	22		1.0	ug/L	20.0		111	75-115			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*93*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*99*	*69-110*			

Matrix Spike (1I01022-MS1) Prepared: 09/01/2011 10:44 Analyzed: 09/02/2011 01:53

Source: C110503-11

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	0.60 U	103	75-133			
Benzene	20		1.0	ug/L	20.0	0.68 U	102	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.74 U	100	83-117			
Toluene	21		1.0	ug/L	20.0	0.85 U	107	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.72 U	100	75-115			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*95*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*91*	*68-117*			
Surrogate: Toluene-d8	*48*			*ug/L*	*50.0*		*96*	*69-110*			

Matrix Spike Dup (1I01022-MSD1) Prepared: 09/01/2011 10:44 Analyzed: 09/02/2011 02:22

Source: C110503-11

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	0.60 U	106	75-133	3	20	
Benzene	20		1.0	ug/L	20.0	0.68 U	101	81-134	1	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.74 U	100	83-117	0.3	16	
Toluene	21		1.0	ug/L	20.0	0.85 U	105	71-118	2	17	
Trichloroethene	19		1.0	ug/L	20.0	0.72 U	95	75-115	5	18	
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*95*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*93*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*97*	*69-110*			

Batch 1I02004 - EPA 5030B_MS

Blank (1I02004-BLK1) Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 13:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1I02004 - EPA 5030B_MS

Blank (1I02004-BLK1) Continued Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 13:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Ethylbenzene	0.62	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.14	U	1.0	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*93*	*51-122*			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1I02004 - EPA 5030B_MS

Blank (1I02004-BLK1) Continued Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 13:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*93*	*68-117*			
Surrogate: Toluene-d8	*47*			*ug/L*	*50.0*		*94*	*69-110*			

LCS (1I02004-BS1) Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 13:42

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		108	75-133			
Benzene	21		1.0	ug/L	20.0		104	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		105	83-117			
Toluene	22		1.0	ug/L	20.0		110	71-118			
Trichloroethene	21		1.0	ug/L	20.0		103	75-115			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*98*	*69-110*			

Matrix Spike (1I02004-MS1) Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 14:11

Source: C110503-12

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.60 U	117	75-133			
Benzene	22		1.0	ug/L	20.0	0.68 U	110	81-134			
Chlorobenzene	22		1.0	ug/L	20.0	0.74 U	111	83-117			
Toluene	23		1.0	ug/L	20.0	0.85 U	114	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	108	75-115			
Surrogate: 4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*97*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*91*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*98*	*69-110*			

Matrix Spike Dup (1I02004-MSD1) Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 14:40

Source: C110503-12

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.60 U	117	75-133	0.6	20	
Benzene	22		1.0	ug/L	20.0	0.68 U	108	81-134	2	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	106	83-117	4	16	
Toluene	22		1.0	ug/L	20.0	0.85 U	112	71-118	2	17	
Trichloroethene	21		1.0	ug/L	20.0	0.72 U	106	75-115	2	18	
Surrogate: 4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*99*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*98*	*69-110*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1H30009 - EPA 245.1

Blank (1H30009-BLK1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:21

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1H30009 - EPA 245.1

Blank (1H30009-BLK1) Continued Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:21

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 (1H30009-BS1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.68		0.200	ug/L	5.00		94	85-115			

Matrix Spike (1H30009-MS1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:37

Source: C109625-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.78		0.200	ug/L	5.00	0.170 U	96	85-115			

Matrix Spike Dup (1H30009-MSD1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:40

Source: C109625-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.88		0.200	ug/L	5.00	0.170 U	98	85-115	2	15	

Post Spike (1H30009-PS1) Prepared: 08/30/2011 10:01 Analyzed: 08/31/2011 12:43

Source: C109625-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.74		0.200	ug/L	5.00	-0.0561	96	75-125			

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

Batch 1H30012 - EPA 3005A

Blank (1H30012-BLK1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:22

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	**3.11**	**J**	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
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 (1H30012-BS1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 09:59

QUALITY CONTROL

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

Batch 1H30012 - EPA 3005A

LCS (1H30012-BS1) Continued Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 09:59

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	203	B	10.0	ug/L	200		102	80-120			
Barium	204		10.0	ug/L	200		102	80-120			
Beryllium	20.4		1.00	ug/L	20.0		102	80-120			
Cadmium	20.9		1.00	ug/L	20.0		105	80-120			
Chromium	205		10.0	ug/L	200		102	80-120			
Cobalt	210		10.0	ug/L	200		105	80-120			
Copper	201		10.0	ug/L	200		100	80-120			
Lead	204		10.0	ug/L	200		102	80-120			
Nickel	207		10.0	ug/L	200		103	80-120			
Silver	213		10.0	ug/L	200		107	80-120			
Tin	202		10.0	ug/L	200		101	80-120			
Vanadium	207		10.0	ug/L	200		103	80-120			
Zinc	205		10.0	ug/L	200		103	80-120			

Matrix Spike (1H30012-MS1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:05

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	202	B	10.0	ug/L	200	2.80 U	101	75-125			
Barium	271		10.0	ug/L	200	59.0	106	75-125			
Beryllium	21.2		1.00	ug/L	20.0	0.100 U	106	75-125			
Cadmium	21.8		1.00	ug/L	20.0	0.360 U	109	75-125			
Chromium	212		10.0	ug/L	200	5.15	104	75-125			
Cobalt	240		10.0	ug/L	200	30.2	105	75-125			
Copper	215		10.0	ug/L	200	3.19	106	75-125			
Lead	204		10.0	ug/L	200	1.90 U	102	75-125			
Nickel	224		10.0	ug/L	200	12.7	106	75-125			
Silver	223		10.0	ug/L	200	2.76	110	75-125			
Tin	210		10.0	ug/L	200	6.34	102	75-125			
Vanadium	213		10.0	ug/L	200	1.40 U	107	75-125			
Zinc	219		10.0	ug/L	200	6.51	106	75-125			

Matrix Spike Dup (1H30012-MSD1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:07

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	209	B	10.0	ug/L	200	2.80 U	105	75-125	3	20	
Barium	275		10.0	ug/L	200	59.0	108	75-125	1	20	
Beryllium	21.3		1.00	ug/L	20.0	0.100 U	106	75-125	0.4	20	
Cadmium	22.1		1.00	ug/L	20.0	0.360 U	111	75-125	2	20	
Chromium	214		10.0	ug/L	200	5.15	104	75-125	0.9	20	
Cobalt	244		10.0	ug/L	200	30.2	107	75-125	2	20	
Copper	217		10.0	ug/L	200	3.19	107	75-125	0.9	20	
Lead	208		10.0	ug/L	200	1.90 U	104	75-125	2	20	
Nickel	225		10.0	ug/L	200	12.7	106	75-125	0.5	20	
Silver	225		10.0	ug/L	200	2.76	111	75-125	0.9	20	
Tin	213		10.0	ug/L	200	6.34	103	75-125	2	20	
Vanadium	215		10.0	ug/L	200	1.40 U	107	75-125	0.5	20	

QUALITY CONTROL

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

Batch 1H30012 - EPA 3005A

Matrix Spike Dup (1H30012-MSD1) Continued Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:07

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Zinc	223		10.0	ug/L	200	6.51	108	75-125	2	20	

Post Spike (1H30012-PS1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:09

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.205	B	0.0100	mg/L	0.200	-0.00388	105	80-120			
Barium	0.267		0.0100	mg/L	0.200	0.0590	104	80-120			
Beryllium	0.0207		0.00100	mg/L	0.0200	-0.000172	104	80-120			
Cadmium	0.0215		0.00100	mg/L	0.0200	0.000268	106	80-120			
Chromium	0.209		0.0100	mg/L	0.200	0.00515	102	80-120			
Cobalt	0.237		0.0100	mg/L	0.200	0.0302	103	80-120			
Copper	0.212		0.0100	mg/L	0.200	0.00319	104	80-120			
Lead	0.200		0.0100	mg/L	0.200	0.00124	99	80-120			
Nickel	0.219		0.0100	mg/L	0.200	0.0127	103	80-120			
Silver	0.178		0.0100	mg/L	0.200	0.00276	88	80-120			
Tin	0.208		0.0100	mg/L	0.200	0.00634	101	80-120			
Vanadium	0.209		0.0100	mg/L	0.200	-0.000937	105	80-120			
Zinc	0.216		0.0100	mg/L	0.200	0.00651	105	80-120			

Batch 1I01020 - EPA 3005A

Blank (1I01020-BLK1) Prepared: 09/01/2011 10:36 Analyzed: 09/19/2011 10:57

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 (1I01020-BS1) Prepared: 09/01/2011 10:36 Analyzed: 09/19/2011 11:00

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.4		2.00	ug/L	25.0		102	80-120			
Selenium	24.3		1.00	ug/L	25.0		97	80-120			
Thallium	26.8		1.00	ug/L	25.0		107	80-120			

Matrix Spike (1I01020-MS1) Prepared: 09/01/2011 10:36 Analyzed: 09/19/2011 11:07

Source: C109985-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.2		2.00	ug/L	25.0	0.220 U	101	75-125			
Selenium	23.3		1.00	ug/L	25.0	0.830 U	93	75-125			
Thallium	26.7		1.00	ug/L	25.0	0.110 U	107	75-125			

Matrix Spike Dup (1I01020-MSD1) Prepared: 09/01/2011 10:36 Analyzed: 09/19/2011 11:11

Source: C109985-02

QUALITY CONTROL

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

Batch 1I01020 - EPA 3005A

Matrix Spike Dup (1I01020-MSD1) Continued Prepared: 09/01/2011 10:36 Analyzed: 09/19/2011 11:11

Source: C109985-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.1		2.00	ug/L	25.0	0.220 U	100	75-125	0.3	20	
Selenium	22.9		1.00	ug/L	25.0	0.830 U	92	75-125	2	20	
Thallium	26.9		1.00	ug/L	25.0	0.110 U	108	75-125	1	20	

Post Spike (1I01020-PS1) Prepared: 09/01/2011 10:36 Analyzed: 09/19/2011 11:21

Source: C109985-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	30.2		2.00	ug/L	25.0	0.0200	121	80-120			QM-08
Selenium	28.7		1.00	ug/L	25.0	0.182	114	80-120			
Thallium	32.5		1.00	ug/L	25.0	0.0190	130	80-120			QM-08

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.
QM-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
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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Page 1 of 1

Client Name: Municipal Engineering Services (MU001)	Project Number: G10007.0 SW
Address: P.O. Box 97	Project Name/Desc: Cherokee Co. SWs
City/ST/Zip: Garner, NC 27529	PO # / Billing Info:
Tel: (919) 772-5393 Fax: (919) 772-1176	Reporting Contact: Jonathan Pfohl
Sampler(s) Name, Affiliation (Print): Jonathan Pfohl	Billing Contact: Accounts Payable
Sampler(s) Signature:	Site Location / Time Zone:

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C109985

Requested Analyses

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B Appendix 1	Ag,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
	SW-1	8/29/11	4:50	Grab	SW	4	X		X								
	SW-2	↓	5:10	↓	SW	4	X		X								
	SW-4		5:25		SW	4	X		X								
	SW-5		5:40		SW	4	X	X		X							
						<-- Total # of Containers											

Sample Kit Prepared By: JK	Date/Time: 8-12	Relinquished By: MESCC	Date/Time: 8/29/11 8:47	Received By:	Date/Time: 8/29/11 8:4
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-733 1.7°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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Environmental Conservation Laboratories, Inc.
102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515
www.encolabs.com

Tuesday, September 20, 2011

Municipal Engineering Services (MU001)

Attn: Jonathan Pfohl

P.O. Box 97

Garner, NC 27529

RE: Laboratory Results for
Project Number: G10007.0 Blanks, Project Name/Desc: Cherokee Co. Landfill Blanks
ENCO Workorder: C109986

Dear Jonathan Pfohl,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Monday, August 29, 2011.

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

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

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

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

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 30.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: EB **Lab ID: C109986-01** **Sampled: 08/27/11 12:00** **Received: 08/29/11 08:47**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/23/12		08/30/11	10:08	8/31/2011 11:00
EPA 6020A	02/23/12		08/30/11	10:16	9/17/2011 15:04
EPA 7470A	09/24/11		08/31/11	09:26	8/31/2011 16:20
EPA 8081B	09/03/11	10/10/11	08/31/11	02:35	9/2/2011 23:29
EPA 8082A	08/26/12	08/26/12	08/31/11	02:37	9/2/2011 23:29
EPA 8151A	09/03/11	10/10/11	08/31/11	05:02	9/2/2011 03:19
EPA 8260B	09/10/11		09/02/11	08:37	9/2/2011 20:00
EPA 8270D	09/03/11	10/12/11	09/02/11	04:28	9/13/2011 17:13
SM18 4500-S D	09/03/11		08/29/11	12:22	8/29/2011 13:08
SM4500-CN/E	09/10/11		09/06/11	14:16	9/7/2011 12:41

Client ID: FB **Lab ID: C109986-02** **Sampled: 08/27/11 12:10** **Received: 08/29/11 08:47**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	02/23/12	08/30/11	10:08	8/31/2011 11:02
EPA 6020A	02/23/12	08/30/11	10:16	9/17/2011 15:08
EPA 7470A	09/24/11	08/31/11	09:26	8/31/2011 16:23
EPA 8260B	09/10/11	09/02/11	08:37	9/2/2011 20:29

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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: FB **Lab ID:** C109986-02

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	4.96	JB	1	2.80	10.0	10	ug/L	EPA 6010C	J

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ANALYTICAL RESULTS

Description: EB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-01
Sampled: 08/27/11 12:00
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/02/11 20:00	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/02/11 20:00	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/02/11 20:00	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/02/11 20:00	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/02/11 20:00	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/02/11 20:00	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/02/11 20:00	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/02/11 20:00	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/02/11 20:00	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/02/11 20:00	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/02/11 20:00	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/02/11 20:00	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/02/11 20:00	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/02/11 20:00	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/02/11 20:00	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/02/11 20:00	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/02/11 20:00	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/02/11 20:00	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/02/11 20:00	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/02/11 20:00	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/02/11 20:00	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/02/11 20:00	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/02/11 20:00	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/02/11 20:00	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/02/11 20:00	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/02/11 20:00	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/02/11 20:00	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/02/11 20:00	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/02/11 20:00	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/02/11 20:00	JKG	

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Description: EB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-01
Sampled: 08/27/11 12:00
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

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	09/02/11 20:00	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/02/11 20:00	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	09/02/11 20:00	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/02/11 20:00	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/02/11 20:00	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/02/11 20:00	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/02/11 20:00	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/02/11 20:00	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/02/11 20:00	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/02/11 20:00	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/02/11 20:00	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/02/11 20:00	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*95 %*	*51-122*	*1I02004*	*EPA 8260B*	*09/02/11 20:00*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*97 %*	*68-117*	*1I02004*	*EPA 8260B*	*09/02/11 20:00*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*95 %*	*69-110*	*1I02004*	*EPA 8260B*	*09/02/11 20:00*	*JKG*	

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Description: EB | **Lab Sample ID:** C109986-01 | **Received:** 08/29/11 08:47

Matrix: Water | **Sampled:** 08/27/11 12:00 | **Work Order:** C109986

Project: Cherokee Co. Landfill Blanks | **Sampled By:** Jonathan Pfohl

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	09/13/11 17:13	DFM	
1,3,5-Trinitrobenzene [99-35-4]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
1,3-Dinitrobenzene [99-65-0]	1.9	U	ug/L	1	1.9	10	20	EPA 8270D	09/13/11 17:13	DFM	
1,4-Naphthoquinone [130-15-4]	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 17:13	DFM	
1,4-Phenylenediamine [106-50-3]	4.0	U	ug/L	1	4.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
1-Naphthylamine [134-32-7]	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 17:13	DFM	
2,3,4,6-Tetrachlorophenol [58-90-2] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
2,4,5-Trichlorophenol [95-95-4] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
2,4,6-Trichlorophenol [88-06-2] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
2,4-Dichlorophenol [120-83-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
2,4-Dimethylphenol [105-67-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
2,4-Dinitrophenol [51-28-5] ^	2.6	U	ug/L	1	2.6	10	50	EPA 8270D	09/13/11 17:13	DFM	
2,4-Dinitrotoluene [121-14-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
2,6-Dichlorophenol [87-65-0] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
2,6-Dinitrotoluene [606-20-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 17:13	DFM	
2-Acetylaminofluorene [53-96-3]	2.5	U	ug/L	1	2.5	10	20	EPA 8270D	09/13/11 17:13	DFM	QV-02
2-Chloronaphthalene [91-58-7] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
2-Chlorophenol [95-57-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.9	U	ug/L	1	2.9	10	50	EPA 8270D	09/13/11 17:13	DFM	
2-Methylnaphthalene [91-57-6] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 17:13	DFM	
2-Methylphenol [95-48-7] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
2-Naphthylamine [91-59-8]	3.0	U	ug/L	1	3.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
2-Nitroaniline [88-74-4] ^	1.5	U	ug/L	1	1.5	10	50	EPA 8270D	09/13/11 17:13	DFM	
2-Nitrophenol [88-75-5] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 17:13	DFM	
3,3'-Dichlorobenzidine [91-94-1] ^	3.3	U	ug/L	1	3.3	10	20	EPA 8270D	09/13/11 17:13	DFM	
3,3'-Dimethylbenzidine [119-93-7] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
3-Methylcholanthrene [56-49-5]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
3-Nitroaniline [99-09-2] ^	2.1	U	ug/L	1	2.1	10	50	EPA 8270D	09/13/11 17:13	DFM	
4-Aminobiphenyl [92-67-1]	2.1	U	ug/L	1	2.1	10	20	EPA 8270D	09/13/11 17:13	DFM	
4-Bromophenyl-phenylether [101-55-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
4-Chloro-3-methylphenol [59-50-7] ^	1.5	U	ug/L	1	1.5	10	20	EPA 8270D	09/13/11 17:13	DFM	
4-Chloroaniline [106-47-8] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 17:13	DFM	
4-Chlorophenyl-phenylether [7005-72-3] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 17:13	DFM	
4-Nitroaniline [100-01-6] ^	3.2	U	ug/L	1	3.2	10	20	EPA 8270D	09/13/11 17:13	DFM	QV-02
4-Nitrophenol [100-02-7] ^	2.0	U	ug/L	1	2.0	10	50	EPA 8270D	09/13/11 17:13	DFM	
5-Nitro-o-toluidine [99-55-8]	3.2	U	ug/L	1	3.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
7,12-Dimethylbenz(a)anthracene [57-97-6]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
Acenaphthene [83-32-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
Acenaphthylene [208-96-8] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
Acetophenone [98-86-2]	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
Anthracene [120-12-7] ^	1.6	U	ug/L	1	1.6	10	10	EPA 8270D	09/13/11 17:13	DFM	
Benzo(a)anthracene [56-55-3] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
Benzo(a)pyrene [50-32-8] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
Benzo(b)fluoranthene [205-99-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
Benzo(g,h,i)perylene [191-24-2] ^	2.4	U	ug/L	1	2.4	10	10	EPA 8270D	09/13/11 17:13	DFM	

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Description: EB | **Lab Sample ID:** C109986-01 | **Received:** 08/29/11 08:47
Matrix: Water | **Sampled:** 08/27/11 12:00 | **Work Order:** C109986
Project: Cherokee Co. Landfill Blanks | **Sampled By:** Jonathan Pfohl

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(k)fluoranthene [207-08-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	QV-02
Benzyl alcohol [100-51-6] ^	1.4	U	ug/L	1	1.4	10	20	EPA 8270D	09/13/11 17:13	DFM	
Bis(2-chloroethoxy)methane [111-91-1] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
Bis(2-chloroethyl)ether [111-44-4] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
Bis(2-chloroisopropyl)ether [108-60-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	1.7	U	ug/L	1	1.7	5.0	15	EPA 8270D	09/13/11 17:13	DFM	
Butylbenzylphthalate [85-68-7] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
Chlorobenzilate [510-15-6]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
Chrysene [218-01-9] ^	2.0	U	ug/L	1	2.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
Diallate [2303-16-4]	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	2.3	U	ug/L	1	2.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
Dibenzofuran [132-64-9] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
Diethylphthalate [84-66-2] ^	2.1	U	ug/L	1	2.1	10	6000	EPA 8270D	09/13/11 17:13	DFM	
Dimethoate [60-51-5]	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 17:13	DFM	
Dimethylphthalate [131-11-3] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
Di-n-butylphthalate [84-74-2] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 17:13	DFM	
Di-n-octylphthalate [117-84-0] ^	3.1	U	ug/L	1	3.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
Disulfoton [298-04-4]	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
Ethyl methanesulfonate [62-50-0] ^	1.2	U	ug/L	1	1.2	10	20	EPA 8270D	09/13/11 17:13	DFM	
Famphur [52-85-7] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 17:13	DFM	
Fluoranthene [206-44-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
Fluorene [86-73-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 17:13	DFM	
Hexachlorobenzene [118-74-1] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
Hexachlorobutadiene [87-68-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
Hexachlorocyclopentadiene [77-47-4] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
Hexachloroethane [67-72-1] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
Hexachloropropene [1888-71-7] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 17:13	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	2.2	U	ug/L	1	2.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
Isodrin [465-73-6] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 17:13	DFM	
Isophorone [78-59-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
Isosafrole [120-58-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
Kepone [143-50-0]	7.2	U	ug/L	1	7.2	20	20	EPA 8270D	09/13/11 17:13	DFM	QV-01
Methapyrilene [91-80-5] ^	3.5	U	ug/L	1	3.5	10	100	EPA 8270D	09/13/11 17:13	DFM	
Methyl Methanesulfonate [66-27-3] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
Methyl parathion [298-00-0] ^	2.5	U	ug/L	1	2.5	10	10	EPA 8270D	09/13/11 17:13	DFM	
Nitrobenzene [98-95-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
N-Nitrosodiethylamine [55-18-5] ^	1.3	U	ug/L	1	1.3	10	20	EPA 8270D	09/13/11 17:13	DFM	
N-Nitrosodimethylamine [62-75-9] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
N-Nitrosodi-n-butylamine [924-16-3] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
N-Nitroso-di-n-propylamine [621-64-7] ^	1.5	U	ug/L	1	1.5	10	10	EPA 8270D	09/13/11 17:13	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
N-Nitrosomethylethylamine [10595-95-6] ^	1.9	U	ug/L	1	1.9	10	10	EPA 8270D	09/13/11 17:13	DFM	
N-Nitrosopiperidine [100-75-4] ^	1.1	U	ug/L	1	1.1	10	20	EPA 8270D	09/13/11 17:13	DFM	
N-Nitrosopyrrolidine [930-55-2] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
O,O,O-Triethyl phosphorothioate [126-68-1] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	

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Description: EB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-01
Sampled: 08/27/11 12:00
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

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-Toluidine [95-53-4] ^	1.1	U	ug/L	1	1.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
Parathion [56-38-2] ^	1.7	U	ug/L	1	1.7	10	10	EPA 8270D	09/13/11 17:13	DFM	
p-Dimethylaminoazobenzene [60-11-7]	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
Pentachlorobenzene [608-93-5] ^	1.3	U	ug/L	1	1.3	10	10	EPA 8270D	09/13/11 17:13	DFM	
Pentachloronitrobenzene [82-68-8] ^	1.0	U	ug/L	1	1.0	10	20	EPA 8270D	09/13/11 17:13	DFM	
Phenacetin [62-44-2] ^	2.7	U	ug/L	1	2.7	10	20	EPA 8270D	09/13/11 17:13	DFM	
Phenanthrene [85-01-8] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
Phenol [108-95-2] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
Phorate [298-02-2] ^	1.0	U	ug/L	1	1.0	10	10	EPA 8270D	09/13/11 17:13	DFM	
Pronamide [23950-58-5] ^	1.4	U	ug/L	1	1.4	10	10	EPA 8270D	09/13/11 17:13	DFM	
Pyrene [129-00-0] ^	2.1	U	ug/L	1	2.1	10	10	EPA 8270D	09/13/11 17:13	DFM	
Safrole [94-59-7] ^	1.2	U	ug/L	1	1.2	10	10	EPA 8270D	09/13/11 17:13	DFM	
Thionazin [297-97-2] ^	2.3	U	ug/L	1	2.3	10	20	EPA 8270D	09/13/11 17:13	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*92*	*1*	*100*	*92 %*	*10-179*	*1I01001*	*EPA 8270D*	*09/13/11 17:13*	*DFM*	
2-Fluorobiphenyl	*43*	*1*	*50.0*	*86 %*	*10-149*	*1I01001*	*EPA 8270D*	*09/13/11 17:13*	*DFM*	
2-Fluorophenol	*65*	*1*	*100*	*65 %*	*10-110*	*1I01001*	*EPA 8270D*	*09/13/11 17:13*	*DFM*	
Nitrobenzene-d5	*42*	*1*	*50.0*	*84 %*	*10-149*	*1I01001*	*EPA 8270D*	*09/13/11 17:13*	*DFM*	
Phenol-d5	*55*	*1*	*100*	*55 %*	*10-88*	*1I01001*	*EPA 8270D*	*09/13/11 17:13*	*DFM*	
Terphenyl-d14	*47*	*1*	*50.0*	*93 %*	*10-188*	*1I01001*	*EPA 8270D*	*09/13/11 17:13*	*DFM*	

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Description: EB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-01
Sampled: 08/27/11 12:00
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	0.044	U	ug/L	1	0.044	0.050	0.1	EPA 8081B	09/02/11 23:29	MSZ	
4,4'-DDE [72-55-9] ^	0.048	U	ug/L	1	0.048	0.050	0.1	EPA 8081B	09/02/11 23:29	MSZ	
4,4'-DDT [50-29-3] ^	0.049	U	ug/L	1	0.049	0.050	0.1	EPA 8081B	09/02/11 23:29	MSZ	
Aldrin [309-00-2] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 23:29	MSZ	
alpha-BHC [319-84-6] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 23:29	MSZ	
beta-BHC [319-85-7] ^	0.027	U	ug/L	1	0.027	0.050	0.05	EPA 8081B	09/02/11 23:29	MSZ	
Chlordane (tech) [12789-03-6] ^	0.20	U	ug/L	1	0.20	0.50	0.5	EPA 8081B	09/02/11 23:29	MSZ	
Chlordane-alpha [5103-71-9] ^	0.048	U	ug/L	1	0.048	0.050	NE	EPA 8081B	09/02/11 23:29	MSZ	
Chlordane-gamma [5566-34-7] ^	0.040	U	ug/L	1	0.040	0.050	NE	EPA 8081B	09/02/11 23:29	MSZ	
delta-BHC [319-86-8] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 23:29	MSZ	
Dieldrin [60-57-1] ^	0.0020	U	ug/L	1	0.0020	0.050	0.075	EPA 8081B	09/02/11 23:29	MSZ	
Endosulfan I [959-98-8] ^	0.041	U	ug/L	1	0.041	0.050	0.1	EPA 8081B	09/02/11 23:29	MSZ	
Endosulfan II [33213-65-9] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 23:29	MSZ	
Endosulfan sulfate [1031-07-8] ^	0.025	U	ug/L	1	0.025	0.050	0.1	EPA 8081B	09/02/11 23:29	MSZ	
Endrin [72-20-8] ^	0.029	U	ug/L	1	0.029	0.050	0.1	EPA 8081B	09/02/11 23:29	MSZ	
Endrin aldehyde [7421-93-4] ^	0.031	U	ug/L	1	0.031	0.050	0.1	EPA 8081B	09/02/11 23:29	MSZ	
gamma-BHC [58-89-9] ^	0.022	U	ug/L	1	0.022	0.050	0.05	EPA 8081B	09/02/11 23:29	MSZ	
Heptachlor [76-44-8] ^	0.038	U	ug/L	1	0.038	0.050	0.05	EPA 8081B	09/02/11 23:29	MSZ	
Heptachlor epoxide [1024-57-3] ^	0.027	U	ug/L	1	0.027	0.050	0.075	EPA 8081B	09/02/11 23:29	MSZ	
Methoxychlor [72-43-5] ^	0.025	U	ug/L	1	0.025	0.050	1	EPA 8081B	09/02/11 23:29	MSZ	
Toxaphene [8001-35-2] ^	0.22	U	ug/L	1	0.22	0.50	1.5	EPA 8081B	09/02/11 23:29	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*110 %*	*44-134*	*1H30003*	*EPA 8081B*	*09/02/11 23:29*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*109 %*	*37-149*	*1H30003*	*EPA 8081B*	*09/02/11 23:29*	*MSZ*	

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Description: EB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-01
Sampled: 08/27/11 12:00
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.19	U	ug/L	1	0.19	0.50	2	EPA 8082A	09/02/11 23:29	MSZ	
PCB-1221 [11104-28-2] ^	0.046	U	ug/L	1	0.046	0.50	NE	EPA 8082A	09/02/11 23:29	MSZ	
PCB-1232 [11141-16-5] ^	0.028	U	ug/L	1	0.028	0.50	NE	EPA 8082A	09/02/11 23:29	MSZ	
PCB-1248 [12672-29-6] ^	0.014	U	ug/L	1	0.014	0.50	NE	EPA 8082A	09/02/11 23:29	MSZ	
PCB-1254 [11097-69-1] ^	0.015	U	ug/L	1	0.015	0.50	NE	EPA 8082A	09/02/11 23:29	MSZ	
PCB-1260 [11096-82-5] ^	0.13	U	ug/L	1	0.13	0.50	NE	EPA 8082A	09/02/11 23:29	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.1*	*1*	*1.00*	*110 %*	*45-151*	*1H30004*	*EPA 8082A*	*09/02/11 23:29*	*MSZ*	
Decachlorobiphenyl	*1.1*	*1*	*1.00*	*109 %*	*42-159*	*1H30004*	*EPA 8082A*	*09/02/11 23:29*	*MSZ*	

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Description: EB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-01
Sampled: 08/27/11 12:00
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 16:20	NLH	

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Description: EB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-01
Sampled: 08/27/11 12:00
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

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	09/17/11 15:04	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 11:00	JDH	
Barium [7440-39-3] ^	1.00	U	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 11:00	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 11:00	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 11:00	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 11:00	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 11:00	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 11:00	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 11:00	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 11:00	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 15:04	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 11:00	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 15:04	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 11:00	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 11:00	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 11:00	JDH	

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Description: EB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-01
Sampled: 08/27/11 12:00
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Cyanide (total) [57-12-5] ^	0.0039	U	mg/L	1	0.0039	0.010	10	SM4500-CN/E	09/07/11 12:41	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	08/29/11 13:08	JOC	

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Description: EB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-01
Sampled: 08/27/11 12:00
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.14	U	ug/L	1	0.14	0.50	2	EPA 8151A	09/02/11 03:19	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	09/02/11 03:19	RGG	
2,4-D [94-75-7] ^	0.15	U	ug/L	1	0.15	0.50	2	EPA 8151A	09/02/11 03:19	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	1	EPA 8151A	09/02/11 03:19	RGG	
Pentachlorophenol [87-86-5] ^	0.13	U	ug/L	1	0.13	0.50	25	EPA 8151A	09/02/11 03:19	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*2.0*	*1*	*2.00*	*99 %*	*68-139*	*1H31002*	*EPA 8151A*	*09/02/11 03:19*	*RGG*	

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

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Description: FB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-02
Sampled: 08/27/11 12:10
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.90	U	ug/L	1	0.90	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	09/02/11 20:29	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/02/11 20:29	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	09/02/11 20:29	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	09/02/11 20:29	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	09/02/11 20:29	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	09/02/11 20:29	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	09/02/11 20:29	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	09/02/11 20:29	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	09/02/11 20:29	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	09/02/11 20:29	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	09/02/11 20:29	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	09/02/11 20:29	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	09/02/11 20:29	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	09/02/11 20:29	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	09/02/11 20:29	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	09/02/11 20:29	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	09/02/11 20:29	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	09/02/11 20:29	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	09/02/11 20:29	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	09/02/11 20:29	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	09/02/11 20:29	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	09/02/11 20:29	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	09/02/11 20:29	JKG	

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Description: FB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-02
Sampled: 08/27/11 12:10
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

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	09/02/11 20:29	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	09/02/11 20:29	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	09/02/11 20:29	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	09/02/11 20:29	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	09/02/11 20:29	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	09/02/11 20:29	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	09/02/11 20:29	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	09/02/11 20:29	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	09/02/11 20:29	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	09/02/11 20:29	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1I02004*	*EPA 8260B*	*09/02/11 20:29*	*JKG*	
Dibromofluoromethane	*48*	*1*	*50.0*	*96 %*	*68-117*	*1I02004*	*EPA 8260B*	*09/02/11 20:29*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*96 %*	*69-110*	*1I02004*	*EPA 8260B*	*09/02/11 20:29*	*JKG*	

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Description:	FB	**Lab Sample ID:**	C109986-02	**Received:**	08/29/11 08:47
Matrix:	Water	**Sampled:**	08/27/11 12:10	**Work Order:**	C109986
Project:	Cherokee Co. Landfill Blanks	**Sampled By:**	Jonathan Pfohl		

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	08/31/11 16:23	NLH	

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Description: FB
Matrix: Water
Project: Cherokee Co. Landfill Blanks

Lab Sample ID: C109986-02
Sampled: 08/27/11 12:10
Sampled By: Jonathan Pfohl

Received: 08/29/11 08:47
Work Order: C109986

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	09/17/11 15:08	VLO	
Arsenic [7440-38-2] ^	**4.96**	JB	ug/L	1	2.80	10.0	10	EPA 6010C	08/31/11 11:02	JDH	J
Barium [7440-39-3] ^	1.00	U	ug/L	1	1.00	10.0	100	EPA 6010C	08/31/11 11:02	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	08/31/11 11:02	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	08/31/11 11:02	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	08/31/11 11:02	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	08/31/11 11:02	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	08/31/11 11:02	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 11:02	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	08/31/11 11:02	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	09/17/11 15:08	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	08/31/11 11:02	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	09/17/11 15:08	VLO	
Tin [7440-31-5] ^	2.10	U	ug/L	1	2.10	10.0	100	EPA 6010C	08/31/11 11:02	JDH	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	08/31/11 11:02	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	08/31/11 11:02	JDH	

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 1I02004 - EPA 5030B_MS

Blank (1I02004-BLK1) Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 13:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,1-Dichloropropene	0.66	U	1.0	ug/L							
1,2,3-Trichloropropane	0.72	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.58	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.11	U	1.0	ug/L							
1,2-Dichloroethane	0.47	U	1.0	ug/L							
1,2-Dichloropropane	0.59	U	1.0	ug/L							
1,3-Dichlorobenzene	0.79	U	1.0	ug/L							
1,3-Dichloropropane	0.67	U	1.0	ug/L							
1,4-Dichlorobenzene	0.79	U	1.0	ug/L							
2,2-Dichloropropane	0.56	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	0.68	U	1.0	ug/L							
Bromochloromethane	0.87	U	1.0	ug/L							
Bromodichloromethane	0.75	U	1.0	ug/L							
Bromoform	0.68	U	1.0	ug/L							
Bromomethane	0.58	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.69	U	1.0	ug/L							
Chlorobenzene	0.74	U	1.0	ug/L							
Chloroethane	0.75	U	1.0	ug/L							
Chloroform	0.70	U	1.0	ug/L							
Chloromethane	0.55	U	1.0	ug/L							
Chloroprene	0.64	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.72	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.075	U	1.0	ug/L							
Dibromochloromethane	0.63	U	1.0	ug/L							
Dibromomethane	0.90	U	1.0	ug/L							
Dichlorodifluoromethane	0.56	U	1.0	ug/L							
Ethyl Methacrylate	0.38	U	1.0	ug/L							
Ethylbenzene	0.62	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 1I02004 - EPA 5030B_MS

Blank (1I02004-BLK1) Continued Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 13:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Methylene chloride	0.14	U	1.0	ug/L							
Naphthalene	0.46	U	1.0	ug/L							
Propionitrile	5.0	U	10	ug/L							
Styrene	0.053	U	1.0	ug/L							
Tetrachloroethene	0.73	U	1.0	ug/L							
Toluene	0.85	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.12	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.50	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.72	U	1.0	ug/L							
Trichlorofluoromethane	0.66	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.60	U	1.0	ug/L							
Xylenes (Total)	2.1	U	3.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*93*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*93*	*68-117*			
Surrogate: Toluene-d8	*47*			*ug/L*	*50.0*		*94*	*69-110*			

LCS (1I02004-BS1) Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 13:42

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		108	75-133			
Benzene	21		1.0	ug/L	20.0		104	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		105	83-117			
Toluene	22		1.0	ug/L	20.0		110	71-118			
Trichloroethene	21		1.0	ug/L	20.0		103	75-115			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*98*	*69-110*			

Matrix Spike (1I02004-MS1) Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 14:11

Source: C110503-12

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.60 U	117	75-133			
Benzene	22		1.0	ug/L	20.0	0.68 U	110	81-134			
Chlorobenzene	22		1.0	ug/L	20.0	0.74 U	111	83-117			
Toluene	23		1.0	ug/L	20.0	0.85 U	114	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	108	75-115			
Surrogate: 4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*97*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*91*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*98*	*69-110*			

Matrix Spike Dup (1I02004-MSD1) Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 14:40

Source: C110503-12

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1I02004 - EPA 5030B_MS

Matrix Spike Dup (1I02004-MSD1) Continued Prepared: 09/02/2011 08:37 Analyzed: 09/02/2011 14:40

Source: C110503-12

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.60 U	117	75-133	0.6	20	
Benzene	22		1.0	ug/L	20.0	0.68 U	108	81-134	2	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	106	83-117	4	16	
Toluene	22		1.0	ug/L	20.0	0.85 U	112	71-118	2	17	
Trichloroethene	21		1.0	ug/L	20.0	0.72 U	106	75-115	2	18	
Surrogate: 4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*99*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*98*	*69-110*			

Organochlorine Pesticides by GC - Quality Control

Batch 1H30003 - EPA 3510C

Blank (1H30003-BLK1) Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 18:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.044	U	0.050	ug/L							
4,4'-DDE	0.048	U	0.050	ug/L							
4,4'-DDT	0.049	U	0.050	ug/L							
Aldrin	0.038	U	0.050	ug/L							
alpha-BHC	0.027	U	0.050	ug/L							
beta-BHC	0.027	U	0.050	ug/L							
Chlordane (tech)	0.20	U	0.50	ug/L							
Chlordane-alpha	0.048	U	0.050	ug/L							
Chlordane-gamma	0.040	U	0.050	ug/L							
delta-BHC	0.022	U	0.050	ug/L							
Dieldrin	0.0020	U	0.050	ug/L							
Endosulfan I	0.041	U	0.050	ug/L							
Endosulfan II	0.029	U	0.050	ug/L							
Endosulfan sulfate	0.025	U	0.050	ug/L							
Endrin	0.029	U	0.050	ug/L							
Endrin aldehyde	0.031	U	0.050	ug/L							
gamma-BHC	0.022	U	0.050	ug/L							
Heptachlor	0.038	U	0.050	ug/L							
Heptachlor epoxide	0.027	U	0.050	ug/L							
Methoxychlor	0.025	U	0.050	ug/L							
Toxaphene	0.22	U	0.50	ug/L							
Surrogate: 2,4,5,6-TCMX	*1.1*			*ug/L*	*1.00*		*109*	*44-134*			
Surrogate: Decachlorobiphenyl	*1.2*			*ug/L*	*1.00*		*117*	*37-149*			

LCS (1H30003-BS1) Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 18:50

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00		110	37-139			
Dieldrin	1.2		0.050	ug/L	1.00		115	46-132			
Endrin	1.1		0.050	ug/L	1.00		109	43-133			
Surrogate: 2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*102*	*44-134*			

QUALITY CONTROL

Organochlorine Pesticides by GC - Quality Control

Batch 1H30003 - EPA 3510C

LCS (1H30003-BS1) Continued Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 18:50

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*108*	*37-149*			

Matrix Spike (1H30003-MS1) Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 19:03

Source: C110503-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00	0.049 U	114	37-139			
Dieldrin	1.2		0.050	ug/L	1.00	0.0020 U	118	46-132			
Endrin	1.1		0.050	ug/L	1.00	0.029 U	110	43-133			
Surrogate: 2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*102*	*44-134*			
Surrogate: Decachlorobiphenyl	*1.2*			*ug/L*	*1.00*		*116*	*37-149*			

Matrix Spike Dup (1H30003-MSD1) Prepared: 08/30/2011 07:13 Analyzed: 09/02/2011 19:16

Source: C110503-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00	0.049 U	110	37-139	4	26	
Dieldrin	1.1		0.050	ug/L	1.00	0.0020 U	114	46-132	4	27	
Endrin	1.1		0.050	ug/L	1.00	0.029 U	108	43-133	3	26	
Surrogate: 2,4,5,6-TCMX	*0.97*			*ug/L*	*1.00*		*97*	*44-134*			
Surrogate: Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*114*	*37-149*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 1H30004 - EPA 3510C

Blank (1H30004-BLK1) Prepared: 08/30/2011 07:20 Analyzed: 09/02/2011 18:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.19	U	0.50	ug/L							
PCB-1221	0.046	U	0.50	ug/L							
PCB-1232	0.028	U	0.50	ug/L							
PCB-1248	0.014	U	0.50	ug/L							
PCB-1254	0.015	U	0.50	ug/L							
PCB-1260	0.13	U	0.50	ug/L							
Surrogate: 2,4,5,6-TCMX	*1.1*			*ug/L*	*1.00*		*109*	*45-151*			
Surrogate: Decachlorobiphenyl	*1.2*			*ug/L*	*1.00*		*117*	*42-159*			

LCS (1H30004-BS1) Prepared: 08/30/2011 07:20 Analyzed: 09/02/2011 19:29

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	7.9		0.50	ug/L	10.0		79	66-149			
PCB-1260	9.2		0.50	ug/L	10.0		92	64-150			
Surrogate: 2,4,5,6-TCMX	*0.83*			*ug/L*	*1.00*		*83*	*45-151*			
Surrogate: Decachlorobiphenyl	*0.99*			*ug/L*	*1.00*		*99*	*42-159*			

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 1H30004 - EPA 3510C

Matrix Spike (1H30004-MS1) Prepared: 08/30/2011 07:20 Analyzed: 09/02/2011 19:43

Source: C110503-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	8.0		0.50	ug/L	10.0	0.19 U	80	66-149			
PCB-1260	9.4		0.50	ug/L	10.0	0.13 U	94	64-150			
Surrogate: 2,4,5,6-TCMX	*0.88*			*ug/L*	*1.00*		*88*	*45-151*			
Surrogate: Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*108*	*42-159*			

Matrix Spike Dup (1H30004-MSD1) Prepared: 08/30/2011 07:20 Analyzed: 09/02/2011 19:56

Source: C110503-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	7.8		0.50	ug/L	10.0	0.19 U	78	66-149	2	21	
PCB-1260	9.2		0.50	ug/L	10.0	0.13 U	92	64-150	2	18	
Surrogate: 2,4,5,6-TCMX	*0.84*			*ug/L*	*1.00*		*84*	*45-151*			
Surrogate: Decachlorobiphenyl	*1.0*			*ug/L*	*1.00*		*104*	*42-159*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1H31011 - EPA 245.1

Blank (1H31011-BLK1) Prepared: 08/31/2011 09:26 Analyzed: 08/31/2011 15:19

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 (1H31011-BS1) Prepared: 08/31/2011 09:26 Analyzed: 08/31/2011 15:22

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.68		0.200	ug/L	5.00		94	85-115			

Matrix Spike (1H31011-MS1) Prepared: 08/31/2011 09:26 Analyzed: 08/31/2011 15:28

Source: C109984-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.96		0.200	ug/L	5.00	0.170 U	99	85-115			

Matrix Spike Dup (1H31011-MSD1) Prepared: 08/31/2011 09:26 Analyzed: 08/31/2011 15:31

Source: C109984-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.75		0.200	ug/L	5.00	0.170 U	95	85-115	4	15	

Post Spike (1H31011-PS1) Prepared: 08/31/2011 09:26 Analyzed: 08/31/2011 15:34

Source: C109984-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.49		0.200	ug/L	5.00	0.00290	90	75-125			

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1H31011 - EPA 245.1

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

Batch 1H30012 - EPA 3005A

Blank (1H30012-BLK1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:22

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	**3.11**	**J**	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
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 (1H30012-BS1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 09:59

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	203	B	10.0	ug/L	200		102	80-120			
Barium	204		10.0	ug/L	200		102	80-120			
Beryllium	20.4		1.00	ug/L	20.0		102	80-120			
Cadmium	20.9		1.00	ug/L	20.0		105	80-120			
Chromium	205		10.0	ug/L	200		102	80-120			
Cobalt	210		10.0	ug/L	200		105	80-120			
Copper	201		10.0	ug/L	200		100	80-120			
Lead	204		10.0	ug/L	200		102	80-120			
Nickel	207		10.0	ug/L	200		103	80-120			
Silver	213		10.0	ug/L	200		107	80-120			
Tin	202		10.0	ug/L	200		101	80-120			
Vanadium	207		10.0	ug/L	200		103	80-120			
Zinc	205		10.0	ug/L	200		103	80-120			

Matrix Spike (1H30012-MS1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:05

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	202	B	10.0	ug/L	200	2.80 U	101	75-125			
Barium	271		10.0	ug/L	200	59.0	106	75-125			
Beryllium	21.2		1.00	ug/L	20.0	0.100 U	106	75-125			
Cadmium	21.8		1.00	ug/L	20.0	0.360 U	109	75-125			
Chromium	212		10.0	ug/L	200	5.15	104	75-125			
Cobalt	240		10.0	ug/L	200	30.2	105	75-125			
Copper	215		10.0	ug/L	200	3.19	106	75-125			
Lead	204		10.0	ug/L	200	1.90 U	102	75-125			
Nickel	224		10.0	ug/L	200	12.7	106	75-125			

QUALITY CONTROL

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

Batch 1H30012 - EPA 3005A

Matrix Spike (1H30012-MS1) Continued Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:05

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Silver	223		10.0	ug/L	200	2.76	110	75-125			
Tin	210		10.0	ug/L	200	6.34	102	75-125			
Vanadium	213		10.0	ug/L	200	1.40 U	107	75-125			
Zinc	219		10.0	ug/L	200	6.51	106	75-125			

Matrix Spike Dup (1H30012-MSD1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:07

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	209	B	10.0	ug/L	200	2.80 U	105	75-125	3	20	
Barium	275		10.0	ug/L	200	59.0	108	75-125	1	20	
Beryllium	21.3		1.00	ug/L	20.0	0.100 U	106	75-125	0.4	20	
Cadmium	22.1		1.00	ug/L	20.0	0.360 U	111	75-125	2	20	
Chromium	214		10.0	ug/L	200	5.15	104	75-125	0.9	20	
Cobalt	244		10.0	ug/L	200	30.2	107	75-125	2	20	
Copper	217		10.0	ug/L	200	3.19	107	75-125	0.9	20	
Lead	208		10.0	ug/L	200	1.90 U	104	75-125	2	20	
Nickel	225		10.0	ug/L	200	12.7	106	75-125	0.5	20	
Silver	225		10.0	ug/L	200	2.76	111	75-125	0.9	20	
Tin	213		10.0	ug/L	200	6.34	103	75-125	2	20	
Vanadium	215		10.0	ug/L	200	1.40 U	107	75-125	0.5	20	
Zinc	223		10.0	ug/L	200	6.51	108	75-125	2	20	

Post Spike (1H30012-PS1) Prepared: 08/30/2011 10:08 Analyzed: 08/31/2011 10:09

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.205	B	0.0100	mg/L	0.200	-0.00388	105	80-120			
Barium	0.267		0.0100	mg/L	0.200	0.0590	104	80-120			
Beryllium	0.0207		0.00100	mg/L	0.0200	-0.000172	104	80-120			
Cadmium	0.0215		0.00100	mg/L	0.0200	0.000268	106	80-120			
Chromium	0.209		0.0100	mg/L	0.200	0.00515	102	80-120			
Cobalt	0.237		0.0100	mg/L	0.200	0.0302	103	80-120			
Copper	0.212		0.0100	mg/L	0.200	0.00319	104	80-120			
Lead	0.200		0.0100	mg/L	0.200	0.00124	99	80-120			
Nickel	0.219		0.0100	mg/L	0.200	0.0127	103	80-120			
Silver	0.178		0.0100	mg/L	0.200	0.00276	88	80-120			
Tin	0.208		0.0100	mg/L	0.200	0.00634	101	80-120			
Vanadium	0.209		0.0100	mg/L	0.200	-0.000937	105	80-120			
Zinc	0.216		0.0100	mg/L	0.200	0.00651	105	80-120			

Batch 1H30014 - EPA 3005A

Blank (1H30014-BLK1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 11:59

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

QUALITY CONTROL

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

Batch 1H30014 - EPA 3005A

Blank (1H30014-BLK1) Continued Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 11:59

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (1H30014-BS1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 12:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.0		2.00	ug/L	25.0		100	80-120			
Selenium	23.8		1.00	ug/L	25.0		95	80-120			
Thallium	27.1		1.00	ug/L	25.0		109	80-120			

Matrix Spike (1H30014-MS1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 12:10

Source: C109553-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	23.1		2.00	ug/L	25.0	0.220 U	92	75-125			
Selenium	24.2		1.00	ug/L	25.0	0.906	93	75-125			
Thallium	24.1		1.00	ug/L	25.0	0.110 U	96	75-125			

Matrix Spike Dup (1H30014-MSD1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 13:38

Source: C109553-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	23.7		2.00	ug/L	25.0	0.220 U	95	75-125	2	20	
Selenium	24.9		1.00	ug/L	25.0	0.906	96	75-125	3	20	
Thallium	24.2		1.00	ug/L	25.0	0.110 U	97	75-125	0.5	20	

Post Spike (1H30014-PS1) Prepared: 08/30/2011 10:16 Analyzed: 09/17/2011 13:42

Source: C109553-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	29.4		2.00	ug/L	25.0	0.0940	117	80-120			
Selenium	29.2		1.00	ug/L	25.0	0.906	113	80-120			
Thallium	31.2		1.00	ug/L	25.0	-0.00600	125	80-120			QM-08

Classical Chemistry Parameters - Quality Control

Batch 1H29007 - NO PREP

Blank (1H29007-BLK1) Prepared: 08/29/2011 12:22 Analyzed: 08/29/2011 13:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	10	U	100	ug/L							

LCS (1H29007-BS1) Prepared: 08/29/2011 12:22 Analyzed: 08/29/2011 13:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.39		0.10	mg/L	0.401		97	80-120			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1H29007 - NO PREP

Matrix Spike (1H29007-MS1) Prepared: 08/29/2011 12:22 Analyzed: 08/29/2011 13:08

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	-0.009	U	0.10	mg/L	0.401	0.010 U		80-120			QM-05

Matrix Spike Dup (1H29007-MSD1) Prepared: 08/29/2011 12:22 Analyzed: 08/29/2011 13:08

Source: C109983-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	-0.007	U	0.10	mg/L	0.401	0.010 U		80-120		25	QM-05

Batch 1I06006 - Same

Blank (1I06006-BLK1) Prepared: 09/06/2011 10:28 Analyzed: 09/07/2011 12:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.0039	U	0.010	mg/L							

LCS (1I06006-BS1) Prepared: 09/06/2011 10:28 Analyzed: 09/07/2011 12:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.15		0.010	mg/L	0.150		100	90-110			

Matrix Spike (1I06006-MS1) Prepared: 09/06/2011 10:28 Analyzed: 09/07/2011 12:05

Source: C105124-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.15		0.010	mg/L	0.150	0.0025	98	90-110			

Matrix Spike Dup (1I06006-MSD1) Prepared: 09/06/2011 10:28 Analyzed: 09/07/2011 12:08

Source: C105124-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyanide (total)	0.14		0.010	mg/L	0.150	0.0025	93	90-110	5	10	

QUALITY CONTROL

Chlorinated Herbicides by GC - Quality Control

Batch 1H31002 - EPA 3510C

Blank (1H31002-BLK1) Prepared: 08/31/2011 05:02 Analyzed: 09/01/2011 19:27

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.14	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.15	U	0.50	ug/L							
2,4-D	0.15	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
Pentachlorophenol	0.13	U	0.50	ug/L							

QUALITY CONTROL

Chlorinated Herbicides by GC - Quality Control

Batch 1H31002 - EPA 3510C

Blank (1H31002-BLK1) Continued Prepared: 08/31/2011 05:02 Analyzed: 09/01/2011 19:27

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: 2,4-DCAA	*2.1*			*ug/L*	*2.00*		*107*	*68-139*			

LCS (1H31002-BS1) Prepared: 08/31/2011 05:02 Analyzed: 09/01/2011 20:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	2.1		0.50	ug/L	2.00		107	68-154			
2,4-D	2.2		0.50	ug/L	2.00		110	62-144			
Surrogate: 2,4-DCAA	*2.0*			*ug/L*	*2.00*		*100*	*68-139*			

Matrix Spike (1H31002-MS1) Prepared: 08/31/2011 05:02 Analyzed: 09/01/2011 20:46

Source: A104611-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	2.2		0.50	ug/L	2.00	0.15 U	109	68-154			
2,4-D	2.2		0.50	ug/L	2.00	0.15 U	109	62-144			
Surrogate: 2,4-DCAA	*2.0*			*ug/L*	*2.00*		*102*	*68-139*			

Matrix Spike Dup (1H31002-MSD1) Prepared: 08/31/2011 05:02 Analyzed: 09/01/2011 21:12

Source: A104611-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	2.1		0.50	ug/L	2.00	0.15 U	106	68-154	3	15	
2,4-D	2.2		0.50	ug/L	2.00	0.15 U	110	62-144	1	33	
Surrogate: 2,4-DCAA	*2.0*			*ug/L*	*2.00*		*102*	*68-139*			

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.
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-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).
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.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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Cary, NC 27511
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Page 1 of 1

Client Name: Municipal Engineering Services (MU001)	Project Number: G10007.0 Blanks
Address: P.O. Box 97	Project Name/Desc: Cherokee Co. Landfill Blanks
City/ST/Zip: Garner, NC 27529	PO # / Billing Info
Tel: (919) 772-5393 Fax: (919) 772-1176	Reporting Contact: Jonathan Pfohl
Sampler(s) Name, Affiliation (Print): Jonathan Pfohl	Billing Contact: Accounts Payable
Sampler(s) Signature:	Site Location / Time Zone

Requested Analyses: 8081B Appendix 2, 8082A Appendix 2, 8151A Appendix 2, 8270D Appendix 2; 8260B Appendix 2; Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Sn,Tl,V,Zn; Cyanide Total SM4500-CN E; Hg; Sulfide SM4500-S D

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C109986

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 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Sn,Tl,V,Zn	Cyanide Total SM4500-CN E	Hg	Sulfide SM4500-S D					Sample Comments
	EB	8/27/11	12:00	Grab	WA	10	X	X	X	X	X	X					Trip Blank not
	FB	8/27/11	12:10	↓	WA	4		X	X		X						received. BJG 8/29/11
	TB	ENCO Filled			WA	2		X									

<-- Total # of Containers

Sample Kit Prepared By: JK	Date/Time: 8-22-11	Relinquished By: / MESCO	Date/Time	Received By:	Date/Time: 8/29/11 8:47
Comments/Special Reporting Requirements: ENCO DI H_2O Geotech D. Bailer		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: C-733 1.7°C		Condition Upon Receipt: ✓ 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

Appendix B
Field Sampling Parameter Data Sheet(s)

Sampling Data Sheet

Municipal Services Engineering Company — Garner, NC — Boone, NC

Project: Cherokee County Closed MSWLF

Samplers: J. Pfohl

Monitoring Point	Sample Date	Sample Time	Sampling Parameters: Depth to Water (BTOC) Static @ Sample Time	Depth to Water (BTOC) Static on (8/24/11)	Lab Parameters to be analyzed for	Volume Purged (Gal)	Sample Type	Goes Dry During Purge	Comments	Total Depth as Expected (Y or N)	Total Depth Expected	Water Quality Parameters (Stabilized): DO (mg/L)	ORP	pH	Temp. ©	Specific Cond. (us/cm	TDS (mg/L)	Turbidity	CH4 (ppm)
MW-1	8/25/11	8:30	6.88	6.87	App II	8	DB	N		Y	15.5		95	6.34	15.2	807	403	c	NR
MW-2	8/24/11	9:00	28.87		App II	10	P&DB	Y		Y	43.5		5	5.86	15.8	122	59	ST	
MW-2R	8/24/11	3:10	17.58		App I	7	P&DB	Y	Pf Rel. from prev. Boxes	Y	25		316	4.78	15.5	53	26	ST	
MW-3	8/24/11	12:15	11.48		App II	8	DB	Y	Adjacent dipstick obtained since 8/11	Y	15.5		-95	6.42	15.1	263	131	c	
MW-4R	8/24/11	11:25	9.82		App II	8	P&DB	N		Y	18		-41	6.31	15.1	412	205	c	
MW-5	8/24/11	10:30	7.82		App II	9	P&DB	N		Y	18		155	5.48	16.1	311	156	c	
MW-6	8/24/11	9:45	31.62		App II	1	DB	Y		Y	34		62	5.63	13.0	131	65	c	
MW-6R	8/24/11	2:30	11.01		App I	5	P&DB	N		Y	20.25		309	5.34	15.9	337	153	ST	
MW-7	8/25/11	9:00	8.11	8.11	App II	6	DB	N		Y	16.5		-68	6.40	16.9	346	173	c	
Pendergrass	8/24/11	3:45	—		App II				Bad Hose Bib		-		213	6.03	16.8	18	9	c	
Solesbee	↓	4:10	—		App II				Well Head	Unknown Low ORP	-		-84	6.83	16.3	103	49	c	
Van Buskirk (Haney)	↓	4:35	—		App II				New Hose Bib installed since 8/11		-		233	5.86	16.7	42	21	c	
Rathbone	No Longer has well																		

Comments

SS B=Stainless Steel Baler, D B=Disposable Baler, P=Low flow Pump, PD=Purged Dry

VT=Very Turbid, MT=Moderately Turbid, ST=Slightly Turbid, C=Clear

NR=No Reading Attempted, NS=No Sample Obtained

Sampling Data Sheet

Municipal Services Engineering Company
Garner, NC Boone, NC

Project: Cherokee County MSWLF-SW SHARED

Samplers: J. Pfohl

Monitoring Point	Sample Date	Sample Time	Sampling Parameters: Depth to Water (BTOP) Static	Lab Parameters to be analyzed for	Volume Purged (Gal)	Sample Type	Goes Dry During Purge	Comments	Total Depth	Water Quality Parameters: Cl⁻ (mg/l)	DO (mg/L)	ORP	pH	Temp. ©	Specific Cond. (us/cm	TDS (mg/L)	Turbidity	CH4 (ppm)
SW-1	8/24/11	4:50	-	App I	-	D.B	-	upstream	-	NR	9.9	266	7.11	19.5	83	41	c	-
SW-2	↓	5:10	-	App I	-	↓	-	Midstream	-	↓	10.1	271	7.04	19.6	68	34	c	-
SW-4	↓	5:25	-	App I	-	↓	-	F. Hart Lowerstream	-	↓	9.8	280	6.98	19.4	72	36	c	-
SW-5	↓	5:40	-	App 2 Metals	-	↓	-	midstream	-	↓	10.3	278	6.99	19.3	80	39	c	-

Comments

SS B=Stainless Steel Baler, D B=Disposable Baler, P=Low flow Pump, PD=Purged Dry

VT=Very Turbid, MT=Moderately Turbid, ST=Slightly Turbid, C=Clear

NR=No Reading Attempted, NS=No Sample Obtained