North Wake Unlined Landfill Facility Permit No. 92-09 Semi-Annual Sampling Report

(November 2011 Sampling Event)

Wake County

Report

December 2011

WAKE COUNTY
NORTH CAROLINA

CDM

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):

Consultant - Camp Dresser & McKee

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

Name: Mathew F. Colone Phone: 919-787-5620

E-mail: colonemf@cdm.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Wake County North Wake Closed Landfill	9004 Deponie Drive Raleigh, NC 27615	92-09	.1600	October 31-November 2, 2011

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

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

Mathew F. Colone — Consultant — (919) 787-5620

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

Signature — 12/13/2011 Date — Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 1851 GEOLOGIST MATHEW F. COLONE

12/13/2011

5400 Glenwood Ave, Suite 300, Raleigh, NC 27612

Facility Representative Address

F-0412

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

Revised 6/2009

CDM

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December 13, 2011

Ms. Jaclynne Drummond
Division of Waste Management
Solid Waste Section
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

Subject: November 2011 Semi-Annual Monitoring Sampling Report
North Wake Unlined Landfill
Facility Permit # - 92-09

Dear Ms. Drummond:

CDM, on behalf of Wake County, is submitting an electronic copy of the November 2011 semi-annual sampling event report. This letter report presents the results of the semi-annual sampling event that was recently completed at the North Wake Unlined Landfill and constitutes the second semi-annual sampling event for 2011.

The groundwater monitoring network consists of the following wells: MW-11 (shallow background well), MW-11d (deep background well), MW-5R, MW-6, MW-6d, MW-7, MW-8, MW-8d, MW-9, MW-10, MW-10d, MW-22, MW-23, MW-23d, MW-24, MW-28, MW-28d, MW-29d, MW-30, MW-31, MW-31d, MW-32, MW-33, MW-34, MW-34d, MW-35, MW-36, MW-36d, TB-1a, and TB-1a deep and surface water sampling locations: SW-2, SW-3, SW-7, and SW-8. Monitoring wells MW-28, MW28d, MW-33, MW-34, MW-34d, and MW-35 are sampled annually during the spring event.

MW-5R has been sampled in place of MW-5 since April 2004 and is approximately 50 feet downgradient of MW-5. MW-27 was abandoned while MW-36 and MW-36d were being installed on November 24 and 25, 2008. MW-36 and MW- 36d are a nested pair of monitoring wells installed down-gradient of MW-9 and triangulated with MW-6 and MW-6d. These wells were installed in order to determine if contaminants had migrated beyond the facility boundary. SW-7 and SW-8 are surface water sampling locations on Abbot's Creek along the northern edge of the landfill that have been sampled since November 2008.

All groundwater samples were analyzed for Appendix I Volatile Organic Compounds (VOCs) plus dichlorodifluoromethane and Appendix I metals plus mercury. In addition, samples from monitoring wells MW-5R, -6, -8, -9, -10, -11, and -36 were analyzed for natural attenuation parameters per the approved Corrective Action Plan. Sampling results for all wells and surface water locations are discussed below.

Field Activities

Groundwater and surface water samples from the North Wake Unlined Landfill were collected from October 31-November 2, 2011. Groundwater samples were collected by use of a peristaltic pump or disposable, laboratory decontaminated bailers. Groundwater elevations were measured at each well prior to sampling and are presented in **Table 1**. These groundwater elevations were used to construct potentiometric contours for this sampling event and are shown on **Figure 1**. The groundwater elevations and potentiometric contours were also used to estimate groundwater velocities at each well as presented in **Table 2**. After depth to groundwater was determined, three well volumes of water were removed from each well prior to sampling to provide fresh formation water within the well water column. Each well volume and surface water sample was measured in the field for pH, conductivity, temperature, turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP). The field parameters at the time of sampling are shown in **Table 1**.

Sampling Results

All groundwater and surface water samples were analyzed by ENCO Laboratories, Inc. in Cary, North Carolina. In accordance with Solid Waste Section (SWS) guidelines the analytical results were reported to the laboratory specific method detection limit (MDL) and are quantifiable at or below Solid Waste Section Limits (SWSLs). All monitoring wells and surface water locations for the Unlined Landfill had detections of analytes above the MDL with a majority of the detections below SWSLs. These detections were qualified as estimated or "J" flags. "B" values which indicate that the analyte was detected in the method blank were also reported.

The following list summarizes which analytes were detected above the SWSL at each sample location. Underlined analytes exceeded the North Carolina 2L Standard (2L), Groundwater Protection Standard, or the North Carolina Surface Water Standards for Class C Waters (2B).

No "J" value detections are listed. A complete summary of all detected and estimated concentrations for this and previous events is presented on **Table 3**. Copies of the laboratory reports are provided in **Appendix A**.

MW-11 (Shallow Background)

Metals:	Zinc
Volatile Organic Compounds:	None Detected

MW-11d (Deep Background)

Metals:	None Detected
Volatile Organic Compounds:	None Detected

MW-5R

Metals:	Barium
Volatile Organic Compounds:	None Detected

MW-6

Metals:	Barium, Cobalt
Volatile Organic Compounds:	Benzene, p-Dichlorobenzene

MW-6d

Metals:	Barium, Zinc
Volatile Organic Compounds:	None Detected

MW-7

Metals:	Chromium, Cobalt, Copper, Zinc
Volatile Organic Compounds:	Benzene, p-Dichlorobenzene, Vinyl Chloride

MW-8

Metals:	None Detected
Volatile Organic Compounds:	cis-1,2-Dichloroethene

MW-8d

Metals:	Cadmium
Volatile Organic Compounds:	None Detected

MW-9

Metals:	Barium, Chromium, Zinc
Volatile Organic Compounds:	Benzene, p-Dichlorobenzene, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Vinyl Chloride

MW-10

Metals:	Zinc
Volatile Organic Compounds:	Benzene, cis-1,2-Dichloroethene, Tetrachloroethene, Trichloroethene, Vinyl Chloride

MW-10d

Metals:	None Detected
Volatile Organic Compounds:	None Detected

MW-22

Metals:	Cadmium, Cobalt, Zinc
Volatile Organic Compounds:	None Detected

MW-23

Metals:	Copper, Zinc
Volatile Organic Compounds:	None Detected

MW-23d

Metals:	Zinc
Volatile Organic Compounds:	None Detected

MW-24

Metals:	Zinc
Volatile Organic Compounds:	Chloroform

MW-28

Metals:	Not Sampled
Volatile Organic Compounds:	Not Sampled

MW-28d

Metals:	Not Sampled
Volatile Organic Compounds:	Not Sampled

MW-29d

Metals:	Copper, Zinc
Volatile Organic Compounds:	None Detected

MW-30

Metals:	Barium, Chromium, Copper, Vanadium, Zinc
Volatile Organic Compounds:	None Detected

MW-31

Metals:	Chromium, Copper, Vanadium, Zinc
Volatile Organic Compounds:	None Detected

MW-31d

Metals:	Chromium, Copper, Zinc
Volatile Organic Compounds:	Chloroform

MW-32

Metals:	Copper, Zinc
Volatile Organic Compounds:	None Detected

TB-1a

Metals:	Barium, Cadmium, Chromium, Cobalt, Copper, Vanadium, Zinc
Volatile Organic Compounds:	None Detected

TB-1a deep

Metals:	Chromium, Zinc
Volatile Organic Compounds:	Chloroform

MW-33

Metals:	Not Sampled
Volatile Organic Compounds:	Not Sampled

MW-34

Metals:	Not Sampled
Volatile Organic Compounds:	Not Sampled

MW-34d

Metals:	Not Sampled
Volatile Organic Compounds:	Not Sampled

MW-35

Metals:	Not Sampled
Volatile Organic Compounds:	Not Sampled

MW-36

Metals:	Chromium, Copper, Zinc
Volatile Organic Compounds:	1,1-Dichloroethane, Trichloroethene

MW-36d

Metals:	Chromium, Copper
Volatile Organic Compounds:	1,1-Dichloroethane, Tetrachloroethene, Trichloroethene

SW-2

Metals:	Copper, Zinc
Volatile Organic Compounds:	None Detected

SW-3

Metals:	None Detected
Volatile Organic Compounds:	None Detected

SW-7

Metals:	None Detected
Volatile Organic Compounds:	None Detected

SW-8

Metals:	None Detected
Volatile Organic Compounds:	None Detected

Equipment Blank

Metals:	None Detected
Volatile Organic Compounds:	None Detected

Trip Blank

Metals:	Not Tested
Volatile Organic Compounds:	None Detected

"J" values were not included in the previous list, but several locations had "J" value detections that exceeded the standards. The "J" value constituents above the standards along with their locations are listed below.

Antimony:	MW-6d, -31d
Cobalt:	MW-5R, -6d, -9, -10, -29d, -30, -31, -32, -36
Silver:	SW-2
Vanadium:	MW-6d, -7, -8, -8d, -9, -11, -11d, -22, -23, -23d, -24, -29d, -31d, -32, TB-1A d, -36, -36d

The equipment blank had a "J" flag detection of copper, and no analytes were detected in the trip blank. The duplicate sample, Dup, was collected from MW-9 and had similar concentrations of all compounds found in MW-9. **Table 4** presents a summary of all parameters detected during the November 2011 sampling event that exceeded the 2L Standard or the Groundwater Protection Standard.

Monitored Natural Attenuation Sampling

Additional groundwater samples were collected from MW-5R, -6, -8, -9, -10, -11, and -36 for evaluation of monitored natural attenuation as part of the corrective action program as required by Solid Waste Section guidelines. These parameters include biological oxygen demand, chemical oxygen demand, alkalinity, nitrate, chloride, sulfate, sulfide, total organic carbon, carbon dioxide, methane, ethane, ethene, ferrous iron, volatile fatty acids, dissolved hydrogen, and field measurements of pH, temperature, conductivity, ORP and DO. Results are presented in **Table 5**. The laboratory data for the additional parameters is included in **Appendix A**.

BIOCHLOR, an Environmental Protection Agency approved screening model used to evaluate remediation by natural attenuation of dissolved solvents, was used to determine if biodegradation is occurring at these wells. Based on the screening results from the November 2011 data, there is adequate to strong evidence that anaerobic biodegradation is occurring in MW-6, MW-8, MW-9, MW-10, and MW-36. BIOCHLOR screening results for each well are provided in **Appendix B**. MW-5R scored the lowest since no VOCs were detected. Scores for MW-9, -10, and -36 may have been higher, but dissolved hydrogen was not analyzed due to the depth of the water table at these locations.

As discussed in the approved Corrective Action Plan (March 2010), concentrations of some of the data from select wells indicates that environments are present which favor reductive dechlorination; notably, the concentrations of nitrate, ferrous iron, sulfate, and carbon dioxide. The following evidence indicates that one or more mechanisms of natural attenuation and/or reductive dechlorination may be occurring at the site:

- VOC concentrations in contaminated wells continue to decline.
- The ratio of parent /daughter compounds continues to decrease over time.
- Nitrate, ferrous iron, sulfate, and carbon dioxide continue to be detected at concentrations favoring reductive dechlorination.
- Concentrations of cis-1,2-DCE continue to be greater than other DCE isomers trans-1,2-DCE and 1,1-DCE.

In addition to favorable conditions for attenuation, the County installed a vacuum extraction system around the perimeter of the landfill in January 2002 to prevent offsite migration of landfill gas. Since previous work has indicated a relationship between the landfill gas and the contaminated groundwater, the installation of the gas extraction system appears to further reduce groundwater contaminant concentrations. As discussed in the approved CAP, the vacuum extraction system will be used in conjunction with an air sparging system to reduce VOCs in the bedrock and PWR between MW-9 and the MW-6 nested pair. The air sparging system has been installed, but is waiting for a permanent power source. The power source is scheduled to be installed by January 2012.

Recommendations

Wake County will continue with the semi-annual assessment monitoring program. In addition to Appendix I metals plus mercury and Appendix I VOCs plus dichlorodifluoromethane, samples collected from MW-5R, -6, -8, -9, -10, -11, and -36 will continue to be analyzed for natural attenuation parameters during the semi-annual events. It is likely that the recent and historic detections of chloroform in MW's -31, -31d, TB-1a, and -TB1a deep are attributed to a release from a municipal water line in the Falls River development and are not related to a release from the landfill. Groundwater samples from the annually monitored wells (MW-28, -28d, -33, -34, -34d, -35) will be collected during the spring 2012 sampling event.

Wake County is requesting that the sampling of pesticides and herbicides during the spring events be discontinued as no pesticides or herbicides have been detected since May 2008 with the exception of a few detections below the laboratory detection limit in MW-6 during March 2009. In addition to previous inconsistent estimated concentration detections and recent non-detects, the historical herbicide and pesticide detections are likely false positives and should not have been reported. The detections are not representative of actual groundwater conditions and therefore should no longer be sampled.

Additionally, Wake County is petitioning to discontinue the Appendix II SVOC sampling in all wells as legitimate detections have not occurred since November 2007. Several wells during the spring 2009

sampling event had "J" value detections of bis (2-ethylhexyl) phthalate, but all were below 2L standards. Since 2009 only MW-29 has had a "J" value detection of bis (2-ethylhexyl) phthalate in March 2011. Due to the lack of legitimate detections of SVOCs in the past two years it is no longer necessary to sample for Appendix II SVOCs.

The County has evaluated the detections in MW-36 and MW-36d and proposed a corrective action to remediate groundwater in this area. The Selected Remedy of monitored natural attenuation paired with in situ remediation by air sparging was approved by the Solid Waste Section in December 2009. The pilot test was conducted throughout July and August 2010 near MW-6. The full-scale system was installed in October 2011 and is expected to be operational before the spring 2012 sampling event.

If you have any questions or require further explanation, do not hesitate to call me at 787-5620.

Very truly yours,

Mathew F. Colone, P.G.
Camp Dresser & McKee

cc: Elliot Cornell, WCSWM
Lee Squires, WCSWM

Table 1
Water Quality Parameters
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

	Water Quality Parameters						Groundwater Elevations		
Monitoring Well I.D.	pH (-)	Conductivity (µS)	Temperature (deg. C)	Turbidity (NTU)	DO (mg/L)	ORP (-)	TOC Elevation (feet AMSL)	Depth to Groundwater (feet)	Groundwater Elevation (feet AMSL)
MW-5R	5.71	310	17.0	4	0.75	156.8	225.28	16.63	208.65
MW-6	6.09	1,671	17.3	7	1.34	10.6	219.80	12.74	207.06
MW-6d	5.88	148	17.0	63	1.61	154.1	218.61	13.02	205.59
MW-7	6.00	727	18.3	29	2.01	26.8	234.15	12.45	221.70
MW-8	5.61	186	17.7	25	0.65	138.1	226.38	11.32	215.06
MW-8d	5.96	161	16.5	10	2.44	145.2	226.16	12.65	213.51
MW-9	5.95	466	17.4	63	1.94	6.3	242.69	30.42	212.27
MW-10	5.41	242	16.9	46	2.12	120.1	274.76	44.77	229.99
MW-10d	5.96	166	17.4	28	4.16	151.8	274.54	48.21	226.33
MW-11	5.62	84	16.3	33	5.89	161.6	343.63	44.33	299.30
MW-11d	5.74	98	16.2	41	5.51	103.8	343.27	44.51	298.76
MW-22	5.58	128	15.0	28	4.47	126.7	254.62	35.63	218.99
MW-23	5.74	106	15.9	206	5.73	170.1	274.83	46.11	228.72
MW-23d	5.70	145	15.7	13	4.21	163.9	274.89	46.20	228.69
MW-24	5.71	79	16.2	142	5.74	152.2	266.64	46.02	220.62
MW-27	ABANDONED						ABANDONED		
MW-28	NOT SAMPLED						NOT SAMPLED		
MW-28d	NOT SAMPLED						NOT SAMPLED		
MW-29d	5.78	123	15.8	30	5.65	172.9	275.06	43.01	232.05
MW-30	5.76	119	15.5	267	5.58	140.2	282.32	51.91	230.41
MW-31	5.93	129	14.9	339	6.49	64.7	261.67	33.85	227.82
MW-31d	5.97	154	16.9	50	3.16	130.1	260.92	33.24	227.68
MW-32	5.30	71	16.1	18	2.13	148.1	242.99	17.37	225.62
TB-1a	5.58	191	15.0	142	2.38	-17.1	255.05	29.16	225.89
TB-1a deep	5.75	182	16.1	35	1.49	103.9	256.01	31.31	224.70
MW-33	NOT SAMPLED						NOT SAMPLED		
MW-34	NOT SAMPLED						NOT SAMPLED		
MW-34d	NOT SAMPLED						NOT SAMPLED		
MW-35	NOT SAMPLED						NOT SAMPLED		
MW-36	5.66	173	15.4	98	1.96	129.6	237.40	26.98	210.42
MW-36d	6.05	289	16.1	61	0.82	114.8	237.68	27.20	210.48
Surface Water I.D.									
SW-2	6.93	120	12.0	7	8.78	122.2			
SW-3	7.17	88	11.0	22	10.47	121.2			
SW-7	7.40	87	10.6	9	9.54	57.9			
SW-8	7.15	89	10.4	17	9.75	91.4			

NOTES:
(1) AMSL - Above Mean Sea Level
(2) TOC - Top of Casing
(3) SW - Surface Water
(4) MW-27 was abandoned on November 24, 2008 in accordance with 15A NCAC 2C .0113
(5) MW-36/36d installed November 2008
(6) Monitoring wells MW-28, -28d, -33, -34, -34d, and -35 sampled yearly during the spring event
(7) Turbidity readings were recorded at the time samples were collected

Table 2
Summary of Calculated Groundwater Flow Velocities
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

	Sampling Date:		11/11/2005		4/13/2006		11/9/2006		4/17/2007		11/9/2007	
Monitoring Well Designation	Hydraulic Conductivity ft/day (cm/s)	Effective Porosity	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)
MW-5R	0.33 1.16E-04	0.18	0.0179	3.28E-02	0.0417	7.65E-02	0.0399	7.32E-02	0.0125	2.29E-02	0.0119	2.18E-02
MW-6	10.58 3.73E-03	0.13	0.0172	1.40E+00	0.0172	1.40E+00	0.0172	1.40E+00	0.0132	1.07E+00	0.0125	1.02E+00
MW-7	1.15 4.06E-04	0.18	0.0172	1.10E-01	0.0172	1.10E-01	0.0172	1.10E-01	0.0208	1.33E-01	0.0278	1.78E-01
MW-8	3.61 1.27E-03	0.18	0.0217	4.35E-01	0.0313	6.28E-01	0.0313	6.28E-01	0.0135	2.71E-01	0.0125	2.51E-01
MW-9	1.22 4.30E-04	0.30	0.0152	6.18E-02	0.0152	6.18E-02	0.0152	6.18E-02	0.0200	8.13E-02	0.0172	6.99E-02
MW-10	0.509 1.80E-04	0.05	0.0250	2.55E-01	0.0250	2.55E-01	0.0250	2.55E-01	0.0417	4.25E-01	0.0556	5.66E-01
MW-11	5.66 2.00E-03	0.13	0.0200	8.71E-01	0.0204	8.88E-01	0.0204	8.88E-01	0.0213	9.27E-01	0.0213	9.27E-01
MW-22	0.07 2.47E-05	0.18	0.0278	1.08E-02	0.0385	1.50E-02	0.0385	1.50E-02	0.0400	1.56E-02	0.0278	1.08E-02
MW-23	3.59 1.27E-03	0.30	0.0208	2.49E-01	0.0227	2.72E-01	0.0227	2.72E-01	0.0208	2.49E-01	0.0196	2.35E-01
MW-24	0.34 1.20E-04	0.30	0.0161	1.82E-02	0.0156	1.77E-02	0.0156	1.77E-02	0.0313	3.55E-02	0.0417	4.73E-02
MW-36	17.56 6.19E-03	0.30										
MW-36D	0.78 2.75E-04	0.10										

Notes:
(1) MW-36/36D installed November 2008

Table 2
Summary of Calculated Groundwater Flow Velocities
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

	Sampling Date:		5/15-21/2008		11/5-08/2008		3/10-13/2009		12/02-04/2009		5/11-13/2010	
Monitoring Well Designation	Hydraulic Conductivity ft/day (cm/s)	Effective Porosity	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)
MW-5R	0.33 1.16E-04	0.18	0.0230	4.21E-02	0.0232	4.26E-02	0.0229	4.20E-02	0.0230	4.22E-02	0.0234	4.29E-02
MW-6	10.58 3.73E-03	0.13	0.0202	1.65E+00	0.0203	1.65E+00	0.0203	1.65E+00	0.0200	1.63E+00	0.0207	1.68E+00
MW-7	1.15 4.06E-04	0.18	0.0250	1.60E-01	0.0251	1.61E-01	0.0251	1.60E-01	0.0251	1.61E-01	0.0256	1.64E-01
MW-8	3.61 1.27E-03	0.18	0.0243	4.87E-01	0.0242	4.85E-01	0.0241	4.84E-01	0.0242	4.86E-01	0.0246	4.93E-01
MW-9	1.22 4.30E-04	0.30	0.0197	8.00E-02	0.0198	8.05E-02	0.0197	8.02E-02	0.0198	8.04E-02	0.0201	8.18E-02
MW-10	0.509 1.80E-04	0.05	0.0168	1.71E-01	0.0171	1.74E-01	0.0170	1.73E-01	0.0171	1.74E-01	0.0170	1.73E-01
MW-11	5.66 2.00E-03	0.13	0.0212	9.23E-01	0.0213	9.29E-01	0.0211	9.17E-01	0.0211	9.19E-01	0.0214	9.31E-01
MW-22	0.07 2.47E-05	0.18	0.0181	7.03E-03	0.0181	7.04E-03	0.0181	7.04E-03	0.0182	7.06E-03	0.0183	7.11E-03
MW-23	3.59 1.27E-03	0.30	0.0194	2.33E-01	0.0196	2.34E-01	0.0196	2.34E-01	0.0196	2.34E-01	0.0196	2.34E-01
MW-24	0.34 1.20E-04	0.30	0.0244	2.76E-02	0.0246	2.78E-02	0.0245	2.78E-02	0.0247	2.80E-02	0.0248	2.81E-02
MW-36	17.56 6.19E-03	0.30					0.0194	1.14E+00	0.0194	1.14E+00	0.0198	1.16E+00
MW-36D	0.78 2.75E-04	0.10					0.0193	1.50E-01	0.0193	1.51E-01	0.0196	1.53E-01

Notes:
(1) MW-36/36D installed November 2008

Table 2
Summary of Calculated Groundwater Flow Velocities
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

	Sampling Date:		10/25-27/2010		3/15-16/2011		10/31-11/2/2011	
Monitoring Well Designation	Hydraulic Conductivity ft/day (cm/s)	Effective Porosity	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)	Gradient	Average Linear Velocity (ft/day)
MW-5R	0.33 1.16E-04	0.18	0.0237	4.34E-02	0.0233	4.28E-02	0.0233	4.27E-02
MW-6	10.58 3.73E-03	0.13	0.0206	1.68E+00	0.0204	1.66E+00	0.0203	1.65E+00
MW-7	1.15 4.06E-04	0.18	0.0256	1.63E-01	0.0254	1.62E-01	0.0253	1.62E-01
MW-8	3.61 1.27E-03	0.18	0.0248	4.98E-01	0.0246	4.93E-01	0.0245	4.91E-01
MW-9	1.22 4.30E-04	0.30	0.0201	8.19E-02	0.0199	8.09E-02	0.0198	8.06E-02
MW-10	0.509 1.80E-04	0.05	0.0172	1.75E-01	0.0172	1.75E-01	0.0171	1.74E-01
MW-11	5.66 2.00E-03	0.13	0.0215	9.36E-01	0.0213	9.28E-01	0.0213	9.26E-01
MW-22	0.07 2.47E-05	0.18	0.0184	7.16E-03	0.0183	7.11E-03	0.0183	7.10E-03
MW-23	3.59 1.27E-03	0.30	0.0197	2.36E-01	0.0197	2.36E-01	0.0197	2.36E-01
MW-24	0.34 1.20E-04	0.30	0.0250	2.83E-02	0.0248	2.81E-02	0.0249	2.82E-02
MW-36	17.56 6.19E-03	0.30	0.0198	1.16E+00	0.0195	1.14E+00	0.0195	1.14E+00
MW-36D	0.78 2.75E-04	0.10	0.0196	1.53E-01	0.0194	1.51E-01	0.0193	1.51E-01

Notes:
(1) MW-36/36D installed November 2008

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-11	15-Apr-94			221				**23**	54	14							**50**	88
MW-11	11-May-94			146				**19**	55	14							**50**	83
MW-11	10-Jun-94			191				**27**	111	7.6		20					**90**	114
MW-11	3-Oct-94			143			**16**	**26**	74	8							**60**	85
MW-11	13-Jun-95																	
MW-11	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11	31-Oct-95		**11**	842	**8**		**24**	**71**	331	**26**		87					**117**	314
MW-11	22-Mar-96							**15**			**1.8**						**51**	70
MW-11	29-Nov-96		**35**															
MW-11	22-Apr-97																	130
MW-11	31-Oct-97																	66
MW-11	11-May-98																	
MW-11	8-Dec-98					**2.1**												
MW-11	14-Apr-99																	
MW-11	30-Nov-99																	
MW-11	5-Apr-00					1.2												
MW-11	18-Dec-00																	
MW-11	18-Apr-01																	
MW-11	27-Nov-01			311					16.5									29.7
MW-11	5-Apr-02																	
MW-11	5-Nov-02																	
MW-11	15-Apr-03																	
MW-11	29-Oct-03																	
MW-11	18-Nov-04																	
MW-11	21-Apr-05																	
MW-11	11-Nov-05																	83
MW-11	14-Apr-06																	
MW-11	10-Nov-06																	82
MW-11	20-Apr-07																	21
MW-11	8-Nov-07			332	2.1				39	12							**58**	113
MW-11	15-May-08			77.8J			5.4J		10.5	3.92J				4.48J		**5.63**	**2.9J**	16.1
MW-11	10-Nov-08			53.1J	3.03	0.35JB	2.73JB		5.94JB	9.78JB				4.02JB			**1.14J**	8.18J
MW-11	11-Mar-09			99.1JB	**6.29**	0.24J	4.39JB	**6.51JB**	13.6B	5.84JB				6.34JB			**20.3JB**	20.7
MW-11	3-Dec-09			412	2.36	0.022J	**14.9**	**25.4**	102B	**19.2**		14.5J	10.7				**99B**	120B
MW-11	12-May-10			62.1J			1.45J		1.92J								**2.67J**	12.6
MW-11	26-Oct-10			143			3.50J	**5.47J**	25.8	5.69J							**23.0J**	42.7
MW-11	17-Mar-11			76.7J			1.6J		3.88J							0.265J	**3.51J**	24.3
MW-11	1-Nov-11			80.7J			1.9J		6.33JB			2.14JB					**3.61J**	19.6
MW-11d	31-Oct-95					**2**												
MW-11d	22-Mar-96					1												
MW-11d	29-Nov-96			26														
MW-11d	22-Apr-97																	54
MW-11d	31-Oct-97																	26
MW-11d	11-May-98																	69
MW-11d	8-Dec-98					1.9												
MW-11d	14-Apr-99																	
MW-11d	30-Nov-99																	
MW-11d	5-Apr-00																	
MW-11d	18-Dec-00																	
MW-11d	18-Apr-01																	
MW-11d	27-Nov-01																	
MW-11d	5-Apr-02										0.3							
MW-11d	5-Nov-02																	
MW-11d	15-Apr-03																	
MW-11d	29-Oct-03																	
MW-11d	18-Nov-04																	
MW-11d	21-Apr-05																	
MW-11d	11-Nov-05																	
MW-11d	14-Apr-06																	
MW-11d	10-Nov-06																	
MW-11d	20-Apr-07																	
MW-11d	8-Nov-07																	16
MW-11d	15-May-08			59.7J	3.07		6.41J		8.21J	4.59J				3.98J		**6.91**	**0.97J**	9.82J
MW-11d	10-Nov-08			37.6J		0.36JB	1.94JB		5.8JB	8.5JB				4.37JB			**4.09J**	4.14J
MW-11d	16-Mar-09		4.11J	87.7JB	**6.11B**	0.41J	7.14JB		15.3B	6.94JB				1.22JB			**20.1J**	21.9
MW-11d	4-Dec-09			61.4JB			5.41JB		8.2JB					3.16JB			**7.28JB**	8.85JB
MW-11d	13-May-10	**1.01J**		47.8J			5.10J		3.10J								**5.50J**	12.3
MW-11d	27-Oct-10	**1.73J**		41.3J			3.56J		2.79J								**3.82J**	9.73J
MW-11d	18-Mar-11	0.852J		51.2J			3.43J		4.41J								**3.73J**	8.04J
MW-11d	2-Nov-11			45.5J			2.18J		4.14JB								**2.45J**	5.86J

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-5	6-Mar-94			76														110
MW-5	15-Apr-94			60		0.9								**62**				47
MW-5	11-May-94			58		0.5			11									28
MW-5	31-May-94			66				11				17						63
MW-5	10-Jun-94			54						2.5								20
MW-5	30-Sep-94			48										7.3				10
MW-5	13-Jun-95																	
MW-5	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	31-Oct-95					1												
MW-5 (dup)	31-Oct-95					1												
MW-5	30-Jan-96																	237
MW-5	29-Nov-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	22-Apr-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	1-Nov-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	6-May-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	6-Aug-98				2.2	**4.9**	32	24									68	190
MW-5	8-Dec-98					1.5												
MW-5	16-Apr-99					1.5		28.3										
MW-5	2-Dec-99					1		49.8										
MW-5	11-Apr-00							34.8										
MW-5	20-Dec-00							26.9										
MW-5	16-Apr-01							32.1										
MW-5	3-Dec-01							19.3										
MW-5	12-Apr-02							34.9										70.5
MW-5	5-Nov-02							37.7										
MW-5	17-Apr-03							55.1										
MW-5	4-Nov-03			533		**3.06**		**113**										
MW-5 (dup)	4-Nov-03			590		**3.48**		**123**										
MW-5	14-Apr-04					1.52		55.3										
MW-5	18-Nov-04							**166**										57
MW-5	21-Apr-05							18										
MW-5	11-Nov-05							**139**										57
MW-5	14-Apr-06							**90**										
MW-5	9-Nov-06							23										
MW-5	19-Apr-07			125				16										
MW-5	9-Nov-07			164														
MW-5R	21-Apr-04		**12.4**															
MW-5R	21-May-08			94J	1.42J		2.36J		4.54J									44.1
MW-5R	10-Nov-08			106		0.53JB	2.74JB	**5.65J**	4.61JB	6.76JB		9.87J		4.41JB			**2.76J**	8.23J
MW-5R	11-Mar-09			116B	0.63J		4.97JB	**10.5B**	5.48JB	4.30JB		5.44J		7.03JB			**4.16JB**	9.72J
MW-5R	3-Dec-09			106				**3.6J**	3.2JB			2.36					**1.45JB**	38.3B
MW-5R	12-May-10			96.9J			2.85J	**1.17J**				3.11J						6.29J
MW-5R	25-Oct-10			77.0J		1.66	3.45J		6.88J	14.4		2.43J		11.8				25
MW-5R	16-Mar-11			95J			4.62J					3.39J				0.267J		6.9J
MW-5R	31-Oct-11			123			3.28J	**2.17J**				5.83JB	1.13J			0.152J		8.33J

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-6	6-Mar-94			190			**32**	**10**	33	**18**		33					**63**	51
MW-6	15-Apr-94			144			**20**	**12**	20	11				7.3			**50**	27
MW-6	11-May-94			175			**30**	**13**	33	9.3				7.3			**70**	35
MW-6	1-Jun-94			260	**5.4**		**49**	**16**	28	14		13					**100**	72
MW-6	25-Aug-94			68										7.3				
MW-6	29-Sep-94			110			**19**		19	6.9				7.3			**40**	16
MW-6	13-Jun-95				2		**22**				**2.6**						**41**	
MW-6	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.5	NS	NS	NS	NS	NS	NS	NS
MW-6	31-Oct-95										**2.5**							
MW-6	30-Jan-96				**7**		**44**	**12**		13	**1.8**						**65**	61
MW-6	29-Nov-96			150	2		**20**	**6**	21	6	0.83						**52**	40
MW-6	22-Apr-97						**12**				**1.1**							67
MW-6	2-Nov-98						**14**				0.54							28
MW-6	6-May-98										0.65							
MW-6 (dup)	6-May-98																	
MW-6	8-Dec-98					1.4					0.81							
MW-6	16-Apr-99										0.7							
MW-6	2-Dec-99										0.9							
MW-6	11-Apr-00										**1.1**							
MW-6	19-Dec-00										**1.8**							
MW-6	16-Apr-01										**1.9**							
MW-6	3-Dec-01										0.6							
MW-6	12-Apr-02																	
MW-6	5-Nov-02										0.9							
MW-6	17-Apr-03							**14.4**			0.7							
MW-6	4-Nov-03							**30.1**			0.464							
MW-6	14-Apr-04		**20.6**					**48.1**			0.283							
MW-6	18-Nov-04					**2**	**47**	**88**			0.53						**41**	
MW-6	21-Apr-05							**33**										
MW-6	11-Nov-05					1	**19**	**50**										
MW-6	14-Apr-06					**2**	**10**	**69**										
MW-6	9-Nov-06						**10**	**65**										
MW-6	19-Apr-07			461				**89**										13
MW-6	9-Nov-07			701				**61**										
MW-6	20-May-08			547	3.34	0.57J	4.84J	**92.3**	14.5	5.31J	0.167J	16.3J		1.6J		**14.8**		32.9
MW-6	11-Nov-08			759B	3.61B	0.25J	7.98JB	**74.4**	20.2B	5.74J		19.1J		10.0B		**15.0**	**7.56JB**	6.90JB
MW-6	11-Mar-09			477B		0.58J	5.14JB	**72.1B**	10.4B	7.43JB	0.143J	14J		8.39JB		**7.8**	**3.78JB**	4.50J
MW-6	3-Dec-09			449	0.61J	0.31J	2.47J	**62.4**	7.16JB			11.4J	3.7J					3.41JB
MW-6	12-May-10	0.286J		575		**2.03**		**80**	3.44J	2.10J		15.8J	4.88J	3.26J		0.259J		5.33J
MW-6	26-Oct-10	0.338JB		416		1.02		**37.4**	8.73J	9.55J		10.5J	3.32J	9.23J				17.5
MW-6	16-Mar-11			365			7.08J	**57.7**	4.66J			11.5J	2.68J	3.18J		**0.741J**		51.3
MW-6	1-Nov-11	0.229J	3.98J	454			6.35J	**65.7**	4.04JB			18.2JB	2.55J	4.11J				5.36J
MW-6d	8-Jun-01																	
MW-6d	4-Dec-01																	
MW-6d	9-Apr-02																	
MW-6d	7-Nov-02																	
MW-6d	16-Apr-03																	
MW-6d	5-Nov-03																	
MW-6d	21-Apr-04						**17.3**											
MW-6d	18-Nov-04					1												
MW-6d	21-Apr-05					1												
MW-6d	11-Nov-05					1												
MW-6d	11-Apr-06					1												
MW-6d	9-Nov-06																	
MW-6d	20-Apr-07																	11
MW-6d	8-Nov-07																	
MW-6d	20-May-08			34.2J	0.98J		5.56J		6.79J								**0.61J**	
MW-6d	6-Nov-08			80.3JB	1.96B		**16.3B**	**4.52J**	15.9B	9.04JB		6.77J		8.74JB		**6.3**	**17.8JB**	13.2
MW-6d (dup)	6-Nov-08		2.57J	77.0JB	**11.6B**		**13.5B**	**4.63J**	14.0B	9.24JB		5.22J		8.35JB			**17.9JB**	12
MW-6d	12-Mar-09			69.7J			2.30J		5.24JB							**5.51**	**7.89JB**	6.82J
MW-6d	3-Dec-09			119			2.39J		6.14JB			5.84J					**6.45JB**	9.62JB
MW-6d	12-May-10	0.619J		77.7J			3.06J	**2.35J**	3.50J			2.40J					**4.15J**	10.3
MW-6d	27-Oct-10	**3.99J**		52.3J			2.17J		3.76J								**4.41J**	12.5
MW-6d	16-Mar-11	0.961J		68.2J			3.05J		3.91J							**0.428J**	**3.28J**	6.94J
MW-6d	2-Nov-11	**2.63J**		100			5.42J	**1.26J**	6.46JB			4.68J					**3.98J**	13.1

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-7	6-Mar-94			190			**48**	**17**	110	**22**		21					**67**	82
MW-7	15-Apr-94			136			**30**	**11**	53	**25**		20					**40**	56
MW-7	11-May-94			51			**30**	**11**	24	6.8							**40**	29
MW-7	31-May-94			350	**5.4**		**89**	**30**	180	**34**		40					**140**	150
MW-7	25-Aug-94			44					25	2.7								19
MW-7	29-Sep-94			49			**15**		26	4.7							**20**	20
MW-7	13-Jun-95																	
MW-7	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	31-Oct-95																	
MW-7	30-Jan-96				2		**35**			10								
MW-7	29-Nov-96			17														
MW-7	21-Apr-97										0.38							
MW-7 (dup)	21-Apr-97										0.22							
MW-7	1-Nov-97										0.58							48
MW-7	6-May-98										0.24							
MW-7	8-Dec-98					**2.6**	**15**				0.25							
MW-7	16-Apr-99																	
MW-7	2-Dec-99										0.2							
MW-7	11-Apr-00										0.2							
MW-7 (dup)	11-Apr-00										0.2							
MW-7	19-Dec-00										0.3							
MW-7 (dup)	19-Dec-00										0.3							
MW-7	16-Apr-01																	
MW-7	4-Dec-01																	
MW-7	9-Apr-02							**10.1**										
MW-7	6-Nov-02																	
MW-7	16-Apr-03							**20.3**										
MW-7	5-Nov-03							**19.2**										
MW-7	21-Apr-04							**29.5**										
MW-7 (dup)	21-Apr-04		**12.1**					**24**										
MW-7	18-Nov-04							**44**										
MW-7	21-Apr-05							**44**										
MW-7	11-Nov-05							**15**										
MW-7	11-Apr-06							**26**										
MW-7	9-Nov-06					**2**	**36**	**29**			0.63							56
MW-7	20-Apr-07							**16**										18
MW-7	8-Nov-07					1	**11**	**14**	13									20
MW-7	15-May-08		2.16J	43.4J			**10.8**	**19.3**	12.6	4.28J		9.94J	10.4	5.99J		**21.1**		9.72J
MW-7	5-Nov-08		2.68J	38.3JB	**6.84B**		3.42JB		6.81JB	9.68JB				8.61JB	38JB		**3.03JB**	6.38J
MW-7	10-Mar-09			10.7J			8.23J	**19.3**	8.17J	4.72J		6.35J		3.42JB			**9.49J**	
MW-7	2-Dec-09			52.8J	0.74J	0.66J	**18.5**	**17.5**	27.5B			10J					**15.3JB**	13.8B
MW-7 (dup)	2-Dec-09			38.4J	0.56J	0.52J	9.86J	**14.5**	20.7B			7.69J					**9.07JB**	8.36JB
MW-7	13-May-10			49.7J		0.90J	1.64J	**32.7**	16.2	4.14J		10.7J	0.889J				**4.95J**	15.6
MW-7	27-Oct-10			66.5J		1.32	6.18J	**33.8**	10.1	3.50J		15.1J	0.999J	2.68J			**8.20J**	27.7
MW-7	16-Mar-11			51.7J		1.2	6.76J	**30.5**	4.81J			11.8J	1.42J	3.14J		**0.36J**	**1.73J**	11.8
MW-7	2-Nov-11			67.1J		0.38J	**14.9**	**31.6**	21.2B			13.4J	1.17J	3.27J			**9.74J**	44.8

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-8	6-Mar-94			120			**17**		26			13					**35**	49
MW-8	15-Apr-94			97					22	4.2		20					**30**	35
MW-8	11-May-94			89					20	4.3							**20**	26
MW-8	31-May-94			330	**5.4**		**81**	**34**	90	**16**		39					**150**	150
MW-8	25-Aug-94			76					13	2.7								21
MW-8	30-Sep-94			82			**20**		14	5.4							**20**	19
MW-8	13-Jun-95						**38**	**11**									**87**	
MW-8	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	31-Oct-95																	
MW-8	30-Jan-96				3		**35**	**12**									**64**	63
MW-8 (dup)	30-Jan-96				3		**36**	**12**									**63**	76
MW-8	29-Nov-96			120			**14**	**5**	21								**31**	54
MW-8 (dup)	29-Nov-96			82														19
MW-8	21-Apr-97						**19**											
MW-8	2-Nov-97																	
MW-8	6-May-98																	
MW-8	8-Dec-98					1.2												
MW-8	16-Apr-99																	
MW-8 (dup)	16-Apr-99																	
MW-8	2-Dec-99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	11-Apr-00					**2.1**												
MW-8	20-Dec-00					1.5		**17.1**										
MW-8	16-Apr-01																	
MW-8	3-Dec-01																	
MW-8	12-Apr-02																	
MW-8	5-Nov-02					1.2	**15.3**											
MW-8	17-Apr-03																	
MW-8	4-Nov-03																	
MW-8	14-Apr-04						**19.8**											
MW-8	18-Nov-04						**198**	**72**		13		**114**					**281**	161
MW-8	21-Apr-05																	
MW-8	11-Nov-05				3		**31**			14								116
MW-8	14-Apr-06				3	**2**	**30**			14							**50**	111
MW-8	9-Nov-06				2		**34**			11								99
MW-8	20-Apr-07																	
MW-8	9-Nov-07																	15
MW-8	20-May-08			26.4J			4.72J		3.99J		0.091J							6.16J
MW-8	10-Nov-08			25.6J	2.49	0.33JB	3.27JB		4.37JB	9.17JB				4.03JB				
MW-8	11-Mar-09			37.1JB	2.75		4.38JB	**4.48JB**	5.02JB		0.045J	4.91J		7.06JB			**3.71JB**	
MW-8	3-Dec-09			34.1J	0.5J		6.17J		6.8JB			3.15J					**9.97JB**	59.1B
MW-8	12-May-10			32.5J			1.24J										**1.42J**	4.80J
MW-8	25-Oct-10			37.0J	0.106J	0.804J	1.69J		7.78J	5.34J				4.12J			**1.61J**	22.9
MW-8	16-Mar-11			41.1J			2.83J		1.63J			2.22J	0.873J			0.279J	**1.65J**	6.42J
MW-8	31-Oct-11			56.5J			7.42J		4.53JB			4.95JB					**5.18J**	7.32J
MW-8d	8-Jun-01												12.7					
MW-8d	4-Dec-01																	
MW-8d	9-Apr-02																	
MW-8d (dup)	9-Apr-02																	
MW-8d	7-Nov-02																	
MW-8d	16-Apr-03																	
MW-8d	4-Nov-03																	
MW-8d	21-Apr-04																	
MW-8d	18-Nov-04																	
MW-8d	21-Apr-05																	
MW-8d	11-Nov-05																	
MW-8d	14-Apr-06																	
MW-8d	10-Nov-06																	
MW-8d	20-Apr-07																	
MW-8d	8-Nov-07																	11
MW-8d	15-May-08			19.1J			6.86J		3.98J	4.10J				4.16J		**8.59**		4.53J
MW-8d	6-Nov-08		2.49J	25.2JB	3.61B		7.57JB		6.96JB	5.20JB				8.71JB			**6.56JB**	4.8J
MW-8d	16-Mar-09			44.5JB	**9.80B**		6.95JB		6.72JB	6.18JB				2.01JB			**9.36JB**	9.52J
MW-8d	4-Dec-09			32.8JB			8.01JB		8.86JB	9.36JB			4.49J	2.65JB			**4.48JB**	6.64JB
MW-8d	13-May-10	0.884J		24.2J		0.602J	4.79J										**4.39J**	11.9
MW-8d	27-Oct-10	**3.52J**		68.8J			7.58J		4.55J	3.62J		2.06J					**7.95J**	16.6
MW-8d	18-Mar-11	0.512J		28.7J			5.85J		4.41J	2.19J							**5.18J**	4.47J
MW-8d	2-Nov-11	0.724J		25.0		1.05	5.02J		5.02JB			2.00J					**4.22J**	7.28J

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-9	6-Mar-94			210														
MW-9	15-Apr-94			199				**11**										
MW-9	11-May-94			193				**10**		2.7								14
MW-9	31-May-94			270			**24**	**14**	25	21							**23**	120
MW-9	25-Aug-94			135														14
MW-9	29-Sep-94			123						4.2								12
MW-9	13-Jun-95							**14**										
MW-9	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	31-Oct-95																	
MW-9	30-Jan-96				**4**	1	**20**	**16**		**17**								65
MW-9	29-Nov-96			140														21
MW-9	22-Apr-97																	
MW-9	2-Nov-97							**11**										37
MW-9	6-May-98																	
MW-9	8-Dec-98					1.5												
MW-9	16-Apr-99																	
MW-9	2-Dec-99																	
MW-9	11-Apr-00																	
MW-9	20-Dec-00																	
MW-9	16-Apr-01																	
MW-9	3-Dec-01		11	166														
MW-9 (dup)	3-Dec-01		12.2	160														
MW-9	12-Apr-02															**10.8**		
MW-9	5-Nov-02							**10.1**										
MW-9	17-Apr-03							**10.6**										
MW-9	4-Nov-03							**11.3**										
MW-9	14-Apr-04		20.6					**11.8**										
MW-9	18-Nov-04					**7**		**10**										
MW-9	21-Apr-05																	
MW-9	11-Nov-05																	
MW-9	14-Apr-06					**3**												
MW-9	9-Nov-06																	
MW-9	19-Apr-07			289	2	1	**17**		12	**21**								122
MW-9	9-Nov-07			186														16
MW-9	20-May-08			190	2.9		**27**		5.8J	10.6		11.3J	8.29J	2.84J		**10.4**		5.58J
MW-9 (dup)	20-May-08			190			**22.7**	**5.15J**	5.87J	8.38J				3.16J		**11.1**		6.10J
MW-9	11-Nov-08			218B	0.3JB		**12.4B**	**6.99J**	9.59JB	13.5			8.93J	11.1B		**16.9**	**8.49JB**	14.4B
MW-9	11-Mar-09			178B			7.63JB	**9.53JB**	3.17JB	10.3B				8.89JB			**4.57JB**	
MW-9 (dup)	11-Mar-09			179B			9.27JB	**9.33JB**	3.39JB	6.28JB		6.45J		8.78JB		**7.3**	**10.8JB**	9.56J
MW-9	3-Dec-09			190	0.64J		7.84J	**2.86J**	5.25JB				4.37J				**1.49JB**	4.02JB
MW-9	12-May-10			227	0.276J			**6.27J**		4.59J			0.936J	2.42J				17.6
MW-9	26-Oct-10		3.47J	157	0.207J	0.695J		**3.92J**	8.84J	7.02J		2.80J		5.70J				20.9
MW-9	17-Mar-11			176	0.241J		7.36J	**4.82J**	2.1J	3.79J			0.841J	3.51J		**0.405J**		13.2
MW-9	1-Nov-11			209	0.425J		**14.9**	**6.79J**	8.83JB	6.37J		4.11JB	0.982J	4.52J		0.164J	**6.88J**	69.2
MW-9 (dup)	1-Nov-11			191	0.256J		**10.4**	**5.81J**	5.32JB	3.99J		3.08JB	0.874J	3.66J		0.127J	**3.26J**	50.1

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-10	31-Oct-95																	
MW-10	30-Jan-96																	
MW-10	28-Nov-96			71				**14**										
MW-10	22-Apr-97						**31**	**23**									**43**	98
MW-10	1-Nov-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	5-May-98					1.3				13	0.34							720
MW-10	18-Aug-98					**4.9**												150
MW-10	10-Sep-98																	
MW-10	6-Oct-98					1.2												
MW-10	8-Dec-98					**2**												
MW-10	11-Jan-99																	
MW-10	8-Feb-99																	
MW-10 (dup)	8-Feb-99																	
MW-10	16-Apr-99																	
MW-10	2-Dec-99										0.3							
MW-10	12-Apr-00																	
MW-10	20-Dec-00																	
MW-10	17-Apr-01																	
MW-10	3-Dec-01																	
MW-10	12-Apr-02																	
MW-10	5-Nov-02										0.5							
MW-10 (dup)	5-Nov-02										0.4							
MW-10	17-Apr-03										0.4							
MW-10	4-Nov-03																	
MW-10	14-Apr-04																	
MW-10	18-Nov-04					**2**												
MW-10	21-Apr-05																	
MW-10	11-Nov-05										**1.1**							
MW-10	14-Apr-06																	
MW-10	9-Nov-06																	
MW-10	19-Apr-07										0.38							
MW-10	9-Nov-07			399														
MW-10	20-May-08			24.1J		0.21J	2.08J		6.28J		0.374					**6.74**		8.03J
MW-10	11-Nov-08		5.71JB	174B	**12.2B**	0.84J	9.86JB	**4.73J**	32.9B	**25.2**	**7.53**	8.21J		9.75JB			**24.9JB**	59.3B
MW-10	11-Mar-09			29.3JB		0.20J	2.27JB	**5.65JB**	3.07JB	7.77JB	0.247J	5.41J		7.13JB			**4.32JB**	7.14J
MW-10	3-Dec-09			16.3J	0.64J				3.96JB								**2.56JB**	8.35JB
MW-10	12-May-10			23.5J	0.147J			**4.51J**				4.31J						12.9
MW-10	25-Oct-10	**1.33JB**		18.4J	0.30J	0.627J		**1.53J**	8.36J	5.19J	0.241	1.89J		3.17J				22.5
MW-10	17-Mar-11			34J	0.285J		2.22J	**1.93J**	4.17J	2.25J	0.388	2.48J				**0.352J**		14.1
MW-10	31-Oct-11			28.1J			1.72J	**1.61J**	3.56JB			3.00J		1.94J				12.8
MW-10d	8-Jun-01								30		0.3							
MW-10d	4-Dec-01																	
MW-10d	9-Apr-02																	
MW-10d	5-Nov-02																	
MW-10d	17-Apr-03		**10.9**			1.1	**10.1**											
MW-10d	4-Nov-03																	
MW-10d	26-Apr-04																	
MW-10d	18-Nov-04																	
MW-10d	21-Apr-05					**5**												
MW-10d	11-Nov-05					**5**												
MW-10d	14-Apr-06					**4**												
MW-10d	10-Nov-06																	
MW-10d	20-Apr-07																	
MW-10d	8-Nov-07					1												
MW-10d	20-May-08		9.06J	57.9J	0.5J		**33**		31.8	**21.9**	0.123J	18.7J		3.92J		**5.93**	**18.9J**	28.6
MW-10d	6-Nov-08		5.94J	40.7JB	**5.27B**		**149B**	**5.12J**	22.9B	**15.1B**		80.3		8.15JB			**16.7JB**	22
MW-10d	12-Mar-09				0.75J		4.38J		3.46JB	4.98J							**9.69JB**	8.62J
MW-10d	4-Dec-09			19.6JB			3.78JB		8.17JB					2.67JB			**2.08JB**	5.77JB
MW-10d	13-May-10			8.37J		0.466J	**27.6**		2.93J	2.54J		13.5J					**2.61J**	9.28J
MW-10d	27-Oct-10			3.34J			4.50J		1.61J								**1.55J**	
MW-10d	18-Mar-11			3.88J					2.16J									4.02J
MW-10d	2-Nov-11			3.81J			2.10J		3.18JB									4.14J

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-22	9-Jun-97					**2.9**		**130**				66						
MW-22	18-Aug-97		**11.9**			**4.4**		**229**		14.3		**164**						68.6
MW-22	2-Nov-97					1.5		**210**		12		**130**						230
MW-22	6-May-98							**110**				51						80
MW-22	18-Aug-98					**9.6**		**110**										210
MW-22	10-Sep-98							**100**										
MW-22	6-Oct-98							**99**										
MW-22	8-Dec-98					1.9		**130**										
MW-22	11-Jan-99					1.5		**202**				55						
MW-22	8-Feb-99					**2**		**168**										
MW-22	16-Apr-99					**4.1**	**10.1**	**261**		**21**		70.9						
MW-22	2-Dec-99					**7.4**		**160**										
MW-22	12-Apr-00					**6.1**		**98.1**										
MW-22	20-Dec-00					**2.4**		**60.7**										
MW-22	17-Apr-01					1.2		**31.4**										
MW-22	5-Dec-01							**26.9**										
MW-22	9-Apr-02					**2.1**		**63.5**										
MW-22	6-Nov-02					1.2		**26.5**										
MW-22	17-Apr-03																	
MW-22	5-Nov-03					1.19	**11.1**	**30.1**		12.9								
MW-22	26-Apr-04																	
MW-22	18-Nov-04					**3**		**15**										
MW-22	22-Apr-05				3	**3**	**17**	**48**		**62**								196
MW-22	11-Nov-05					**2**		**13**										
MW-22	14-Apr-06					**2**		**12**										
MW-22	10-Nov-06					**2**		**15**										
MW-22	20-Apr-07					**2**												20
MW-22	8-Nov-07					**2.8**		**24**		13								32
MW-22	15-May-08			45J		**4.66**	8.9J	**25.1**	7.09J	10.3		16.2J	7.95J	5.69J		**7.37**	**1.3J**	16.3
MW-22	6-Nov-08		4.58J	75.5JB	2.45B	**6.68**	9.28JB	**44.9**	9.38JB	**15.4B**		27.5J	10.5	10.6B			**20.7JB**	32.6
MW-22	12-Mar-09			21.5J		**10.3**	2.39J	**26.9**	1.92JB	4.02J		11.6J		1.79J		**6.65**	**35.1B**	10.3
MW-22	4-Dec-09			44.9JB		**4.05**	4.97JB	**22.1**	8.74JB			10.4J	3.05J	3.24JB			**5.22JB**	9.59JB
MW-22	12-May-10			30.5J		**2.23**		**19.2**				5.88J						21.5
MW-22	26-Oct-10			29.5J		**2.06**	2.66J	**13.0**	7.94J			5.73J					**2.94J**	21.6
MW-22	18-Mar-11			40.7J	0.105J	**2.21**	4.1J	**14.8**	2.71J	3.69J		7.49J					**4.89J**	16.1
MW-22	1-Nov-11			41.2J		**7.96**	4.25J	**46.7**	5.24JB			17.2JB		2.87J			**3.22J**	43.9

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-23	9-Jun-97																	
MW-23	18-Aug-97		**10.3**			**2.3**		**14.2**		**18.8**		59.1						
MW-23	2-Nov-97			600	**4.7**	**2.6**	**54**	**35**		**56**		**110**					**170**	260
MW-23	5-May-98																	
MW-23	18-Aug-98					**5.4**	**24**	**10**		**17**							**50**	150
MW-23	10-Sep-98																	
MW-23	6-Oct-98					1.6					0.26							
MW-23	8-Dec-98					1.7												
MW-23 (dup)	8-Dec-98					**2.3**												
MW-23	11-Jan-99										0.20							
MW-23	8-Feb-99										0.20							
MW-23	16-Apr-99						**11.2**			**23.8**	0.7							
MW-23	2-Dec-99										0.2							
MW-23 (dup)	2-Dec-99																	
MW-23	12-Apr-00										**1.1**							
MW-23	20-Dec-00																	
MW-23	17-Apr-01																	
MW-23	4-Dec-01																	
MW-23	11-Apr-02																	
MW-23	6-Nov-02																	
MW-23	17-Apr-03																	
MW-23 (dup)	17-Apr-03																	
MW-23	5-Nov-03																	
MW-23	26-Apr-04																	
MW-23	18-Nov-04																	
MW-23	21-Apr-05																	
MW-23	11-Nov-05																	
MW-23	14-Apr-06																	
MW-23	9-Nov-06						**13**		39									133
MW-23	20-Apr-07			133	2		**10**	**23**	29								**28**	102
MW-23	8-Nov-07			123	1			**21**	21								**27**	92
MW-23	15-May-08		3.35J	90.7J	6.57		**18.8**	**4.50J**	32.7	11.7		10.3J		4.56J			**30**	49.2
MW-23	6-Nov-08		4.07J	65.4JB	1.96B		**10.6B**		18.3B	13.2B		8.28J		8.41JB			**17.5JB**	15.9
MW-23	12-Mar-09			62.1J	2.99		**11.9**	**3.31J**	22.1B	13		7.02J					**36.7B**	35
MW-23	4-Dec-09			48.6JB			4.33JB		12.2B					3.02JB			**3.57JB**	6.88JB
MW-23	13-May-10			124			**23.8**	**9.69J**	45.6	**23.6**		12.8J				**0.348J**	**52**	81.7
MW-23	27-Oct-10			50.9J		0.562J	8.39J	**1.18J**	14.2	7.54J		2.91J					**14.0J**	20.3
MW-23 (dup)	27-Oct-10			54.3J			9.05J		15.7	7.75J		3.58J					**14.5J**	19.4
MW-23	18-Mar-11			43.3J			5.52J		9.92J	6.42J		3.64J					**11.4J**	23.7
MW-23	2-Nov-11			43.5J			5.93J		11.0B	2.79J		4.01J					**9.10J**	14.8

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-23d	5-May-98																	80
MW-23d	18-Aug-98					**4**												63
MW-23d	10-Sep-98					1.6				11								
MW-23d	6-Oct-98					**2.0**					0.22							60
MW-23d	8-Dec-98					1.8												83
MW-23d	11-Jan-99																	
MW-23d	8-Feb-99																	
MW-23d	16-Apr-99																	
MW-23d	2-Dec-99																	
MW-23d	12-Apr-00																	
MW-23d	20-Dec-00										0.8							
MW-23d	17-Apr-01																	
MW-23d	4-Dec-01																	
MW-23d	11-Apr-02																	
MW-23d	6-Nov-02																	
MW-23d	17-Apr-03																	
MW-23d	5-Nov-03																	
MW-23d	26-Apr-04																	
MW-23d	18-Nov-04																	
MW-23d	21-Apr-05					**2**				12								55
MW-23d	11-Nov-05					1												
MW-23d	14-Apr-06																	
MW-23d	9-Nov-06																	
MW-23d	20-Apr-07																	
MW-23d	8-Nov-07																	10
MW-23d	15-May-08			36.5J			5.10J		3.39J					3.39J				
MW-23d	6-Nov-08			48.8JB	**7.34B**		6.57JB		5.63JB	6.76JB				8.81JB			**8.38JB**	4.77J
MW-23d	12-Mar-09			24.4J			1.71J		3.23JB								**9.35JB**	12.6
MW-23d	4-Dec-09			50.1JB		0.17J	4.98JB		8.53JB	10.7B				2.77JB			**7.17JB**	11.2B
MW-23d	13-May-10	**2.10J**		41.6J		0.593J	5.43J		3.27J	2.06J							**7.12J**	39.3
MW-23d	26-Oct-10	**1.08J**		25.2J		0.385J	3.62J		1.78J								**4.05J**	7.70J
MW-23d	17-Mar-11	0.561J		41.7J			4.14J		4.38J				1.04J				**5.04J**	5.36J
MW-23d	1-Nov-11	0.798J		35.8J			3.92J		4.12JB								**3.75J**	10.9

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-24	9-Jun-97																	
MW-24	18-Aug-97					1.7		**11.2**										52.8
MW-24	1-Nov-97																	66
MW-24 (dup)	1-Nov-97									12	0.25							91
MW-24	5-May-98																	
MW-24	18-Aug-98					**4.7**				**16**								180
MW-24 (dup)	18-Aug-98		**11**		2.1	**8.9**	**12**	**11**		**22**								290
MW-24	10-Sep-98										0.44							
MW-24	6-Oct-98										0.98							
MW-24	8-Dec-98										0.62							
MW-24	8-Dec-98										0.62							
MW-24	11-Jan-99										0.50							
MW-24	16-Apr-99									13.7	0.4							53.1
MW-24	2-Dec-99																	
MW-24	12-Apr-00										0.3							
MW-24	20-Dec-00																	
MW-24	16-Apr-01										0.3							
MW-24 (dup)	16-Apr-01																	
MW-24	3-Dec-01																	
MW-24	12-Apr-02																	
MW-24	5-Nov-02																	
MW-24	17-Apr-03										0.4							
MW-24	4-Nov-03																	
MW-24	14-Apr-04																	
MW-24	18-Nov-04										**1.2**							68
MW-24	21-Apr-05										0.65							
MW-24	11-Nov-05				**5**		**11**			**52**	**2**							539
MW-24	14-Apr-06				3	**2**				**41**	**1.2**							492
MW-24	9-Nov-06				**4**		**10**			**48**	**1.7**							464
MW-24	19-Apr-07				1					14	0.68							112
MW-24	9-Nov-07				3.3		**10**		15	**31**	0.98							305
MW-24	20-May-08			42.4J	3.85		3.47J		7.58J	7.16J	0.046J						**4.83J**	27.4
MW-24	11-Nov-08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24	12-Mar-09			52.3J			4.48J		8.35JB	9.33J	0.168J						**18JB**	57.1
MW-24	4-Dec-09			39.7JB			4.11JB		14.9B	11.1B				3.52JB			**4.63JB**	10.2B
MW-24	13-May-10		2.98J	82.9J			6.43J	**3.42J**	9.23J	13.2	0.197J					0.241J	**13.9J**	87.7
MW-24	27-Oct-10		3.63J	50.2J			3.49J		5.21J	6.78J							**8.13J**	50.4
MW-24	18-Mar-11		3.98J	33J			2.17J		2.92J	3.62J			1.13J				**4.25J**	27.1
MW-24	2-Nov-11			48.8J			3.81J		6.75JB	4.69J		2.13J					**6.26J**	43.6

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-27	4-May-98																	
MW-27	7-Dec-98					1	21											
MW-27	29-Apr-99					**2.3**		19										
MW-27	3-Dec-99							13.2										
MW-27	12-Apr-00					1.7		14.5			0.5							75.6
MW-27	18-Apr-01																	
MW-27	12-Apr-02					1.7		10.5										51.8
MW-27	17-Apr-03																	
MW-27	26-Apr-04																	
MW-27	22-Apr-05				3	1	11										**57**	216
MW-27	11-Nov-05																	
MW-27	14-Apr-06																	
MW-28	1-May-98																	
MW-28	17-Aug-98					**5.6**												
MW-28	9-Sep-98																	
MW-28	7-Oct-98					**8.8**	**43**	**24**									**80**	150
MW-28	9-Dec-98					**8.9**	**39**	**19**									**68**	140
MW-28	12-Jan-99																	
MW-28	9-Feb-99																	
MW-28	19-Apr-99																	
MW-28	3-Dec-99																	
MW-28	12-Apr-00																	
MW-28	18-Apr-01																	
MW-28	12-Apr-02																	
MW-28	17-Apr-03																	
MW-28	26-Apr-04																	
MW-28	22-Apr-05				2		**33**	**13**		**17**							**67**	331
MW-28	13-Apr-06						**12**											66
MW-28	20-Apr-07						**11**											88
MW-28	19-May-08			75.8J	**4.29**		**16.9**	**3.18J**	6.12J	4.16J							**25.1**	39.9
MW-28	12-Mar-09			22.8J			4.87J							0.89J			**10.1JB**	13
MW-28	13-May-10			35.6J			6.55J	**1.35J**									**7.87J**	17.6
MW-28	18-Mar-11			51.5J			9.81J	**1.82J**	2.29J	5.21J		2.92J	1.45J			0.179J	**14J**	40.5
MW-28d	1-May-98																	
MW-28d	17-Aug-98					1.3												
MW-28d	9-Sep-98																	
MW-28d	7-Oct-98																	
MW-28d	9-Dec-98										0.25							
MW-28d	12-Jan-99																	
MW-28d (dup)	12-Jan-99																	
MW-28d	9-Feb-99																	
MW-28d	19-Apr-99																	
MW-28d	3-Dec-99																	
MW-28d	12-Apr-00																	
MW-28d	18-Apr-01																	
MW-28d	12-Apr-02																	
MW-28d	17-Apr-03																	
MW-28d	26-Apr-04																	
MW-28d	22-Apr-05																	
MW-28d	13-Apr-06																	
MW-28d	20-Apr-07																	35
MW-28d	19-May-08				**7.76**		1.53J		5J	3.8J							**1.52J**	
MW-28d	12-Mar-09						2.99J		2.04JB	6.28J							**12.7JB**	8.95J
MW-28d	13-May-10			7.52J			2.21J										**3.05J**	8.79J
MW-28d	18-Mar-11			14.3J			4.17J		2.91J	2.31J		2.08J	1.59J				**4.96J**	16.8

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-29d	4-May-98						**13**											
MW-29d	17-Aug-98																	
MW-29d	9-Sep-98					1	**17**											
MW-29d (dup)	9-Sep-98						**11**											
MW-29d	7-Oct-98					**2.7**	**18**											53
MW-29d	9-Dec-98										0.24							
MW-29d	12-Jan-99																	
MW-29d	9-Feb-99																	
MW-29d	19-Apr-99																	
MW-29d	3-Dec-99																	
MW-29d	12-Apr-00																	
MW-29d	19-Dec-00																	
MW-29d	18-Apr-01																	
MW-29d	4-Dec-01																	
MW-29d	11-Apr-02																	
MW-29d	6-Nov-02																	
MW-29d	18-Apr-03																	
MW-29d	5-Nov-03																	
MW-29d	26-Apr-04																	
MW-29d	18-Nov-04					**2**												
MW-29d	22-Apr-05																	
MW-29d	11-Nov-05																	
MW-29d	14-Apr-06																	
MW-29d	10-Nov-06																	
MW-29d	20-Apr-07								16									56
MW-29d	9-Nov-07																	24
MW-29d	19-May-08			33.8J	**6.72**		4.31J		5.61J									4.02J
MW-29d	7-Nov-08			49.8JB	**10.7B**		8.58JB	**3.47J**	12.1B	5.59JB				8.05JB			**12.1JB**	10.5
MW-29d	10-Mar-09						**11.8**		5.96J	6.80J				1.97JB		6.41	**7.77J**	8.23J
MW-29d	2-Dec-09			37.1J			4.39J		12.6B			2.68J					**5.01JB**	4.93JB
MW-29d	13-May-10			38.5J			4.33J		2.61J								**3.10J**	23
MW-29d	27-Oct-10	0.542J		30.7J			5.46J		2.91J								**2.09J**	15.7
MW-29d	18-Mar-11	0.391J	3.08J	54.8J			9.57J		16.2	4.09J		4.15J					**7.4J**	15.5
MW-29d	1-Nov-11			42.7J			6.46J	**1.21J**	12.4B			2.70J					**4.25J**	17.2
MW-30	4-May-98						**60**	**19**									**56**	60
MW-30	17-Aug-98					**34**	**50**	**19**				50					**50**	190
MW-30	9-Sep-98						**16**					50						140
MW-30	7-Oct-98					1.1												
MW-30	7-Dec-98					**2.6**	**20**											
MW-30	12-Jan-99						**20**											
MW-30	9-Feb-99						**20**											
MW-30	19-Apr-99																	
MW-30	3-Dec-99																	
MW-30	12-Apr-00																	
MW-30	19-Dec-00																	
MW-30	18-Apr-01																	
MW-30	4-Dec-01																	
MW-30	11-Apr-02																	
MW-30	6-Nov-02																	
MW-30	17-Apr-03																	
MW-30	5-Nov-03																	
MW-30	28-Apr-04																	
MW-30	18-Nov-04						**108**	**41**		12		71					**107**	89
MW-30	21-Apr-05																	
MW-30	11-Nov-05						**13**											
MW-30	14-Apr-06						**15**											
MW-30	10-Nov-06						**32**											83
MW-30	20-Apr-07			416	3		**43**		60	**18**							**44**	150
MW-30	9-Nov-07			419	3.2		**117**		160	**21**		52					**118**	147
MW-30	19-May-08			106	**10.1**		**31.9**	**5.84J**	58.4	4.9J		13.9J					**30.7**	25.9
MW-30	7-Nov-08			149B	0.59JB		**32.0B**	**5.75J**	58.4B	8.97JB		16.6J		8.54JB			**53.4B**	38.4
MW-30	11-Mar-09			206B	3.46		**61.6B**	**20.3B**	116B	14.4B		34.4J		6.51JB			**85.9B**	57.8
MW-30	4-Dec-09			42.1JB			7.58JB		14.2B	10.7B			3.08J	2.47JB			**6.6JB**	23.6B
MW-30	12-May-10		4.72J	**774**		1.25	**239**	**64.5**	373	**34.2**		**114**				**1.08J**	**253**	254
MW-30	26-Oct-10		4.15J	155			**38**	**9.46J**	68.7	7.91J		18.3J					**40.6**	52.5
MW-30	18-Mar-11			91.1J	0.202J		**29**	**4.25J**	37.1	8.69J		11.2J	1.12J				**27**	37.1
MW-30	1-Nov-11			147	0.302J		**47.5**	**8.80J**	69.8B	3.90J		22.2JB		3.51J		0.196J	**44**	60.8

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-31	1-May-98																	
MW-31	17-Aug-98					**14**	**88**			**38**		82					**81**	220
MW-31	9-Sep-98					**3.3**	**42**			**15**								530
MW-31	7-Oct-98					1.8	**10**											
MW-31	8-Dec-98					**2.6**	**24**											
MW-31	11-Jan-99																	
MW-31	8-Feb-99																	
MW-31	19-Apr-99																	
MW-31	3-Dec-99																	
MW-31	13-Apr-00																	
MW-31	19-Dec-00																	
MW-31	17-Apr-01						**16.5**											
MW-31	6-Dec-01						**55**											
MW-31	11-Apr-02																	
MW-31	6-Nov-02																	
MW-31	18-Apr-03																	
MW-31	5-Nov-03																	
MW-31	28-Apr-04																	
MW-31	18-Nov-04						**64**	**32**		14							**120**	64
MW-31	21-Apr-05																	
MW-31	11-Nov-05						**17**											
MW-31	14-Apr-06																	
MW-31	9-Nov-06						**15**											
MW-31	20-Apr-07																	
MW-31	9-Nov-07				1		**38**		19	**22**	0.22						**47**	32
MW-31	19-May-08			50.7J			**18.1**		13.6	8.81J		6.67J		4.33J		**7.52**	**16.9J**	13
MW-31	7-Nov-08			66.6JB			**30.0B**		23.3B	**15.3B**		7.34J		8.57JB			**40.3B**	12.1
MW-31	11-Mar-09			85.6JB	1.34		**30.2B**	**6.48JB**	21.7B	**19.2B**		11J		6.54JB			**36.4B**	11.1
MW-31	4-Dec-09			38.4JB			**13.4B**		14.5B	11.3B		5.52J	4.62J	2.91JB			**11.8JB**	10.2B
MW-31	12-May-10		3.31J	70.9J	0.182J		**32.4**	**2.22J**	17.1	9.41J		4.63J					**33.5**	27.1
MW-31	26-Oct-10			21.5J	0.102J		7.8J		4.32J	1.99J							**5.48J**	31
MW-31	17-Mar-11			42.6J			**14**		7.79J	4.47J		3.2J				0.255J	**9.69J**	26.3
MW-31	1-Nov-11			84.2J	0.151J		**33.3**	**2.57J**	23.9B	7.27J		13.7JB		2.66J		0.129J	**26.2**	57.9
MW-31d	1-May-98				3		**110**	**13**		**19**		68					**280**	210
MW-31d	17-Aug-98					**8.6**	**10**											94
MW-31d	9-Sep-98					**2.8**	**25**										**60**	260
MW-31d	7-Oct-98					**2.2**												
MW-31d	8-Dec-98																	
MW-31d	11-Jan-99						**19.1**											
MW-31d	8-Feb-99																	
MW-31d	19-Apr-99																	
MW-31d	3-Dec-99																	
MW-31d	13-Apr-00																	
MW-31d	19-Dec-00																	
MW-31d	18-Apr-01																	
MW-31d	6-Dec-01																	
MW-31d	11-Apr-02																	
MW-31d	6-Nov-02																	
MW-31d	18-Apr-03						**10.1**											
MW-31d	5-Nov-03																	
MW-31d	28-Apr-04																	
MW-31d	18-Nov-04						**24**										**50**	
MW-31d	21-Apr-05																	
MW-31d	11-Nov-05																	
MW-31d	14-Apr-06																	
MW-31d	9-Nov-06																	
MW-31d	20-Apr-07																	10
MW-31d	9-Nov-07																	
MW-31d	19-May-08			23.2J			8.61J		4.27J	3.63J				4.16J	7.6J		**6.26J**	4.39J
MW-31d	6-Nov-08		2.66J	31.2JB	**6.26B**		11.7B		8.19JB	10.2B		5.34J		8.47JB			**25.1B**	6.85J
MW-31d	10-Mar-09						5.52J			5.19J				1.44JB			**19.9J**	
MW-31d	2-Dec-09			15.8J			5.23J		9.19JB							**0.42J**	**7.27JB**	35.5B
MW-31d	11-May-10	0.468J	3.16J	17.6J		0.371J	8.36J		1.74J								**7.97J**	17.7
MW-31d	25-Oct-10	0.582JB		14.8J	0.111J		6.56J										**7.10J**	10.6
MW-31d	16-Mar-11	**1.19J**		20.3J			9.86J		4.08J	2.56J			1.24J			**0.327J**	**9.46J**	30.5
MW-31d	31-Oct-11	**1.21J**		21.2J			**13.4**		34.2B			4.99JB					**10.2J**	69.6

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-32	1-May-98						**23**	**44**									**41**	59
MW-32	17-Aug-98					**5.5**	**10**	**31**										130
MW-32	9-Sep-98					**5.4**	**34**	**45**				54					**60**	240
MW-32	6-Oct-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32	7-Dec-98					**8**	**40**	**42**				77					**74**	85
MW-32	11-Jan-99							**26.5**										
MW-32	8-Feb-99							**24**										
MW-32	19-Apr-99							**28.1**										
MW-32	3-Dec-99							**25.1**										
MW-32	13-Apr-00					1.2		**40.9**										
MW-32	19-Dec-00					1.0		**25.8**										
MW-32	17-Apr-01							**22.8**										
MW-32	4-Dec-01							**14.7**										
MW-32	11-Apr-02							**12.1**										
MW-32	6-Nov-02							**12.2**										
MW-32	18-Apr-03					1.4		**24**										
MW-32	4-Nov-03							**10.3**										
MW-32	28-Apr-04							**10.5**										
MW-32	18-Nov-04							**11**										
MW-32	21-Apr-05																	
MW-32	11-Nov-05																	
MW-32	14-Apr-06																	
MW-32	9-Nov-06																	
MW-32	20-Apr-07								18									21
MW-32	9-Nov-07																	29
MW-32	19-May-08			16.7J			4.81J		10.7	4.53J				4.35J			**0.72J**	5.83J
MW-32	6-Nov-08			18.4JB	**8.50B**		4.14JB	**4.41J**	6.41JB	6.36JB				9.0JB			**8.39JB**	4.39J
MW-32	11-Mar-09			23.5JB			4JB	**7.94JB**	13.4B	5.74JB		5.61J		6.91JB			**10.9JB**	
MW-32	4-Dec-09			21.6JB			4JB	**8.41JB**					3.28J	3.21JB			**0.78JB**	3.89JB
MW-32	12-May-10			11.7J			1.34J	**4.70J**	6.82J								**3.52J**	19.1
MW-32	26-Oct-10			20.7J			3.54J	**3.28J**	16			2.48J					**10.7J**	21.1
MW-32	17-Mar-11			21.8J	0.145J		4.58J	**2.91J**	18.2	2.11J		3.91J				0.276J	**7.49J**	29.5
MW-32	1-Nov-11		5.75J	14.2J			3.41J	**1.47J**	10.0B			3.39J					**2.96J**	27.7
TB-1a	1-May-98					1.1								14				50
TB-1a	17-Aug-98					**9.3**	**21**	**20**										130
TB-1a	9-Sep-98					**2.6**	**14**	**16**										160
TB-1a	7-Oct-98					**4.0**	**17**	**14**										
TB-1a (dup)	7-Oct-98					**2.1**		**14**										
TB-1a	9-Dec-98					**3.0**					0.22							
TB-1a	11-Jan-99																	
TB-1a	8-Feb-99																	
TB-1a	19-Apr-99																	
TB-1a	3-Dec-99																	
TB-1a	13-Apr-00																	
TB-1a	20-Dec-00																	
TB-1a	17-Apr-01																	
TB-1a	3-Dec-01								17.3									
TB-1a	12-Apr-02																	
TB-1a	5-Nov-02					**2.2**	**12.7**											
TB-1a	17-Apr-03																	
TB-1a	4-Nov-03																	
TB-1a	14-Apr-04																	
TB-1a	18-Nov-04					**2**	**20**											
TB-1a	21-Apr-05					**2**												
TB-1a	11-Nov-05					**2**	**12**				0.95							67
TB-1a	14-Apr-06					**3**					0.88							
TB-1a	9-Nov-06					**5**	**17**				**2.5**							87
TB-1a	19-Apr-07					**39**	**14**		88	14	**1.9**						**30**	262
TB-1a	8-Nov-07					**8**			29									51
TB-1a	20-May-08			22J	1.94	0.87J	3.47J		16.8	3.79J	0.143J							10.1
TB-1a	11-Nov-08		**12.9**	502		**5.92**	**95.8B**	**44.9**	511B	**19.4**	0.76	75.5	27.8	7.84JB			**200B**	198
TB-1a	11-Mar-09			64.8JB	3.46	**3.25**	9.58JB	**9.49JB**	39B	9.25JB	0.253J	12.2J		6.57JB			**23.9JB**	17.3
TB-1a	3-Dec-09			68.5J	0.45J	**3.33**	9.13J	**3.89J**	56.4B	6.92J		12.2J	3.97J				**23JB**	26.5B
TB-1a	12-May-10			76J		1.49	9.71J	**7.78J**	55.4		0.339	7.66J					**25.8**	27.7
TB-1a	26-Oct-10			43.4J		0.544J	4.92J	**4.77J**	27.2			5.70J					**12.5J**	28.2
TB-1a	17-Mar-11			32.7J			2.46J	**2.23J**	11.6	2.68J		3.14J	0.849J			0.332J	**7.45J**	16.3
TB-1a	1-Nov-11			126		**5.39**	**19.1**	**11.5**	99.3B			19.0J					**40.5**	91.8

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
TB-1a deep	8-Jun-01																	
TB-1a deep	6-Dec-01																	
TB-1a deep	11-Apr-02																	
TB-1a deep	6-Nov-02																	
TB-1a deep	18-Apr-03																	
TB-1a deep	4-Nov-03																	
TB-1a deep	28-Apr-04																	
TB-1a deep	18-Nov-04																	
TB-1a deep	21-Apr-05																	
TB-1a deep	11-Nov-05																	
TB-1a deep	14-Apr-06																	
TB-1a deep	10-Nov-06																	
TB-1a deep	20-Apr-07																	
TB-1a deep	8-Nov-07																	
TB-1a deep	19-May-08			15.6J			**22.6**		5.37J	5.36J		6.9J		4.69J		**5.54**	**6.86J**	7.06J
TB-1a deep	7-Nov-08			15.2JB	1.05B		**16.8B**		8.18JB	5.33JB				8.69JB			**18.9JB**	
TB-1a deep	12-Mar-09				**4.48**	0.23J	**12.6**		3.46JB	6.73J							**9.29JB**	18.5
TB-1a deep	4-Dec-09			30.1JB			**12.6B**		9.35JB			7.1J		3.05JB			**4.21JB**	77.9B
TB-1a deep	11-May-10	0.553J		13J			**19.5**		3.25J			3.51J	1.07J				**8.23J**	22.4
TB-1a deep	25-Oct-10	0.785J		7.98J			**11.4**		1.83J			1.92J					**6.13J**	7.70J
TB-1a deep	16-Mar-11	**1.19J**		14.9J			**16.7**		3.97J	2.03J		4.68J	0.946J			**0.338J**	**7.43J**	12.4
TB-1a deep	31-Oct-11	0.865J		14.2J			**22.9**		4.52JB			6.60JB	1.13J				**7.66J**	13.2
MW-33	6-Aug-98					**5.8**	**46**	**18**									**73**	110
MW-33	7-Dec-98					**2.7**	**18**											
MW-33	26-Apr-99						**15.5**											58.5
MW-33	2-Dec-99						**18.1**											61
MW-33	13-Apr-00																	
MW-33	18-Apr-01																	
MW-33	9-Apr-02																	
MW-33	16-Apr-03					1.2	**26.9**	**11.8**									**47.1**	71.5
MW-33	21-Apr-04						**10.5**											
MW-33	22-Apr-05			660	3		**54**	**18**		**32**							**92**	885
MW-33	14-Apr-06				3		**47**	**15**		**27**							**80**	669
MW-33	20-Apr-07						**19**		14								**30**	**1,165**
MW-33	15-May-08			54.9J			**20.2**		14.6	5.11J		6.9J		4.47J		**10.7**	**19.2J**	31.1
MW-33	12-Mar-09			21.9J			4.58J		1.88JB	4.65J							**7.79JB**	5.35J
MW-33	12-May-10			100			**44.7**	**14.4**	30	3.13J		16.5J					**68.1**	90.9
MW-33	16-Mar-11			66.9J			**21.1**	**5.46J**	14.9	4.04J		7.61J				**0.298J**	**29**	45.9
MW-34	6-Aug-98				**4.9**	**8.4**	**43**	**20**				64					**110**	180
MW-34	7-Dec-98					**2.2**	**14**											59
MW-34	26-Apr-99																	73.2
MW-34	2-Dec-99																	
MW-34	13-Apr-00																	
MW-34	18-Apr-01																	
MW-34	9-Apr-02																	
MW-34	16-Apr-03																	
MW-34	21-Apr-04															**10.3**		
MW-34	22-Apr-05			**1,108**	**10**	1.0	**29**			**33**							**74**	439
MW-34	13-Apr-06																	
MW-34	20-Apr-07																	16
MW-34	19-May-08			121			**11.7**		12.3		0.191J	5.43J		4.19J			**8.81J**	23
MW-34	12-Mar-09			73J			3.78J		3.8JB		0.121J						**12.7JB**	12.2
MW-34	12-May-10		4.96J	393	1.63	0.50J	**47.5**	**14.5**	63.2	13	0.246	31.3J				0.127J	**99.6**	129
MW-34	17-Mar-11			238	2.19		**37.2**	**8.32J**	46.3	13.7		24.9J		2.47J		0.254J	**72**	94.5

Table 3a
Detected Groundwater Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Tin	Thallium	Vanadium	Zinc
NC 2L Standard		**1***	**10**	**700**	**4***	**2**	**10**	**1***	**1,000**	**15**	**1**	**100**	**20**	**20**	**2000***	**0.2***	**0.3***	**1,000**
Solid Waste Section Limit		**6**	**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**0.2**	**50**	**10**	**10**	**100**	**5.5**	**25**	**10**
MW-34d	6-Aug-98																	
MW-34d (dup)	6-Aug-98																	
MW-34d	7-Dec-98																	
MW-34d	26-Apr-99																	
MW-34d	2-Dec-99																	
MW-34d	13-Apr-00																	
MW-34d	18-Apr-01																	
MW-34d	9-Apr-02						**12.5**											
MW-34d	16-Apr-03																	
MW-34d	21-Apr-04																	
MW-34d	22-Apr-05																	
MW-34d	13-Apr-06					**4.0**												
MW-34d	20-Apr-07																	
MW-34d	19-May-08			27.4J			**10.1**		3.95J	5.49J				4.46J				
MW-34d	12-Mar-09			21.5J			4.48J		2.29JB							**5.78**	**8.27JB**	18
MW-34d	11-May-10			23.1J		0.396J	8.78J		13.5								**1.52J**	20.3
MW-34d	16-Mar-11	0.351J		33.2J			9.87J		8.59J	2.06J			0.946J			0.209J	**1.83J**	11.2
MW-35	6-Aug-98				**4.3**	**9.8**	**47**	**30**				52					**120**	130
MW-35	7-Dec-98					**4.6**	**22**	**15**				79					**43**	74
MW-35	26-Apr-99							**13**										
MW-35	2-Dec-99																	
MW-35	13-Apr-00																	
MW-35	18-Apr-01																	
MW-35	9-Apr-02																	
MW-35	16-Apr-03																	
MW-35	21-Apr-04																	
MW-35	22-Apr-05				**5**		**19**			**18**							**52**	134
MW-35	13-Apr-06				2		**10**											
MW-35	20-Apr-07			316	**6**	1.0	**39**	**10**	55	**19**							**109**	149
MW-35	19-May-08			49.5J			5.40J		6.03J					4.43J		**11.7**		8.04J
MW-35	10-Mar-09			34J										1.42JB		**8.59J**		
MW-35	12-May-10			109	0.648J		**16.2**	**9.60J**	22.7	3.21J		8.98J					**42.9**	44.9
MW-35	17-Mar-11			52.9J	0.536J		5.36J	**2.04J**	7.03J	2.33J		3.08J				0.192J	**10.2J**	23.2
MW-36	4-Dec-08			159B			**52.3B**	**21.9**	57.5B	13.6	0.13JB	24.2J	9.10J				**81.6**	47.1
MW-36	10-Mar-09			107			**13**	**5.23J**	19.1			5.71J		1.56JB			**27.2**	11.5
MW-36	4-Dec-09			71.1JB			4.21JB		8.25JB	9.4JB				2.78JB			**3.72JB**	4.9JB
MW-36	12-May-10			96.9J			**18.3**	**7.48J**	18.9			7.38J					**24.0J**	23.3
MW-36	26-Oct-10			46.0J			5.94J	**1.58J**	6.28J			2.01J					**7.32J**	12.2
MW-36	17-Mar-11			69.7J			**10.4**	**2.66J**	9.6J	2.28J		4.16J	0.962J			**0.282J**	**10.7JB**	13.8
MW-36	1-Nov-11			74.6J			**12.1**	**3.63J**	14.7B			7.15JB					**14.8J**	31.8
MW-36d	4-Dec-08			102B			**70.4B**	**6.46J**	32.8B	4.12J	0.13JB	20.0J				**7.59**	**37**	55.6
MW-36d	10-Mar-09			39.8J			**18.1**		11.6	3.94J		9.35J		1.87JB			**16.6J**	
MW-36d	2-Dec-09			54J			**26**		11.6B			15.9J					**10.7JB**	4.16JB
MW-36d	13-May-10			105			**30.6**	**5.53J**	32.4	2.42J		13.6J					**32.2**	25
MW-36d (dup)	13-May-10			126		0.374J	**44.2**	**7.51J**	43	2.67J		18.7J				0.167J	**41.3**	34.4
MW-36d	27-Oct-10	0.269J		79.9J			**69.2**	**2.30J**	20.3	2.50J		32.6J					**20.7J**	12.3
MW-36d	18-Mar-11			98.4J			**32.3**	**2J**	32.5	4.8J		15.5J	1.73J				**29.3**	17.8
MW-36d (dup)	18-Mar-11			88.4J			**27.1**	**1.35J**	27.3	2.51J		12.7	0.845J				**24.5J**	14.2
MW-36d	2-Nov-11			60.3J			**10.2**		12.0B			6.22J					**11.1J**	5.45J

Notes:
All units are in micrograms per liter (parts per billion)
- Concentration exceeds NC Groundwater Standards (2L)
- Indicates result below detection limits
* - Groundwater Protection Standard
NS - Not Sampled; NE - Standard Not Established; dup - Duplicate Sample
J - Indicates the analytical result is an estimated concentration between the Method Detection Limit and the Solid Waste Section Reporting Limit (SWSL)
B - Indicates that the amount detected in the method blank was greater than the Method Detection Limit
MW-27 was abandoned on November 24, 2008 in accordance with 15A NCAC 2C .0113
MW-36/36d installed November 2008
Monitoring wells MW-28, -28d, -33, -34, -34d, and -35 sampled yearly during the spring event

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-11	15-Apr-94																																						
MW-11	11-May-94																																						
MW-11	25-Aug-94																																						
MW-11	29-Sep-94																																						
MW-11	13-Jun-95																																						
MW-11	28-Sep-95																																						
MW-11	31-Oct-95																																						
MW-11	22-Mar-96																																						
MW-11	27-Nov-96																																						
MW-11	22-Apr-97																																						
MW-11	31-Oct-97																																						
MW-11	11-May-98																																						
MW-11	8-Dec-98																																		24				
MW-11	14-Apr-99																																						
MW-11	30-Nov-99																																						
MW-11	5-Apr-00																																						
MW-11	18-Dec-00																																						
MW-11	18-Apr-01																																						
MW-11	27-Nov-01																																						
MW-11	5-Apr-02																																						
MW-11	5-Nov-02																																						
MW-11	15-Apr-03																																						
MW-11	30-Oct-03																																						
MW-11	21-Apr-04																																						
MW-11	18-Nov-04																																						
MW-11	21-Apr-05																																						
MW-11	11-Nov-05																																						
MW-11	14-Apr-06																																						
MW-11	10-Nov-06																																						
MW-11	20-Apr-07																																						
MW-11	8-Nov-07																																						
MW-11	15-May-08																																						
MW-11	10-Nov-08									0.12J																													
MW-11	11-Mar-09									0.14J																	0.11J												
MW-11	3-Dec-09									0.14J																													
MW-11	12-May-10																																						
MW-11	26-Oct-10																																						
MW-11	17-Mar-11																																						
MW-11	1-Nov-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-11d	31-Oct-95																																						
MW-11d	22-Mar-96																																						
MW-11d	27-Nov-96																																						
MW-11d	22-Apr-97																																						
MW-11d	31-Oct-97																																						
MW-11d	11-May-98																																						
MW-11d	8-Dec-98																																						
MW-11d	14-Apr-99																																						
MW-11d	30-Nov-99																																		20				
MW-11d	5-Apr-00																																						
MW-11d	18-Dec-00																																						
MW-11d	18-Apr-01																																						
MW-11d	27-Nov-01																																						
MW-11d	5-Apr-02																																						
MW-11d	5-Nov-02																																						
MW-11d	15-Apr-03																																						
MW-11d	30-Oct-03																																						
MW-11d	21-Apr-04																																						
MW-11d	18-Nov-04																																						
MW-11d	21-Apr-05																																						
MW-11d	11-Nov-05																																						
MW-11d	14-Apr-06																																						
MW-11d	10-Nov-06																																						
MW-11d	20-Apr-07																																		24.5				
MW-11d	8-Nov-07																																						
MW-11d	15-May-08									0.31J																													
MW-11d	10-Nov-08									0.22J																													
MW-11d	16-Mar-09									0.28J																									0.999J				
MW-11d	4-Dec-09									0.29J																													
MW-11d	13-May-10																																						
MW-11d	27-Oct-10																																						
MW-11d	18-Mar-11																																						
MW-11d	2-Nov-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-5	6-Mar-94		4.9												150		0.84	2.1					17				6.3		5.3	14	9.2		2	3.23					
MW-5	15-Apr-94		4.2						35.7		5.7				99.6	1.1	1.2	1.5					11.7				6.3			11.8	17.9								
MW-5	11-May-94		2.4						24		5.7				74		1.1						11				4.9	2		8.2	26								
MW-5	31-May-94		3.1							0.6					47		1.2	1.2									5.4		7.2	8.1				2.72					
MW-5	10-Jun-94		2.8						24.5						71.8		1.4	1.2									3.6		7.6	7.1									
MW-5	30-Sep-94		1.9						18.7						41.6												4.6		8.9										
MW-5	13-Jun-95		10						48					22				8	196								10			19									
MW-5	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	31-Oct-95		9						61						230			14					18							11									
MW-5 (dup)	31-Oct-95		9						53						210			14					15				9			16									
MW-5	30-Jan-96		10						50					16	198			23									7			17									
MW-5	28-Nov-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	22-Apr-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	1-Nov-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	6-May-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	8-Dec-98		7.9						20			6.0		10	74			15					79				11			17				6.5					
MW-5	16-Apr-99		8						22						87			42					100				6			14									26
MW-5	2-Dec-99		6												60			72									6			16									
MW-5	11-Apr-00		6						14			11.0			70			34									10			22		140							
MW-5	20-Dec-00														39			17												14									
MW-5	16-Apr-01											7.0			44			29												17									
MW-5	3-Dec-01														31			20												12									
MW-5	12-Apr-02											7.0			32			33												16									
MW-5	5-Nov-02								10			6.0			26			31												15									
MW-5	17-Apr-03											14.0			24			44												11									
MW-5	4-Nov-03	540										8												360															
MW-5	4-Nov-03	490										8												360															
MW-5	14-Apr-04																											1000											
MW-5	18-Nov-04																																						
MW-5	21-Apr-05																																						
MW-5	11-Nov-05								6	9.2																													
MW-5	14-Apr-06																																						
MW-5	9-Nov-06								8.6	5.8																													
MW-5	19-Apr-07								6.7	6.8																													
MW-5	8-Nov-07		4.9					5.9	20.5	8.8																				2.6			13						
MW-5R	21-Apr-04											16.5			13.1			56.2																					
MW-5R	21-May-08		0.34J					1.00J	0.67J			6.17			0.8J			4.22J					0.24J							0.26J									
MW-5R	10-Nov-08		0.23J					0.63J				5.49			0.61J			1.95J					0.23J							0.13J									
MW-5R	11-Mar-09											0.91J																											
MW-5R	3-Dec-09											0.51J						0.09J																					
MW-5R	12-May-10											2.1			0.57J			0.53J																					
MW-5R	25-Oct-10										0.51J	2.5																											
MW-5R	16-Mar-11											2.1																											
MW-5R	31-Oct-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-6	6-Mar-94		1.7							0.83					34								37				3.4		5.9	4.6	3.9			2.42					
MW-6	15-Apr-94								8.5		1.2				12.5								21				1.9			2.1	2.6								
MW-6	11-May-94								18.4		1.2				28.7								64.2				2.3			4.9	2.6								
MW-6 (dup)	1-Jun-94		3.7							4.3					50								130				7		14	7.5	11			16.6					
MW-6	25-Aug-94								22						36								79.8																
MW-6	29-Sep-94		2						18		66				34								6.1				3		1.4										
MW-6	13-Jun-95								19						28								61							6									
MW-6	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	31-Oct-95								22						32								56							6									
MW-6	30-Jan-96		6						37						61															11									
MW-6	29-Nov-96								34						41								91							16									
MW-6	22-Apr-97		5.4						37						29			6.7					88							15									
MW-6	2-Nov-97		6.1						28						28			7.8					90				5.2			16									
MW-6	6-May-98								29						34			13					140							17									
MW-6 (dup)	6-May-98								30						35			14					140							19									
MW-6	8-Dec-98								26						40			14					180							19									
MW-6	16-Apr-99		5						16						26								110							11									
MW-6	2-Dec-99														12			7					67							6									
MW-6	11-Apr-00														12			7					63							6									
MW-6	19-Dec-00														6								20																
MW-6	16-Apr-01														8			6					46																
MW-6	3-Dec-01																	6																					
MW-6	12-Apr-02														7			5					26																
MW-6	5-Nov-02																	5					10																
MW-6	17-Apr-03																																		13				
MW-6	4-Nov-03																	6																					
MW-6	14-Apr-04																	5.7																					
MW-6	18-Nov-04																																						
MW-6	21-Apr-05																																						
MW-6	11-Nov-05																																						
MW-6	14-Apr-06																																						
MW-6	9-Nov-06																																						
MW-6	19-Apr-07																																						
MW-6	8-Nov-07		3.3									7.4																					3.4						
MW-6	20-May-08		3.85					1J	3.85J			2.07			1.22J			2.3J					0.62J					0.14J		0.9J			3.29		2.17J	1.86J		1.06J	
MW-6	11-Nov-08		4.12					1.29J	3.90J			2.72		0.33J	1.27J			2.22J					1.08					0.20J		0.98J			4.01						
MW-6	11-Mar-09		3.3					1.22J	2.43J			2.02			0.75J			2.21J										0.11J		0.71J			3.61						
MW-6	3-Dec-09		2.56					1.7J	1.79J			1.78			0.79J			1.49J					0.28J					0.14J		0.6J			2.24						
MW-6	12-May-10	6.5J	1.3					2.8J				2.80			0.95J			1.7J															3.0						
MW-6	7-Jul-10		3.9					2.3J	2.3J			2.70			0.85J			1.5J															2.6						
MW-6	29-Jul-10		3.7					2.6J	2.0J			3.20			0.86J			1.1J															2.5						
MW-6	13-Aug-10		4.3					2.5J	2.1J			3.00			0.97J			1.3J															2.5						
MW-6	26-Oct-10		4.5					2.3J				3.00			1.0J			1.3J																					
MW-6	16-Mar-11		3.4					1.3J				1.6			0.42J			1.3J															1.8						
MW-6	1-Nov-11		3.6					1.1J				1.7			1.0J			0.95J																					

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-6d	8-Jun-01														8			6																					
MW-6d	4-Dec-01																																						
MW-6d	9-Apr-02																																						
MW-6d	7-Nov-02																																						
MW-6d	16-Apr-03																																						
MW-6d	4-Nov-03																																						
MW-6d	21-Apr-04																																						
MW-6d	18-Nov-04																																						
MW-6d	21-Apr-05																																						
MW-6d	11-Nov-05																																						
MW-6d	11-Apr-06																																						
MW-6d	9-Nov-06																																						
MW-6d	20-Apr-07																																						
MW-6d	8-Nov-07																																						
MW-6d	20-May-08									0.49J				3.04J	5.7			0.85J					0.34J				0.71J			0.91J	0.91J								
MW-6d	6-Nov-08		0.23J							0.57J		0.44J		2.76J	6.12			1.10J					0.77J				1.06			1.13	1.10								
MW-6d (dup)	6-Nov-08		0.25J							0.61J		0.45J		2.69J	6.16			1.00J					0.68J				1.08			1.13	0.99J								
MW-6d	12-Mar-09									0.43J				1.47J	3.24J			0.54J					0.33J				0.77J			0.49J	0.55J								
MW-6d	3-Dec-09									0.58J		0.28J		1.86J	5.51			0.9J					0.42J				0.69J			0.86J	0.75J								
MW-6d	12-May-10									0.92J				1.9J	6.2			1.1J					0.81J				0.70J			0.77J	0.79J								
MW-6d	7-Jul-10		0.42J							0.91J		0.55J		2.9J	8			1.9J					0.78J				0.97J			1.2	1.1								
MW-6d	29-Jul-10									1.0J		0.68J			7.6			1.5J									1.2			1.3	1.4								
MW-6d	13-Aug-10									1.1J		0.61J			7.8			1.7J					1.1				1.2			1.3	1.1								
MW-6d	27-Oct-10									1.2J		0.67J		3.0J	5.2			1.2J									0.81J			1.1	1.0								
MW-6d	16-Mar-11													0.91J	3.2J								0.49J																
MW-6d	2-Nov-11									0.72J				1.5J	3.4J								0.43J																

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-7	6-Mar-94																																						
MW-7	15-Apr-94																																						
MW-7	11-May-94																																						
MW-7	31-May-94																																						
MW-7	25-Aug-94																																						
MW-7	29-Sep-94																																						
MW-7	13-Jun-95																																						
MW-7	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	31-Oct-95								11						5																								
MW-7	30-Jan-96																																						
MW-7	29-Nov-96								22						9			2									4			5									
MW-7	21-Apr-97								19						11			5.9																					
MW-7	1-Nov-97								26						10			6.2																					
MW-7	6-May-98								24						17			21																					
MW-7	8-Dec-98		7.2						32						20			36					12							5.2									
MW-7	16-Apr-99								21						14			24																					
MW-7	2-Dec-99														9			16																					
MW-7	11-Apr-00														8			17																					
MW-7 (dup)	11-Apr-00														8			17																	16				
MW-7	19-Dec-00														5			10																					
MW-7 (dup)	19-Dec-00														6			12																					
MW-7	16-Apr-01														6			13																	16				
MW-7	4-Dec-01																																						
MW-7	9-Apr-02																	7																					
MW-7	6-Nov-02																	12																					
MW-7	16-Apr-03																	24																					
MW-7	5-Nov-03																	15																					
MW-7	21-Apr-04																	18.3																					
MW-7 (dup)	21-Apr-04																	19.9																					
MW-7	18-Nov-04																	16.4																					
MW-7	21-Apr-05																	26																					
MW-7	11-Nov-05																	12.2																					
MW-7	14-Apr-06																	19.3																					
MW-7	9-Nov-06																	27.2																					
MW-7	20-Apr-07																	24.3															5.4						
MW-7	8-Nov-07		3.5									2.7						22.3															7.7						
MW-7	15-May-08		1.61					0.24J				0.77J	0.15J		0.44J			7.68															2.74		0.907J				
MW-7	5-Nov-08		1.04					0.14J				0.83J	0.16J	1.10J	0.25J			3.14J										0.15J					2.09						
MW-7	10-Mar-09		1.56					0.20J				1.17		1.34J				3.40J										0.68J					2.73	0.96J	2.36J				
MW-7	2-Dec-09		1.37					0.2J	0.62J			1.13	0.23J	0.69J	0.32J			2.24J										0.3J					1.82	0.48J					
MW-7 (dup)	2-Dec-09		1.38					0.22J	0.59J			1.11	0.23J	0.76J	0.29J			2.34J										0.32J					1.93	0.45J					
MW-7	13-May-10		2.1									2			0.46J			1.8J															3.1	0.50J					
MW-7	27-Oct-10		2.3					0.42J				2.5	0.72J		0.61J			1.6J										0.49J					2.9	1.2J					
MW-7	16-Mar-11		1.8									1.6						0.74J															1.5						
MW-7	2-Nov-11	7.6J	1.3									1.6																					1.4						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-8	6-Mar-94		6.8							2.2		3.2			13	1	1.3	7.6			0.56		450				7.5	4	18	16	7.3		0.76	35.6					
MW-8	15-Apr-94		7.9						39.8	1.3	8.8	4.9			88.6	1.8	1.5	8.9		3	1.4		310				8.1	5		17.5	5.1			39.7					
MW-8	11-May-94		5.6						34						83								278				7			15				27.1					
MW-8	31-May-94		12							1.1		13			110	2.6	1.6	23					310			3.1	16	11	16	29	4.4			89					
MW-8	25-Aug-94								51.3						109								400											32					
MW-8	30-Sep-94		5.8						35		12.2	5.2			86			5.6					300						8.9	13				22.8					
MW-8	13-Jun-95								15						36								47							6				19					
MW-8	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	31-Oct-95		8						40	8				8	72			23			32		137				9			14									
MW-8	30-Jan-96		10						37					10	71			34					123				18			23				58	20				
MW-8	29-Nov-96		4			8			15			3		5	18			24					23				13		1	12				13					
MW-8	21-Apr-97														10			20					16				8.3			8.1					8				
MW-8	2-Nov-97														6.3			22												5.2									
MW-8	6-May-98		5.7												15			56					13				7.8			8.7				6.1					
MW-8	8-Dec-98														7.9			37												5.2									
MW-8	16-Apr-99											6			13			55												6									
MW-8 (dup)	16-Apr-99														10			41																					
MW-8	2-Dec-99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	11-Apr-00																	12																					
MW-8	20-Dec-00																																						
MW-8	16-Apr-01																																						
MW-8	3-Dec-01																																						
MW-8	12-Apr-02																																						
MW-8	5-Nov-02																																						
MW-8	17-Apr-03																																		10				
MW-8	4-Nov-03																	12																					
MW-8	14-Apr-04																	7.9																					
MW-8	18-Nov-04																	7.9																					
MW-8	21-Apr-05																																						
MW-8	11-Nov-05																																						
MW-8	14-Apr-06																																						
MW-8	9-Nov-06																																						
MW-8	20-Apr-07																	18.9																					
MW-8	8-Nov-07																	6.6																					
MW-8	20-May-08		0.19J					0.16J		0.38J		0.16J			0.96J			14.2					0.76J				0.28J			0.39J									
MW-8	10-Nov-08		0.14J							0.39J					0.58J								1.17				0.17J	0.11J		0.23J									
MW-8	11-Mar-09		0.20J					0.19J		0.32J					0.61J			6.84					0.30J																
MW-8	3-Dec-09		0.22J							0.35J					0.62J			8.04					0.45J				0.13J			0.25J			0.44J						
MW-8	12-May-10											0.40J			1.0J			19					0.78J										0.84J						
MW-8	25-Oct-10		0.41J												1.0J			56					0.69J							0.58J									
MW-8	16-Mar-11														0.61J			17																					
MW-8	31-Oct-11														0.66J			14																					

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-8d	8-Jun-01																																						
MW-8d	4-Dec-01																																						
MW-8d	9-Apr-02																																						
MW-8d (dup)	9-Apr-02																																						
MW-8d	7-Nov-02																																						
MW-8d	16-Apr-03																																						
MW-8d	4-Nov-03																																						
MW-8d	21-Apr-04																																						
MW-8d	18-Nov-04																																						
MW-8d	21-Apr-05																																						
MW-8d	11-Nov-05																																						
MW-8d	14-Apr-06																																						
MW-8d	10-Nov-06																																						
MW-8d	20-Apr-07																																						
MW-8d	8-Nov-07																																						
MW-8d	15-May-08									0.28J					0.17J			0.07J																					
MW-8d	6-Nov-08									0.31J													0.62J																
MW-8d	16-Mar-09									0.39J					0.14J			0.07J									0.44J												
MW-8d	4-Dec-09									0.36J					0.14J			0.08J																					
MW-8d	13-May-10									0.45J																													
MW-8d	27-Oct-10									0.61J																													
MW-8d	18-Mar-11																																						
MW-8d	2-Nov-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-9	6-Mar-94		5.3							5.8		1.6			100		1.3				0.73		680				6.6	6	7	8.7	4.2		0.96	15.2					
MW-9	15-Apr-94		5.6						14.1	4.9	7.3	2.4			96.8		1.8	0.7					357				8.2	1.6		12.4	3.6			17.3					
MW-9	11-May-94		6.8							5	20.1				134								357				7.6			13				20.5					
MW-9	31-May-94		8.2							6.6		3.4			170		1.7						460				8.8	1.7	8.7	14	3.6			23.3					
MW-9	25-Aug-94														165								558																
MW-9	29-Sep-94		7							5.1					131								400				8.2		6.5					16					
MW-9	13-Jun-95		11						20					28	203								258				11		7	23				8					
MW-9	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	31-Oct-95		15						29					44	310								278				14			27				14					
MW-9	30-Jan-96		14						22		11			33	270												8			23				6					
MW-9	29-Nov-96		22												280															31									
MW-9	22-Apr-97		24											16	220															28				14.2					
MW-9	2-Nov-97													32	200																								
MW-9	6-May-98		17											31	210												13			32									
MW-9	8-Dec-98		14											53	200												13			31					20				
MW-9	16-Apr-99		7											49	140												7			20					12				
MW-9	2-Dec-99														120															20									
MW-9	11-Apr-00														110															20									
MW-9	20-Dec-00													25	100															18									
MW-9	16-Apr-01													20	93			6									6			15					21				
MW-9	3-Dec-01													25	100			20												5									
MW-9 (dup)	3-Dec-01													20	89			19																	22				
MW-9	12-Apr-02														97			21																					
MW-9	5-Nov-02													19	84			20																					
MW-9	17-Apr-03		5											19	100			29										6							59				
MW-9	4-Nov-03		5												83			28										13						8					
MW-9	14-Apr-04		5.86									5.5		11.8	96			27			2.5							15					6.2	7.4	28				
MW-9	18-Nov-04											5.2		13.2	73.7			6.4										6.6					26.5						
MW-9	21-Apr-05											5.2		9.5	69.6																		29.6						
MW-9	11-Nov-05											6.7		8.3	63.1																		28.8						
MW-9	14-Apr-06											6.9			47.6																		29.5						
MW-9	9-Nov-06											5.8			39.9																		23						
MW-9	19-Apr-07		4.4									8.4			44.4																		32.9						
MW-9	8-Nov-07		1.6									7.4			28.9	1														1.1			26.4						
MW-9	20-May-08		2.17					0.28J	3.53J			7.73		0.42J	28.9	0.86J		3.83J		0.9J	1.51		0.24J					1.01		0.45J	0.24J		25.6	1.69J		1.11J			
MW-9 (dup)	20-May-08		2.27					0.27J				7.42			30.3			3.62J	0.23J		1.32		0.26J					1.03		0.42J			27.7	1.10J		1.01J			
MW-9	11-Nov-08		1.74					0.20J	2.24J			6.26			21.6			3.28J			1.06		0.72J					0.60J		0.28J			19.1	0.48J					
MW-9	11-Mar-09		1.96					0.24J	2.50J			6.99			22.9			4.16J	0.15J	0.86J	1.06							0.54J		0.20J			22.1	0.77J	0.834J				
MW-9 (dup)	11-Mar-09		1.85					0.24J	2.36J			6.93			22.5			4.14J	0.13J	0.83J	1.06							0.54J		0.24J			21.5	0.89J	2.07J				
MW-9	3-Dec-09		1.58					0.22J	2.37J			6.06			18.9	0.67J		5.99	0.21J	0.8J	1.15							0.37J		0.28J			21.5	0.79J					
MW-9	12-May-10											9.5			23	0.91J		6.7		1.1	2.4				1.0J			0.62J					41	2.0J					
MW-9	26-Oct-10		1.6									8.4			17	1.2		16		1.0	0.74J												25	0.57J					
MW-9	17-Mar-11		1.1									6			12	0.92J		13		0.61J													14						
MW-9	1-Nov-11		1.3									5.9			11			11															12						
MW-9 (dup)	1-Nov-11	6.1J	1.0						1.3J			5.9			10			12															10						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-10	6-Mar-94		2.4							2.5					37		2.4						72				4.6		16	9.8	12			26.7					
MW-10	15-Apr-94		1.8						18.1	1.6	5.5				24.2	2.6	2.6						67.3				4.8			8				16.9					
MW-10	11-May-94		1.4						15.8	1.7	4				23	2.6	1.8						54.8				4			6.8	16.3			6.7					
MW-10	31-May-94		3.7							3.9					57		2.7						120				8.7		17	15	15			19.1					
MW-10	25-Aug-94								47.7		18.7				72						8		194				9.2		18.4		18			15					
MW-10	29-Sep-94		4.2						37.7	3.4	7.2				56.3		3.5						148						3.5	19	17.1			13.1					
MW-10	13-Jun-95		7						53		13			18	84								223				13		13	20				14					
MW-10	28-Sep-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	31-Oct-95								33					46	44			10					47				7		14	8	14								
MW-10	30-Jan-96		8						48		10			29	101			12									9		8	18				8					
MW-10	28-Nov-96								3						12			1					15				2			2									
MW-10	22-Apr-97		12						31					8.5	160			20					120				25			33				19.6	7.3				
MW-10	1-Nov-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	8-Dec-98														140			48					270				16			19				12					
MW-10	11-Jan-99		7						19						140			36					320				14			18					NS				
MW-10	8-Feb-99		9						24						140			41									17			21				20	NS				
MW-10 (dup)	8-Feb-99		8						20						130			38									13			17					NS				
MW-10	16-Apr-99														160			26					410												16				
MW-10	2-Dec-99														40								77				6								14				
MW-10	12-Apr-00														46			7					88				7			6									
MW-10	20-Dec-00														35								40																
MW-10	17-Apr-01														34								34																
MW-10	3-Dec-01														26								18																
MW-10	12-Apr-02														22								18																
MW-10	5-Nov-02													6	20								16				8												
MW-10 (dup)	5-Nov-02													6	21								16				9												
MW-10	17-Apr-03													5	26								22				7												
MW-10	4-Nov-03													5	26																								
MW-10	14-Apr-04													5																					189				
MW-10	18-Nov-04																	6.4																	37				
MW-10	21-Apr-05																	9.9																					
MW-10	11-Nov-05														5.7			17.6																					
MW-10	14-Apr-06																	11.9																					
MW-10	9-Nov-06														7.8			27.7																					
MW-10	19-Apr-07														6.3			7.4																	24				
MW-10	8-Nov-07																						1				1.3								21				
MW-10	20-May-08		1.16						1.03J			0.46J		0.55J	6.07		0.14J	7.13					3.69				2.34			1.81	0.17J		0.49J	0.52J	3.12J				
MW-10	11-Nov-08		2.26						1.46J			0.66J		0.83J	9.44			11.3					1.89				4.2			2.99			1.67	0.41J					
MW-10	11-Mar-09		3.53						1.50J			0.50J			8.52			22.3									4.06			4			1.70	0.65J	0.616J				
MW-10	3-Dec-09		4.32					0.09J	1.06J			0.68J		0.38J	7.58			28.8					0.42J				2.65			2.99			0.95J	0.15J					
MW-10	12-May-10		0.66J												1.7J			26									0.74J			0.71J			1.20						
MW-10	25-Oct-10	4.2J	4.0						1.7J		0.45J	0.67J		0.52J	4.4J			48									2.8			1.9			1.70						
MW-10	17-Mar-11		3.3									1.1			4.2J			48									2.5			2.6			1.6						
MW-10	31-Oct-11		3.2						1.4J			0.90J			4.9J			42									2.9			2.6			1.3						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-10d	8-Jun-01														12								16																
MW-10d	4-Dec-01														17																								
MW-10d	11-Apr-02														16																								
MW-10d	5-Nov-02														13																								
MW-10d	17-Apr-03														11																								
MW-10d	4-Nov-03														8																				13				
MW-10d	26-Apr-04														5.9																				32.4				
MW-10d	18-Nov-04																																		43				
MW-10d	21-Apr-05																																						
MW-10d	11-Nov-05																																						
MW-10d	14-Apr-06																																						
MW-10d	10-Nov-06																																						
MW-10d	20-Apr-07																																		19.9				
MW-10d	8-Nov-07																																		20				
MW-10d	20-May-08									0.3J				0.36J	2.01J			0.2J					0.71J				0.29J			0.36J									
MW-10d	6-Nov-08		0.22J				6.01J			0.21J					2.16J			0.15J					1.47				0.32J			0.37J	0.39J								
MW-10d	12-Mar-09									0.26J				0.67J	2.30J			0.18J					1.17				0.33J			0.37J					1.12J				
MW-10d	4-Dec-09									0.25J				0.56J	2.44J			0.27J					1.06				0.47J			0.48J	0.29J								
MW-10d	13-May-10													0.78J	2.5J												0.64J			0.59J									
MW-10d	27-Oct-10													1.1J	2.5J			0.69J									1.2			0.79J	0.50J								
MW-10d	18-Mar-11														2J								1																
MW-10d	2-Nov-11														2.2J								0.92J																
MW-22	9-Jun-97																																						
MW-22	18-Aug-97																																						
MW-22	2-Nov-97													5.2	6.9																								
MW-22	6-May-98																																						
MW-22	8-Dec-98														8.6																								
MW-22	16-Apr-99														6																								
MW-22	2-Dec-99																																						
MW-22	12-Apr-00																																						
MW-22	20-Dec-00														9																								
MW-22	17-Apr-01														9																								
MW-22	4-Dec-01														6																								
MW-22	9-Apr-02														5																								
MW-22	6-Nov-02														5																								
MW-22	17-Apr-03																																						
MW-22	5-Nov-03																																						
MW-22	26-Apr-04																																						
MW-22	19-Nov-04																																						
MW-22	22-Apr-06																																						
MW-22	11-Nov-05																																						
MW-22	14-Apr-07																																						
MW-22	9-Nov-06																																						
MW-22	20-Apr-07																																						
MW-22	8-Nov-07																																						
MW-22	15-May-08														0.25J												0.31J								1.47J				
MW-22	6-Nov-08																						0.74J				0.32J												
MW-22	12-Mar-09														0.09J												0.66J								0.71J				
MW-22	4-Dec-09		0.15J							1.2J													0.4J				0.31J												
MW-22	12-May-10									0.83J																													
MW-22	26-Oct-10									0.94J																	0.65J												
MW-22	18-Mar-11									0.79J																													
MW-22	1-Nov-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-23	9-Jun-97								40						86			7.6					100				9.3	16	6.4	9.1				13					
MW-23	18-Aug-97								33						93			11					85																
MW-23	2-Nov-97								26						68			11					40				5.6			6.3									
MW-23	5-May-98														6.9								10																
MW-23	8-Dec-98														7.4																				8.3				
MW-23 (dup)	8-Dec-98														9.2																								
MW-23	16-Apr-99																																						
MW-23	2-Dec-99																																						
MW-23 (dup)	2-Dec-99																																						
MW-23	12-Apr-00																																						
MW-23	20-Dec-00																																						
MW-23	17-Apr-01																																						
MW-23	4-Dec-01																																						
MW-23	11-Apr-02																																						
MW-23	6-Nov-02																																						
MW-23	17-Apr-03																																						
MW-23 (dup)	17-Apr-03																																						
MW-23	5-Nov-03																																						
MW-23	26-Apr-04																																						
MW-23	19-Nov-04																																						
MW-23	21-Apr-05																																						
MW-23	11-Nov-05																																						
MW-23	14-Apr-06																																						
MW-23	9-Nov-06																																						
MW-23	20 ap 07																																						
MW-23	8-Nov-07																																						
MW-23	15-May-08									0.17J					0.67J												0.19J								0.86J				
MW-23	6-Nov-08														0.35J								0.37J				0.13J												
MW-23	12-Mar-09														0.35J												0.48J												
MW-23	4-Dec-09														0.23J																								
MW-23	13-May-10																																						
MW-23	27-Oct-10																																						
MW-23 (dup)	27-Oct-10																																						
MW-23	18-Mar-11																																						
MW-23	2-Nov-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-23d	5-May-98																																						
MW-23d	8-Dec-98																																		7.8				
MW-23d	16-Apr-98																																						
MW-23d	2-Dec-99																																		10				
MW-23d	12-Apr-00																																		10				
MW-23d	20-Dec-00																																						
MW-23d	17-Apr-01																																						
MW-23d	4-Dec-01																																						
MW-23d	11-Apr-02																																						
MW-23d	6-Nov-02																																						
MW-23d	17-Apr-03																																						
MW-23d	5-Nov-03																																						
MW-23d	26-Apr-04																																						
MW-23d	19-Nov-04									6.4																													
MW-23d	21-Apr-05									6.9																													
MW-23d	11-Nov-05																																						
MW-23d	14-Apr-06																																						
MW-23d	9-Nov-06																																						
MW-23d	20-Apr-07																																						
MW-23d	8-Nov-07																																						
MW-23d	15-May-08									0.3J																													
MW-23d	6-Nov-08									0.15J																													
MW-23d	12-Mar-09									0.24J																									1.21J				
MW-23d	4-Dec-09									0.2J																													
MW-23d	13-May-10																																						
MW-23d	26-Oct-10																																						
MW-23d	17-Mar-11																																						
MW-23d	1-Nov-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-24	9-Jun-97								12						37			5.1			14		200					160		8.5				57					
MW-24	18-Aug-97														68								380					400											
MW-24	1-Nov-97														56						25		340					260						98					
MW-24 (dup)	1-Nov-97														68						33		370					340						131					
MW-24	5-May-98														42						28		240					230						112					
MW-24	8-Dec-98		12						30						85			26			23		280					140		15				93	7.7				
MW-24	16-Apr-99								19						55						13		170					46						60					
MW-24	2-Dec-99														25								43											21	11				
MW-24	12-Apr-00														42			5					39				7			7				33					
MW-24	20-Dec-00														44			5					29				8			7				21					
MW-24	16-Apr-01														34			5					18				6							12					
MW-24 (dup)	16-Apr-01														34			5					20				6							12					
MW-24	3-Dec-01														33			5					12				8							10					
MW-24	12-Apr-02														27												6							8					
MW-24	5-Nov-02														21																								
MW-24	17-Apr-03														19																				30				
MW-24	4-Nov-03														9																								
MW-24	14-Apr-04														6.5																								
MW-24	18-Nov-04																																						
MW-24	21-Apr-05																																						
MW-24	11-Nov-05									7																													
MW-24	14-Apr-06									8.5																													
MW-24	9-Nov-06									9.8																													
MW-24	19-Apr-07									11.4																													
MW-24	8-Nov-07									7.2																													
MW-24	20-May-08									14.8					0.29J								0.19J				0.38J								1.52J				
MW-24	11-Nov-08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24	12-Mar-09									10.1					0.26J												0.62J								1.69J				
MW-24	4-Dec-09				*1.48J					9.11	*422				0.2J							*2.93J					0.2J												
MW-24	13-May-10									13																													
MW-24	17-Oct-10									11																													
MW-24	18-Mar-11									13																													
MW-24	2-Nov-11									8.9																													
MW-27	4-May-98																																		7.5				
MW-27	7-Dec-98																																		6.4				
MW-27	26-Apr-99																																		20				
MW-27	3-Dec-99																																						
MW-27	12-Apr-00																																						
MW-27	18-Apr-01																																						
MW-27	12-Apr-02																																						
MW-27	17-Apr-03																																						
MW-27	26-Apr-04																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-28	1-May-98																																						
MW-28	17-Aug-98																																						
MW-28	9-Sep-98																																						
MW-28	7-Oct-98																																						
MW-28	9-Dec-98																																		12				
MW-28	12-Jan-99																																						
MW-28	9-Feb-99																																						
MW-28	19-Apr-99																																						
MW-28	3-Dec-99																																						
MW-28	12-Apr-00																																						
MW-28	18-Apr-01																																						
MW-28	12-Apr-02																																						
MW-28	17-Apr-03																																						
MW-28	26-Apr-04																																						
MW-28	22-Apr-05																																						
MW-28	14-Apr-06																																						
MW-28	20-Apr-07																																						
MW-28	19-May-08									0.39J																													
MW-28	12-Mar-09									0.39J																													
MW-28	13-May-10																																						
MW-28	18-Mar-11																																						
MW-28d	1-May-98																																						
MW-28d	17-Aug-98																																						
MW-28d	9-Sep-98																																						
MW-28d	7-Oct-98																																						
MW-28d	9-Dec-98																																		20				
MW-28d	12-Jan-99																																						
MW-28d (dup)	12-Jan-99																																						
MW-28d	9-Feb-99																																						
MW-28d	19-Apr-99																																						
MW-28d	3-Dec-99																																		94				
MW-28d	12-Apr-00																																		46				
MW-28d	18-Apr-01																																						
MW-28d	12-Apr-02																																		36				
MW-28d	17-Apr-03																																						
MW-28d	26-Apr-04																																		28.3				
MW-28d	22-Apr-05																																						
MW-28d	14-Apr-06																																						
MW-28d	20-Apr-07																																						
MW-28d	19-May-08									0.45J																													
MW-28d	12-Mar-09									0.33J																	0.42J												
MW-28d	13-May-10																																						
MW-28d	18-Mar-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-29d	4-May-98																																						
MW-29d	17-Aug-98																																						
MW-29d	4-May-98																																						
MW-29d	17-Aug-98																																						
MW-29d	9-Sep-98																																						
MW-29d (dup)	9-Sep-98																																						
MW-29d	7-Oct-98																																						
MW-29d	9-Dec-98																																		37				
MW-29d	12-Jan-99																																						
MW-29d	9-Feb-99																																						
MW-29d	19-Apr-99																																						
MW-29d	3-Dec-99																																						
MW-29d	12-Apr-00																																						
MW-29d	19-Dec-00																																						
MW-29d	18-Apr-01																																						
MW-29d	4-Dec-01																																						
MW-29d	11-Apr-02																																						
MW-29d	6-Nov-02																																						
MW-29d	18-Apr-03																																						
MW-29d	5-Nov-03																																						
MW-29d	26-Apr-04																																						
MW-29d	19-Nov-04																																						
MW-29d	21-Apr-05																																						
MW-29d	11-Nov-05																																						
MW-29d	14-Apr-06																																						
MW-29d	10-Nov-06																																						
MW-29d	20-Apr-07																																		23				
MW-29d	9-Nov-07																																						
MW-29d	19-May-08									0.13J																									1.44J				
MW-29d	7-Nov-08																						0.37J																
MW-29d	10-Mar-09									0.12J																									0.857J				
MW-29d	2-Dec-09									0.15J																	0.21J												
MW-29d	13-May-10																																						
MW-29d	27-Oct-10																																						
MW-29d	18-Mar-11																																		1.8J				
MW-29d	1-Nov-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-30	4-May-98																																						
MW-30	17-Aug-98																																						
MW-30	9-Sep-98																																						
MW-30	7-Oct-98																																						
MW-30	7-Dec-98																																						
MW-30	12-Jan-99																																						
MW-30	9-Feb-99																																						
MW-30	19-Apr-99																																						
MW-30	3-Dec-99																																						
MW-30	12-Apr-00																																						
MW-30	19-Dec-00																																						
MW-30	18-Apr-01																																						
MW-30	4-Dec-01																																						
MW-30	11-Apr-02																																						
MW-30	6-Nov-02																																						
MW-30	17-Apr-03																																						
MW-30	5-Nov-03																																						
MW-30	28-Apr-04																																						
MW-30	19-Nov-04																																		27.7				
MW-30	21-Apr-05																																						
MW-30	11-Nov-05																																						
MW-30	14-Apr-06																																						
MW-30	10-Nov-06																																						
MW-30	20-Apr-07																																						
MW-30	9-Nov-07																																						
MW-30	19-May-08									0.55J																													
MW-30	7-Nov-08									0.45J													0.21J																
MW-30	11-Mar-09									0.39J																													
MW-30	4-Dec-09	3.01J																																					
MW-30	12-May-10																																						
MW-30	26-Oct-10									0.52J																													
MW-30	18-Mar-11																																						
MW-30	1-Nov-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-31	1-May-98																																						
MW-31	17-Aug-98																																						
MW-31	9-Sep-98																																						
MW-31	7-Oct-98																																						
MW-31	8-Dec-98																																						
MW-31	11-Jan-99																																						
MW-31	8-Feb-99																																						
MW-31	19-Apr-99																																						
MW-31	3-Dec-99																																						
MW-31	13-Apr-00									13																													
MW-31	19-Dec-00									25																													
MW-31	17-Apr-01									21																													
MW-31	6-Dec-01									54																													
MW-31	11-Apr-02									37																													
MW-31	6-Nov-02									43																													
MW-31	18-Apr-03									32																													
MW-31	5-Nov-03									48																													
MW-31	28-Apr-04									32.5																													
MW-31	18-Nov-04									26.5																													
MW-31	21-Apr-05									27.2																													
MW-31	11-Nov-05									38.2																													
MW-31	14-Apr-06									36.6																													
MW-31	9-Nov-06									26.2																													
MW-31	20-Apr-07									23.4																													
MW-31	9-Nov-07									9.9																													
MW-31	19-May-08									14.9																													
MW-31	6-Nov-08									10.1													0.15J																
MW-31	11-Mar-09									10.1																													
MW-31	4-Dec-09									4.62J																													
MW-31	12-May-10									4.9J																													
MW-31	26-Oct-10									2.6J																													
MW-31	17-Mar-11									2.5J																													
MW-31	1-Nov-11									2.1J																													

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-31d	1-May-98																																						
MW-31d	17-Aug-98																																						
MW-31d	9-Sep-98																																						
MW-31d	7-Oct-98																																						
MW-31d	8-Dec-98																																		10				
MW-31d	11-Jan-99																																						
MW-31d	8-Feb-99																																						
MW-31d	19-Apr-99																																		10				
MW-31d	3-Dec-99																																		41				
MW-31d	13-Apr-00																																						
MW-31d	19-Dec-00																																						
MW-31d	18-Apr-01									7																													
MW-31d	6-Dec-01									14																													
MW-31d	11-Apr-02									23																													
MW-31d	6-Nov-02									31																													
MW-31d	18-Apr-03									26																													
MW-31d	5-Nov-03									34																													
MW-31d	28-Apr-04									38.3																													
MW-31d	19-Nov-04									23.8																													
MW-31d	21-Apr-05									31.9																													
MW-31d	11-Nov-05									34																													
MW-31d	14-Apr-06									33.1																													
MW-31d	9-Nov-06									37.7																													
MW-31d	20-Apr-07									37.5																									23				
MW-31d	9-Nov-07									31.5																													
MW-31d	19-May-08									36.6																													
MW-31d	6-Nov-08									33																													
MW-31d	10-Mar-09									30.2																													
MW-31d	2-Dec-09									20																													
MW-31d	11-May-10									31																													
MW-31d	25-Oct-10									22																													
MW-31d	16-Mar-11									28																													
MW-31d	31-Oct-11									23																													

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-32	1-May-98																																						
MW-32	18-Aug-98																																						
MW-32	9-Sep-98																																						
MW-32	6-Oct-98																																						
MW-32	7-Dec-98																																						
MW-32	11-Jan-99																																						
MW-32	8-Feb-99																																						
MW-32	19-Apr-99																																						
MW-32	3-Dec-99																																						
MW-32	13-Apr-00																																						
MW-32	19-Dec-00																																						
MW-32	17-Apr-01																																						
MW-32	4-Dec-01																																						
MW-32	11-Apr-02																																						
MW-32	6-Nov-02																																						
MW-32	18-Apr-03																																						
MW-32	4-Nov-03																																		11				
MW-32	28-Apr-04																																						
MW-32	18-Nov-04																																						
MW-32	21-Apr-05																																						
MW-32	11-Nov-05																																						
MW-32	14-Apr-06																																						
MW-32	9-Nov-06																																						
MW-32	20-Apr-07																																						
MW-32	9-Nov-07																																						
MW-32	19-May-08																																						
MW-32	6-Nov-08																						0.47J																
MW-32	11-Mar-09																																						
MW-32	4-Dec-09				*1.65J						*455											*3.23J																	
MW-32	12-May-10																																						
MW-32	26-Oct-10																																						
MW-32	17-Mar-11																																						
MW-32	1-Nov-11																																						

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
TB-1a	1-May-98														5.3													6.9	6.9										
TB-1a	18-Aug-98								20						39								22				7.5		9.8	7.6				23					
TB-1a	9-Sep-98								21						40								22				7.7		11	7.9				20					
TB-1a	7-Oct-98								17						35								16				8.2		11	7.1				13					
TB-1a (dup)	7-Oct-98								17						33								16				8.3		11	7.2				17					
TB-1a	9-Dec-98								14						23												5.3		8.2					11					
TB-1a	11-Jan-99								16						21												6.0		11	5.0				6					
TB-1a	8-Feb-99								15						18												7.0		10					8					
TB-1a	19-Apr-99								10						14												5.0		10					5					
TB-1a	3-Dec-99								11						19												6.0		10					9					
TB-1a	13-Apr-00								11						22												7.0		8	5.0				11					
TB-1a	20-Dec-00														13																								
TB-1a	17-Apr-01														11																								
TB-1a	3-Dec-01														7																								
TB-1a	12-Apr-02														8																								
TB-1a	5-Nov-02														9																								
TB-1a	17-Apr-03														30												7.0			6.0									
TB-1a	4-Nov-03									8					8																								
TB-1a	14-Apr-04									20.4																													
TB-1a	18-Nov-04									17.3																													
TB-1a	21-Apr-05									18.8																													
TB-1a	11-Nov-05									24.3																													
TB-1a	14-Apr-06									18.6																													
TB-1a	9-Nov-06									25.5																													
TB-1a	19-Apr-07									22.5																													
TB-1a	9-Nov-07									21.8																													
TB-1a	20-May-08			0.66J						11.5					0.21J								0.31J				0.17J												
TB-1a	11-Nov-08			0.54J						11.6					0.33J								1.1				0.16J												
TB-1a	11-Mar-09									5.6					0.33J												0.12J												
TB-1a	3-Dec-09									5.5					0.3J												0.16J												
TB-1a	12-May-10									1.3J																													
TB-1a	26-Oct-10									4.3J					0.46J												0.50J												
TB-1a	17-Mar-11									2.5J																													
TB-1a	1-Nov-11									1.6J																													
TB-1a deep	8-Jun-01																																						
TB-1a deep	6-Dec-01																																						
TB-1a deep	11-Apr-02																																						
TB-1a deep	6-Nov-02																																						
TB-1a deep	18-Apr-03									8																													
TB-1a deep	4-Nov-03																																		19				
TB-1a deep	28-Apr-04									22																													
TB-1a deep	18-Nov-04									17.9																													
TB-1a deep	21-Apr-05									25.6																													
TB-1a deep	11-Nov-05									30.6																													
TB-1a deep	14-Apr-06									29.1																													
TB-1a deep	10-Nov-06									35.6																													
TB-1a deep	20-Apr-07									32.4																													
TB-1a deep	9-Nov-07									26.2																													
TB-1a deep	19-May-08		0.77J							25.2													0.72J																
TB-1a deep	7-Nov-08									32.5													0.42J																
TB-1a deep	12-Mar-09									31.8																													
TB-1a deep	4-Dec-09									33.9																													
TB-1a deep	11-May-10									37																													
TB-1a deep	25-Oct-10									38																													
TB-1a deep	16-Mar-11									31																													
TB-1a deep	31-Oct-11									31																													

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-33	6-Aug-98																																						
MW-33	7-Dec-98																																						
MW-33	26-Apr-99																																						
MW-33	2-Dec-99																																						
MW-33	13-Apr-00																																						
MW-33	18-Apr-01																																						
MW-33	9-Apr-02																																						
MW-33	16-Apr-03																																						
MW-33	21-Apr-04																																						
MW-33	22-Apr-05																																						
MW-33	14-Apr-06																																						
MW-33	20-Apr-07																																						
MW-33	15-May-08																																						
MW-33	12-Mar-09																																						
MW-33	12-May-10																																						
MW-33	16-Mar-11																																						
MW-34	6-Aug-98																																						
MW-34	7-Dec-98																																						
MW-34	26-Apr-99																																						
MW-34	2-Dec-99																																						
MW-34	13-Apr-00																																						
MW-34	18-Apr-01																																						
MW-34	9-Apr-02																																						
MW-34	16-Apr-03																																						
MW-34	21-Apr-04																																						
MW-34	22-Apr-05																																						
MW-34	14-Apr-06														12.7			6.9																					
MW-34	20-Apr-07														13.8			6.2																					
MW-34	19-May-08		0.56J						1.74J	0.45J		0.95J		1.72J	15.3		0.23J	9.75					10.7				2.14		0.13J	3.07	0.56J			0.16J					
MW-34	12-Mar-09		0.47J						1.26J	0.37J		0.71J		1.72J	13.5		0.47J	9.34					12.7				1.71			2.67	0.68J			0.15J					
MW-34	12-May-10		0.64J						1.4J	0.70J		1.2		2.1J	16			8.7					6				1.7			2.9	0.96J								
MW-34	17-Mar-11											0.89J			10			11					11				2.2			3.4									
MW-34d	6-Aug-98																																		7.3				
MW-34d (dup)	6-Aug-98																																						
MW-34d	7-Dec-98																																						
MW-34d	26-Apr-99																																						
MW-34d	2-Dec-99																																						
MW-34d	13-Apr-00																																						
MW-34d	18-Apr-01																																						
MW-34d	9-Apr-02														5																								
MW-34d	16-Apr-03														11																								
MW-34d	21-Apr-04														6.8																								
MW-34d	22-Apr-05														5.7																								
MW-34d	14-Apr-06																																						
MW-34d	20-Apr-07														6.9																				35				
MW-34d	19-May-08									0.21J				0.36J	1.64J			1.07J					0.2J				0.32J			0.38J	0.19J								
MW-34d	12-Mar-09														0.64J			0.62J									0.51J			0.19J					1.02J				
MW-34d	11-May-10													0.41J	3.3J			1.7J												0.59J									
MW-34d	16-Mar-11														1.7J			1.6J					0.43J																

Table 3b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Benzene	Bromodichloromethane	Bromomethane	1,2-Dibromoethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	p-Dichlorobenzene	o-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Iodomethane	Methylene Chloride	MEK (2-Butanone)	Naphthalene	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	Vinyl Chloride	Total Xylenes	bis(2-ethylhexyl) Phthalate	Diethylphthalate	Di-n-Butylphthalate	Dimethylphthalate	3&4-Methylphenol
NC 2L Standard		6000	1	0.6	10	0.02	700	50	3,000	70	3	6	20	1,000	6	0.4	7	70	100	0.6	600	NE	5	4,000	6	70	0.7	600	200	3	2,000	0.005	0.03	500	3	6,000	700	NE	40
Solid Waste Section Limit		100	1	1	10	1	100	3	10	5	1	1	5	5	5	1	5	5	5	1	1	10	1	100	10	1	1	1	1	1	1	1	1	5	15	6,000	10	10	10
MW-35	6-Aug-98																																						
MW-35	7-Dec-98																																						
MW-35	26-Apr-99																																						
MW-35	2-Dec-99																																						
MW-35	13-Apr-00																																						
MW-35	18-Apr-01																																						
MW-35	9-Apr-02																																						
MW-35	16-Apr-03																																						
MW-35	21-Apr-04																																						
MW-35	22-Apr-05																																						
MW-35	14-Apr-06																																						
MW-35	20-Apr-07																																						
MW-35	19-May-08					0.55J				0.17J																	0.13J												
MW-35	10-Mar-09									0.15J				0.67J																									
MW-35	12-May-10													0.57J																									
MW-35	17-Mar-11																																						
MW-36	4-Dec-08		0.81J						0.77J	0.14J		1.46		2.25J	23.5		0.40J	7.6					0.77J				2.00			3.4	0.28J		0.84J				0.906J		
MW-36	10-Mar-09		0.86J						1.16J	0.13J		1.42		2.52J	23.4	0.36J	0.41J	7.9		0.3J			0.64J				1.62			3.22	0.38J		0.96J						
MW-36	4-Dec-09		0.68J		*1.78J				0.8J		*485	1.4		1.56J	18.6		0.33J	7.25		0.27J		*3.84J	0.46J				0.92J			2.29			0.94J						
MW-36	12-May-10		0.56J						0.45J			1.4		1.4J	17			6.5									0.86J			1.8			0.96J						
MW-36	26-Oct-10		0.45J									1.3		1.4J	14		0.42J	6.3									1.10			1.7			0.96J						
MW-36	17-Mar-11											1.1			9.1			6.3					0.47J							1.7			0.8J						
MW-36	1-Nov-11											0.86J			8.9			4.3J												1.1									
MW-36d	4-Dec-08		0.37J	0.24J						1.05J		0.28J		1.78J	10.9			3.18J					9.11				1.95	0.10J		1.5									
MW-36d	10-Mar-09		0.51J						0.74J	0.41J		0.39J		2.94J	12.4		0.28J	3.86J		0.12J			2.27				1.35			1.81	0.29J								
MW-36d	2-Dec-09		0.47J							0.4J		0.44J		1.71J	10.7		0.24J	4.2J					1.32				0.91J			1.64									
MW-36d	13-May-10		0.58J							0.50J		0.58J		2.5J	12			4.4J									1.2			1.6									
MW-36d (dup)	13-May-10		0.49J							0.51J		0.62J		2.4J	12			4.3J									1.4			1.6									
MW-36d	27-Oct-10		0.49J									0.53J		2.2J	11			5.0					0.58J							1.9									
MW-36d	18-Mar-11													1.4J	8.8			5.2					1				1.0			1.7									
MW-36d (dup)	18-Mar-11													1.2J	8.9			5.1					1.1				1.1			1.7									
MW-36d	2-Nov-11													1.4J	9.2			4.0J					0.89J				1.0			1.4									

Notes:
All units are in micrograms per liter (parts per billion)
- Concentration exceeds NC Groundwater Standards (2L)
- Indicates result below detection limits
NS - Not Sampled; NE - Standard Not Established; dup - Duplicate Sample
J - Indicates the analytical result is an estimated concentration between the Method Detection Limit and the Solid Waste Section Reporting Limit (SWSL)
B - Indicates that the amount detected in the method blank was greater than the Method Detection Limit
MW-27 was abandoned on November 24, 2008 in accordance with 15A NCAC 2C .0113
MW-36/36d installed November 2008
MW-24 was dry during the November 2008 sampling event
Monitoring wells MW-28, -28d, -33, -34, -34d, and -35 sampled yearly during the spring event
* - Solvent contamination in HCl-preserved bottles caused elevated levels of chloromethane, bromomethane, and iodomethane to appear in several analyses during the December 2009 sampling event

Table 3c
Detected Constituents - Pesticides, Herbicides, and PCB's
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC (Lindane)	Heptachlor	Aldrin	4,4'-DDT	DDD	Dieldrin	Endrin Aldehyde	Endosulfan I	Endrin	Dinoseb
NC 2L Standard		**0.006***	**0.019***	**0.019***	**0.03**	**0.008**	**0.002***	**0.1**	**0.1**	**0.002**	**2**	**40**	**2**	**7***
Solid Waste Section Limit		**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.1**	**0.1**	**0.075**	**0.1**	**0.1**	**0.1**	**1**
MW-11	18-Nov-04													
MW-11	21-Apr-05													
MW-11	11-Nov-05													
MW-11	14-Apr-06													
MW-11	10-Nov-06													
MW-11	20-Apr-07													
MW-11	8-Nov-07													
MW-11	15-May-08													
MW-11	11-Mar-09													
MW-11	12-May-10													
MW-11	17-Mar-11													
MW-11d	18-Nov-04													
MW-11d	21-Apr-05													
MW-11d	11-Nov-05													
MW-11d	14-Apr-06													
MW-11d	10-Nov-06													
MW-11d	20-Apr-07													
MW-11d	8-Nov-07													
MW-11d	15-May-08							0.0297J				0.0096J**		
MW-11d	16-Mar-09													
MW-11d	13-May-10													
MW-11d	18-Mar-11													
MW-5	18-Nov-04		**0.384**	**0.152**										
MW-5	21-Apr-05		**0.405**	**0.933**	0.098									
MW-5	11-Nov-05													
MW-5	14-Apr-06													
MW-5	9-Nov-06													
MW-5	19-Apr-07													
MW-5	8-Nov-07													
MW-5R	21-May-08							0.0609J				0.0752J**		
MW-5R	11-Mar-09													
MW-5R	12-May-10													
MW-5R	16-Mar-11													
MW-6	18-Nov-04	**0.235**		**0.706**						**0.281**			0.412	
MW-6	21-Apr-05	**0.182**		**0.48**										
MW-6	11-Nov-05		**0.31**		0.053									1.72
MW-6	14-Apr-06													
MW-6	9-Nov-06													
MW-6	19-Apr-07													
MW-6	8-Nov-07		**0.062**							**0.094**				
MW-6	20-May-08		0.0233J					0.0312J**						
MW-6	11-Mar-09	**0.0743J**	**0.0437JD**	**0.0611J**		**0.0292JD**	0.104JD	0.0466JD	0.018JD		0.0574JD	0.0322JD		
MW-6	12-May-10													
MW-6	16-Mar-11													
MW-6d	18-Nov-04													
MW-6d	21-Apr-05													
MW-6d	11-Nov-05													
MW-6d	11-Apr-06													
MW-6d	9-Nov-06													
MW-6d	20-Apr-07													
MW-6d	8-Nov-07													
MW-6d	20-May-08													
MW-7	18-Nov-04													
MW-7	21-Apr-05													1.21
MW-7	11-Nov-05													
MW-7	14-Apr-06													
MW-7	9-Nov-06													
MW-7	20-Apr-07													
MW-7	8-Nov-07													
MW-7	15-May-08											0.0929J**		

Table 3c
Detected Constituents - Pesticides, Herbicides, and PCB's
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC (Lindane)	Heptachlor	Aldrin	4,4'-DDT	DDD	Dieldrin	Endrin Aldehyde	Endosulfan I	Endrin	Dinoseb
NC 2L Standard		**0.006***	**0.019***	**0.019***	**0.03**	**0.008**	**0.002***	**0.1**	**0.1**	**0.002**	**2**	**40**	**2**	**7***
Solid Waste Section Limit		**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.1**	**0.1**	**0.075**	**0.1**	**0.1**	**0.1**	**1**
MW-8	18-Nov-04													
MW-8	21-Apr-05	**0.132**												
MW-8	11-Nov-05													
MW-8	14-Apr-06													
MW-8	9-Nov-06													
MW-8	20-Apr-07													
MW-8	8-Nov-07													
MW-8	20-May-08													
MW-8d	18-Nov-04													
MW-8d	21-Apr-05													
MW-8d	11-Nov-05													
MW-8d	14-Apr-06													
MW-8d	10-Nov-06													
MW-8d	20-Apr-07													
MW-8d	8-Nov-07													
MW-8d	15-May-08											0.0254J**		
MW-9	18-Nov-04			**0.138**	0.051									1.8
MW-9	21-Apr-05			**0.896**	**0.622**									
MW-9	11-Nov-05													1.4
MW-9	14-Apr-06				0.143									
MW-9	9-Nov-06				**0.786**									
MW-9	19-Apr-07													
MW-9	8-Nov-07			**0.06**										
MW-9	20-May-08			0.0132J								0.0368J**		
MW-9 (dup)	20-May-08													
MW-9	11-Mar-09													
MW-9 (dup)	11-Mar-09													
MW-9	12-May-10													
MW-9	17-Mar-11													
MW-10	18-Nov-04													
MW-10	21-Apr-05													
MW-10	11-Nov-05													
MW-10	14-Apr-06													
MW-10	9-Nov-06													
MW-10	19-Apr-07													
MW-10	8-Nov-07													
MW-10	20-May-08													
MW-10d	18-Nov-04													
MW-10d	21-Apr-05													
MW-10d	11-Nov-05													1.72
MW-10d	14-Apr-06													
MW-10d	10-Nov-06													
MW-10d	20-Apr-07													
MW-10d	8-Nov-07													
MW-10d	20-May-08											0.0234J**		
MW-22	19-Nov-04													
MW-22	22-Apr-06													
MW-22	11-Nov-05													
MW-22	14-Apr-07													
MW-22	9-Nov-06													
MW-22	20-Apr-07													
MW-22	8-Nov-07													
MW-22	15-May-08											0.124		
MW-22	12-Mar-09													
MW-22	12-May-10													
MW-22	18-Mar-11													
MW-23	19-Nov-04													
MW-23	21-Apr-05													
MW-23	11-Nov-05													
MW-23	14-Apr-06													
MW-23	9-Nov-06													
MW-23	20 ap 07													
MW-23	8-Nov-07													
MW-23	15-May-08													

Table 3c
Detected Constituents - Pesticides, Herbicides, and PCB's
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC (Lindane)	Heptachlor	Aldrin	4,4'-DDT	DDD	Dieldrin	Endrin Aldehyde	Endosulfan I	Endrin	Dinoseb
NC 2L Standard		**0.006***	**0.019***	**0.019***	**0.03**	**0.008**	**0.002***	**0.1**	**0.1**	**0.002**	**2**	**40**	**2**	**7***
Solid Waste Section Limit		**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.1**	**0.1**	**0.075**	**0.1**	**0.1**	**0.1**	**1**
MW-23d	19-Nov-04													
MW-23d	21-Apr-05													
MW-23d	11-Nov-05													
MW-23d	14-Apr-06													
MW-23d	9-Nov-06													
MW-23d	20-Apr-07													
MW-23d	8-Nov-07													
MW-23d	15-May-08											0.0256J**		
MW-24	18-Nov-04													
MW-24	21-Apr-05													
MW-24	11-Nov-05													
MW-24	14-Apr-06													
MW-24	9-Nov-06													
MW-24	19-Apr-07													
MW-24	8-Nov-07													
MW-24	20-May-08											0.017J**		
MW-28	22-Apr-05													
MW-28	14-Apr-06													
MW-28	20-Apr-07													
MW-28	19-May-08			0.0209J								0.0412J**		
MW-28	12-Mar-09													
MW-28	13-May-10													
MW-28	18-Mar-11													
MW-28d	22-Apr-05													
MW-28d	14-Apr-06													
MW-28d	20-Apr-07													
MW-28d	19-May-08											0.0308J**		
MW-29d	19-Nov-04													
MW-29d	21-Apr-05													
MW-29d	11-Nov-05													
MW-29d	14-Apr-06													
MW-29d	10-Nov-06													
MW-29d	20-Apr-07													
MW-29d	9-Nov-07													
MW-29d	19-May-08			0.0309J								0.0464J**		
MW-29d	10-Mar-09													
MW-29d	13-May-10													
MW-29d	18-Mar-11													
MW-30	19-Nov-04													
MW-30	21-Apr-05													
MW-30	11-Nov-05													
MW-30	14-Apr-06													
MW-30	10-Nov-06													
MW-30	20-Apr-07													
MW-30	9-Nov-07													
MW-30	19-May-08			**0.0632**								0.155		
MW-30	11-Mar-09													
MW-30	12-May-10													
MW-30	18-Mar-11													
MW-31	18-Nov-04													
MW-31	21-Apr-05													
MW-31	11-Nov-05													
MW-31	14-Apr-06													
MW-31	9-Nov-06													
MW-31	20-Apr-07													
MW-31	9-Nov-07													
MW-31	19-May-08			0.0111J										
MW-31	11-Mar-09													
MW-31	12-May-10													
MW-31	17-Mar-11													

Table 3c
Detected Constituents - Pesticides, Herbicides, and PCB's
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC (Lindane)	Heptachlor	Aldrin	4,4'-DDT	DDD	Dieldrin	Endrin Aldehyde	Endosulfan I	Endrin	Dinoseb
NC 2L Standard		**0.006***	**0.019***	**0.019***	**0.03**	**0.008**	**0.002***	**0.1**	**0.1**	**0.002**	**2**	**40**	**2**	**7***
Solid Waste Section Limit		**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.1**	**0.1**	**0.075**	**0.1**	**0.1**	**0.1**	**1**
MW-31d	19-Nov-04													
MW-31d	21-Apr-05													
MW-31d	11-Nov-05													
MW-31d	14-Apr-06													
MW-31d	9-Nov-06													
MW-31d	20-Apr-07													
MW-31d	9-Nov-07													
MW-31d	19-May-08											0.0375J**		
MW-32	18-Nov-04													
MW-32	21-Apr-05													
MW-32	11-Nov-05													
MW-32	14-Apr-06													
MW-32	9-Nov-06													
MW-32	20-Apr-07													
MW-32	9-Nov-07													
MW-32	19-May-08											0.0492J**		
TB-1a	18-Nov-04													
TB-1a	21-Apr-05													
TB-1a	11-Nov-05													
TB-1a	14-Apr-06													
TB-1a	9-Nov-06													
TB-1a	19-Apr-07													
TB-1a	9-Nov-07													
TB-1a	20-May-08	0.0183J										0.0828J**		
TB-1a	11-Mar-09													
TB-1a	12-May-10													
TB-1a	17-Mar-11													
TB-1a deep	11-Nov-05													
TB-1a deep	14-Apr-06													
TB-1a deep	10-Nov-06													
TB-1a deep	20-Apr-07													
TB-1a deep	9-Nov-07													
TB-1a deep	19-May-08											0.0595J**		
MW-33	22-Apr-05													
MW-33	14-Apr-06													
MW-33	20-Apr-07													
MW-33	15-May-08			0.00175J								0.0318J**		
MW-33	12-Mar-09													
MW-33	12-May-10													
MW-33	16-Mar-11													
MW-34	22-Apr-05													
MW-34	14-Apr-06													
MW-34	20-Apr-07													
MW-34	19-May-08													
MW-34d	22-Apr-05													
MW-34d	14-Apr-06													
MW-34d	20-Apr-07													
MW-34d	19-May-08											0.0145J**		
MW-35	22-Apr-05													
MW-35	14-Apr-06													
MW-35	20-Apr-07													
MW-35	19-May-08													

Table 3c
Detected Constituents - Pesticides, Herbicides, and PCB's
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC (Lindane)	Heptachlor	Aldrin	4,4'-DDT	DDD	Dieldrin	Endrin Aldehyde	Endosulfan I	Endrin	Dinoseb
NC 2L Standard		**0.006***	**0.019***	**0.019***	**0.03**	**0.008**	**0.002***	**0.1**	**0.1**	**0.002**	**2**	**40**	**2**	**7***
Solid Waste Section Limit		**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.1**	**0.1**	**0.075**	**0.1**	**0.1**	**0.1**	**1**
MW-36	4-Dec-08		**0.059**	0.0102J	0.162									
MW-36	10-Mar-09				0.186D									
MW-36	12-May-10													
MW-36	17-Mar-11													
MW-36d	4-Dec-08				0.0366J									
MW-36d	10-Mar-09			0.0139J	0.0259JD			0.075J						
MW-36d	13-May-10													
MW-36d (dup)	13-May-10													
MW-36d	18-Mar-11													
MW-36d (dup)	18-Mar-11													

Notes:
All units are in micrograms per liter (parts per billion)
- Concentration exceeds NC Groundwater Standards (2L)
- Indicates result below detection limits
* - Groundwater Protection Standard
** - Endosulfan I was also detected in the background well MW-11d and batch and equipment blanks at similar concentrations
NE - Standard Not Established
J - Indicates the analytical result is an estimated concentration between the Method Detection Limit and the Solid Waste Section Reporting Limits (SWSL)
D - Detected but the relative percent difference is greater than 40% between results in the dual column method
MW-36/36d installed November 2008
Monitoring wells MW-28, -28d, -33, -34, -34d, and -35 sampled yearly during the spring event

Table 3d
Detected Surface Water Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
NC 2B Standard		**10***	**1,000**	**6.5**	**2**	**50**	**NE**	**7****	**25**	**88**	**5**	**0.06****	**NE**	**NE**	**50****
SWSL		**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**50**	**10**	**10**	**5.5**	**25**	**10**
SW-2	13-Jun-95														
SW-2	31-Oct-95				**2**										
SW-2	28-Nov-96		25				2								21
SW-2	21-Apr-97		29												
SW-2	5-Nov-97														
SW-2	11-May-98														
SW-2	24-Nov-98														
SW-2	14-Apr-99														
SW-2	9-Apr-02														
SW-2	16-Apr-03														
SW-2	29-Oct-03														
SW-2	8-Apr-04														
SW-2	18-Nov-04				1										
SW-2	21-Apr-05														
SW-2	11-Nov-05														
SW-2	13-Apr-06														
SW-2	9-Nov-06														
SW-2	20-Apr-07														
SW-2	7-Nov-07														
SW-2	21-May-08		28.9J			1.53J		5.97J							5.81J
SW-2	7-Nov-08		33.5JB	3.10B		4.28JB		**7.72JB**	3.62JB			**8.20JB**		15.1JB	4.51J
SW-2	16-Mar-09		52.8JB	**9.06B**		4.73JB		**8.54JB**	3.61JB			**2.01JB**	5.89	10.4JB	12.5
SW-2	2-Dec-09		16.7J	0.46J				**7.65JB**						8.31JB	7.57JB
SW-2	13-May-10		33.8J			1.05J		1.62J							4.98J
SW-2	26-Oct-10		27.2J					3.32J						2.59J	4.67J
SW-2	17-Mar-11		41J					1.72J	2.27J				0.194J		
SW-2	1-Nov-11		77.1J			9.49J	5.46J	**14.1B**	4.12J	5.20JB		**2.35J**		22.0J	25.7
SW-3	13-Jun-95														
SW-3	31-Oct-95														
SW-3	27-Nov-96		33				2								32
SW-3	21-Apr-97		19												
SW-3	1-Nov-97														**56**
SW-3	11-May-98														
SW-3	24-Nov-98														
SW-3	14-Apr-99														
SW-3	30-Nov-99														
SW-3	12-Apr-00														
SW-3	15-Dec-00														
SW-3	16-Apr-01														
SW-3	29-Nov-01														
SW-3	9-Apr-02														
SW-3	16-Apr-03														
SW-3	29-Oct-03					11.1									
SW-3	8-Apr-04														
SW-3	18-Nov-04														
SW-3	21-Apr-05														
SW-3	11-Nov-05														
SW-3	13-Apr-06														
SW-3	9-Nov-06														
SW-3	20-Apr-07														
SW-3	7-Nov-07				1										13
SW-3	19-May-08		28.5J			3.21J		6.36J				**4.09J**			
SW-3	6-Nov-08		40.8JB			3.41JB		5.94JB	8.95JB			**9.04JB**		6.43JB	4.79J
SW-3	16-Mar-09	3.86J	47.6JB	3.16B		5.02JB		**7.72JB**	5.76JB	5.09J		**1.89JB**	5.97	12.5JB	7.17J
SW-3	2-Dec-09		32.9J	0.49J		3.65J	2.65J	**12.1B**						14.9JB	14.3B
SW-3	11-May-10		28.2J											1.60J	4.62J
SW-3	26-Oct-10		17.6J			1.03J		4.08J						3.41J	4.15J
SW-3	17-Mar-11		31.7J						1.97J				0.231J	1.86J	
SW-3	1-Nov-11		33.4J			2.11J		5.21JB		2.22JB				4.06J	6.46J

Table 3d
Detected Surface Water Constituents - Metals
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
NC 2B Standard		**10***	**1,000**	**6.5**	**2**	**50**	**NE**	**7****	**25**	**88**	**5**	**0.06****	**NE**	**NE**	**50****
SWSL		**10**	**100**	**1**	**1**	**10**	**10**	**10**	**10**	**50**	**10**	**10**	**5.5**	**25**	**10**
SW-7	7-Nov-08		50.8JB			16.0B	10.7	**20.3B**	9.63JB			**9.62JB**		19.8JB	6.33J
SW-7	16-Mar-09	3.45J	45.5JB	5.37B		4.51JB		**7.4JB**	9.39JB			**2.04JB**		14.8JB	7.09J
SW-7	2-Dec-09		21.1J	0.05J		4.8J		**7.02JB**						8.72JB	8.19JB
SW-7	13-May-10		25.0J											1.44J	
SW-7	26-Oct-10		21.6J			1.71J		4.07J						3.77J	4.95J
SW-7	18-Mar-11		30.9J								0.976J		0.188J		
SW-7	1-Nov-11		26.3J			1.19J		3.78JB		1.99JB					
SW-8	7-Nov-08		26.7JB			3.14JB		**7.10JB**				**8.56JB**		7.92JB	
SW-8	16-Mar-09		44.8JB	6.11B		5.02JB		**7.51JB**	8.08JB			**1.56JB**		10.6JB	10.2
SW-8	2-Dec-09		28.1J	0.5J		2.38J		**8.11JB**						11.8JB	20.8B
SW-8	11-May-10		21.6J												
SW-8	26-Oct-10		21.6J					3.18J						3.49J	
SW-8	18-Mar-11		28J								0.947J		0.128J		
SW-8	1-Nov-11		24.8J			1.10J		5.18JB							

Notes:
All units are in micrograms per liter (parts per billion)
- Concentration exceeds NC 2B Surface Water Standards for Class C Waters
- Indicates result below detection limits
* - Human Health Standard
** - Action Level Standard
NE - Standard Not Established
J - Indicates the analytical result is an estimated concentration between the Method Detection Limit and the Solid Waste Section Reporting Limit (SWSL)
B - Indicates that the amount detected in the method blank was greater than the Method Detection Limit

Table 3e
Detected Surface Water Constituents - Volatile Organic Compounds
November 2011 Semi-Annula Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	Acetone	Bromodichloromethane	Bromoform	2-Butanone (MEK)	Carbon Disulfide	Chloroform	Chloromethane	Dibromochloromethane	Cis 1,2-Dichloroethene	1,1-Dichloroethane	Methylene Chloride	Tetrachloroethene	Toluene	Trichlorofluoromethane
NC 2B Standard		NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	3.3*	11	NE
SWSL		100	1	3	100	1000	5	1	1	5	5	1	1	1	1
SW-2	18-Nov-04														
SW-2	21-Apr-05														
SW-2	11-Nov-05														
SW-2	14-Apr-06														
SW-2	9-Nov-06														
SW-2	19-Apr-07														
SW-2	9-Nov-07						0.2J	0.3J							
SW-2	21-May-08						0.13J								
SW-2	7-Nov-08						0.13J					0.21J			
SW-2	16-Mar-09														
SW-2	2-Dec-09														
SW-2	13-May-10														
SW-2	26-Oct-10														
SW-2	17-Mar-11														
SW-2	1-Nov-11														
SW-3	18-Nov-04														
SW-3	21-Apr-05														
SW-3	11-Nov-05														
SW-3	14-Apr-06														
SW-3	9-Nov-06														
SW-3	19-Apr-07														
SW-3	9-Nov-07	1.3J			0.9J			0.3J							
SW-3	19-May-08														
SW-3	6-Nov-08											0.25J			
SW-3	16-Mar-09														
SW-3	2-Dec-09	3.66J													
SW-3	11-May-10														
SW-3	26-Oct-10														
SW-3	17-Mar-11														
SW-3	1-Nov-11														
SW-7	7-Nov-08									0.20J	0.72J				
SW-7	16-Mar-09									0.070J	0.29J				
SW-7	2-Dec-09														
SW-7	13-May-10										0.61J				
SW-7	26-Oct-10														
SW-7	18-Mar-11										0.52J				
SW-7	1-Nov-11														
SW-8	7-Nov-08										0.12J	0.20J			
SW-8	16-Mar-08														
SW-8	2-Dec-09														
SW-8	11-May-10														
SW-8	26-Oct-10														
SW-8	18-Mar-11														
SW-8	1-Nov-11														

Notes:
All units are in micrograms per liter (parts per billion)
- Concentration exceeds NC 2B Surface Water Standards for Class C Water
- Indicates result below detection limits
* - Human Health Standard
NE - Standard Not Established
J - Indicates the analytical result is an estimated concentration between the Method Detection Limit and the Solid Waste Section Reporting Limit (SWSL)

Table 4
Constiuents Exceeding NC2L Standards
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

WELL	NOVEMBER 2011 PARAMETERS EXCEEDING NC2L STANDARD
MW-11	**Vanadium***
MW-11d	**Vanadium***
MW-5R	**Cobalt***
MW-6	Cobalt*, Benzene
MW-6d	**Antimony*, Cobalt*, Vanadium***
MW-7	Chromium, Cobalt*, **Vanadium*,** Benzene, Vinyl Chloride
MW-8	**Vanadium***
MW-8d	**Vanadium***
MW-9	Chromium, **Cobalt*, Vanadium***, Benzene, 1,1-Dichloroethane, Vinyl Chloride
MW-10	**Cobalt***, Benzene, Tetrachloroethene, Vinyl Chloride
MW-10d	None
MW-22	Cadmium, Cobalt*, **Vanadium***
MW-23	**Vanadium***
MW-23d	**Vanadium***
MW-24	**Vanadium***
MW-27	ABANDONED
MW-28	NOT SAMPLED
MW-28d	NOT SAMPLED
MW-29d	**Cobalt*, Vanadium***
MW-30	Chromium, **Cobalt***, Vanadium*
MW-31	Chromium, **Cobalt***, Vanadium*
MW-31d	**Antimony*,** Chromium, **Vanadium***
MW-32	**Cobalt*, Vanadium***
TB-1a	Cadmium, Chromium, Cobalt*, Vanadium*
TB-1a deep	Chromium, **Vanadium***
MW-33	NOT SAMPLED
MW-34	NOT SAMPLED
MW-34d	NOT SAMPLED
MW-35	NOT SAMPLED
MW-36	Chromium, **Cobalt*, Vanadium***, 1,1-Dichloroethenane
MW-36d	Chromium, **Vanadium***, 1,1-Dichloroethane, Tetrachloroethene

Notes:
* - Groundwater Protection Standard
Bold - Indicates a J value detection in which the analytical result is an estimated concentration between the Method Detection Limit and the Solid Waste Section Limit (SWSL)
MW-27 was abandoned on November 24, 2008 in accordance with 15A NCAC 2C .0113
MW-28, -28d, -33, -34, 34d, and -35 are sampled semi-annually during the spring sampling event

Table 5
Geochemical Data
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	ORP (mV)	pH	Dissolved Oxygen	BOD	COD	Methane (ug/l)	Ethane (ug/l)	Ethene (ug/l)	Chloride	Nitrate	Total Organic Carbon	Alkalinity (CaCO3 - Lab)	Alkalinity (CaCO3 - Field)	Sulfate (Lab)	Sulfate (Field)	Sulfide (Lab)	Free Chlorine	Carbon Dioxide	Ferrous Iron	Acetic Acid	Butyric Acid	Lactic Acid	Propionic Acid	Pyruvic Acid	Dissolved Hydrogen (nM)
MW-11	8-Dec-98	156.2	5.57	6.03						3.5	0.6	2.1	21	40				0.17	50	0.02						0.02
MW-11	18-Dec-00	742.0	5.69																							
MW-11	18-Apr-01		6.80																							
MW-11	27-Nov-01		5.48																							
MW-11	5-Apr-02		6.19																							
MW-11	5-Nov-02		6.14																							
MW-11	15-Apr-03		6.36																							
MW-11	29-Oct-03		6.47																							
MW-11	21-Apr-04		5.31																							
MW-11	15-May-08	135.8	5.53	6.71																						
MW-11	10-Nov-08	167.0	5.74	6.71	<2	6	<7.2	<20	<20	3.67	0.794	1.42	34		<0.3		<0.01		26	<0.2	<1	<1	<25	<1	<10	
MW-11	11-Mar-09	102.5	5.34	7.16	<2	<25	<7.2	<20	<20	3.38	0.719	0.543	32.2		<0.3		<0.05		158	0.21	<1	<1	<25	<1	<10	
MW-11	3-Dec-09	246.0	5.79	6.38	2.00	92	<7.2	<20	<20	2.92	0.662	0.343J	22.5		0.381		<0.05		53	<0.2	<1	<1	<25	<1	<10	
MW-11	12-May-10	154.2	5.85	5.46	<2	23	4	<2	<2	4.20J	0.089J	2.2	27		3.80J		<0.1		83.1	0.12	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-11	26-Oct-10	65.4	5.90	6.44	<2	18	10.3	<2	<2	4.10J	0.032J	1.3	37		2.10J		<0.1		99.9	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-11	17-Mar-11	211.2	5.21	8.02	<2	17	0.52J	<2	<2	5B	0.6J	0.53J	32		2.1J		<0.1		67.6	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-11	1-Nov-11	161.6	5.62	5.89	3.20	<10	<1	<2	<3	4.1JB	0.71J	0.35J	25		2.2J		<0.1		164	<0.05	0.8	<0.07	0.077J	0.16	<0.07	
MW-11d	8-Dec-98	123.0	6.03	4.68						3.0	0.58	0.64	14	60				0.02	30							
MW-11d	18-Dec-00	154.0	5.26																							
MW-11d	18-Apr-01		6.91																							
MW-11d	27-Nov-01		5.21																							
MW-11d	5-Apr-02		6.97																							
MW-11d	5-Nov-02		6.26																							
MW-11d	15-Apr-03		6.98																							
MW-11d	29-Oct-03		6.87																							
MW-11d	21-Apr-04		5.79																							
MW-11d	15-May-08	87.2	5.95	5.02																						
MW-11d	16-Mar-09	173.6	5.76	5.85																						

Table 5
Geochemical Data
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	ORP (mV)	pH	Dissolved Oxygen	BOD	COD	Methane (ug/l)	Ethane (ug/l)	Ethene (ug/l)	Chloride	Nitrate	Total Organic Carbon	Alkalinity (CaCO3 - Lab)	Alkalinity (CaCO3 - Field)	Sulfate (Lab)	Sulfate (Field)	Sulfide (Lab)	Free Chlorine	Carbon Dioxide	Ferrous Iron	Acetic Acid	Butyric Acid	Lactic Acid	Propionic Acid	Pyruvic Acid	Dissolved Hydrogen (nM)
MW-5	3-Dec-98		5.70							5.6																
MW-5	20-Dec-00	38.0	5.40				4,500			13.4	0.07	2.7							141							
MW-5	16-Apr-01	85.4	5.20							8.5		8.8			6.8				141	1.07						1.07
MW-5	3-Dec-01	102.8	5.68				1,600			5.2					1.7				79.2							
MW-5	12-Apr-02	42.8	5.54				2,400			3.3					4.1				44	3.7						3.7
MW-5	5-Nov-02	64.6	5.72				1,500			8.7	0.34	1.2			4.7				244							
MW-5	17-Apr-03	-138.4	6.08	0.79			6,600			13		13.7			4.1				9							
MW-5	4-Nov-03	-142.0	5.60	0.14			3,200			19		1474							2055	18.5						18.5
MW-5R	14-Apr-04	-35.4	6.30	1.92			4,040			8.19		13.8			0.444		0.08		286							
MW-5R	21-May-08	94.8	6.02	0.14	<2	9	709	<100	<100	3.92	0.576	11.1	280		13.3		<0.01		264	<0.2	<1	<1	<25	<1	<10	1.1
MW-5R	10-Nov-08	113.0	6.07	0.31	<2	10	340	<20	<20	4.66	1.25	1.95	240		6.42		<0.01		211	<0.2	<1	<1	<25	<1	<10	1.6
MW-5R	11-Mar-09	61.3	5.73	0.31	<2	<25	<7.2	<20	<20	1.6	11.9	1.23	113		6.61		<0.05		141	<0.2	<1	<1	<25	<1	<10	2.1
MW-5R	3-Dec-09	272.4	5.78	0.99	<2	16	<7.2	<20	<20	1.34	12.6	2.26	61.9		7.29		<0.05		106	<0.2	<1	<1	<25	<1	<10	2.7
MW-5R	12-May-10	76.2	6.42	1.82	<2	<10	1	<2	<2	4.80J	0.54J	2.6	150		9.70J		<0.1		169	0.039J	<0.5	<0.5	<0.5	<0.5	<0.5	2.6
MW-5R	25-Oct-10	-64.3	6.34	1.05	<2	3.1J	9.72	<2	<2	3.90J	0.075J	0.93J	300		8.60J		<0.01		206	0.097	<0.5	<0.5	<0.5	<0.5	<0.5	4.2
MW-5R	16-Mar-11	141.9	5.94	1.89	<2	<10	1.60	<2	<2	3.8JB	0.53J	0.92J	250D		8.3J		<0.1		164	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	2.7
MW-5R	31-Oct-11	156.8	5.71	0.75	<2	<10	3.88	<2	<3	2.7JB	12.0	1.4	110D		3.9J		<0.1		335 D	0.140	0.51	<0.07	0.11J	<0.07	<0.07	1.9
MW-6	3-Dec-98		5.71							6.8																
MW-6	19-Dec-00	156.0	5.54				669			9.12	0.05	5.9							57							
MW-6	16-Apr-01	96.5	5.05				450			7.5		7.7			0.66				47							
MW-6	3-Dec-01	136.3	5.88				470			6.4					0.34				30.8							
MW-6	12-Apr-02	173.6	5.47				800			7.3					0.46				35							
MW-6	5-Nov-02	73.2	5.58				1,500			11	0.36	2.1			0.74				83							
MW-6	17-Apr-03	234.4	5.79	0.59			2,400			12	0.48	10.4			0.47				9							
MW-6	4-Nov-03	41.0	4.80	0.25			640			110		8.5			1.2				185							
MW-6	14-Apr-04	316.4	5.76	1.70			1,450			190		16.6			2.2				330							
MW-6	20-May-08	115.0	5.94	2.41	<4	78	2,740	<400	<400	185	0.19J	24.4	474		12		<0.01		466	0.22	<1	<1	<25	<1	<10	1.1
MW-6	11-Nov-08	84.0	6.14	1.36	2	106	1,190	<200	<200	231	<0.3	30.2	750		2.51J		<0.01		541	0.59	<1	<1	<25	<1	<10	1.9
MW-6	11-Mar-09	59.1	5.81	0.46	3	86	1,810	<200	<200	166	0.155J	22.3	476		8.4		<0.05		387	1.16	<1	<1	<25	<1	<10	3.9
MW-6	3-Dec-09	90.1	6.23	1.44	2	72	1,560	<200	<200	175	<0.3	19.4	507		8.66		<0.05		326	2.12	<1	<1	<25	<1	<10	2.3
MW-6	12-May-10	91.2	6.24	1.87	<2	130	918	<2	<2	210	<0.1	30	610		15J		<0.1		543	3.75	<0.5	<0.5	<0.5	<0.5	<0.5	3.3
MW-6	26-Oct-10	-110.9	6.50	2.36	<2	120	800	<2	<2	210	0.23J	26	930		13J		<0.1		692	1.20	34	4.3	60	54	<0.5	4.3
MW-6	16-Mar-11	25.3	5.89	2.48	<2	75	899	<2	<2	140BD	0.029J	14	500D		6.3J		<0.1		349D	0.77	<0.5	<0.5	<0.5	18	<0.5	2.2
MW-6	1-Nov-11	10.6	6.09	1.34	<2	94	4,600	<2	<3	170BD	0.053J	22	600D		12J		<0.1		820D	1.50	<0.07	8.7	<0.14	34	<0.07	1.9

Table 5
Geochemical Data
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	ORP (mV)	pH	Dissolved Oxygen	BOD	COD	Methane (ug/l)	Ethane (ug/l)	Ethene (ug/l)	Chloride	Nitrate	Total Organic Carbon	Alkalinity (CaCO3 - Lab)	Alkalinity (CaCO3 - Field)	Sulfate (Lab)	Sulfate (Field)	Sulfide (Lab)	Free Chlorine	Carbon Dioxide	Ferrous Iron	Acetic Acid	Butyric Acid	Lactic Acid	Propionic Acid	Pyruvic Acid	Dissolved Hydrogen (nM)
MW-8	3-Dec-98		5.75							7.3																
MW-8	20-Dec-00	66.0	5.42							6.84	0.09	5.9							22							
MW-8	16-Apr-01	53.6	5.61				17			3.2	0.23	1.3			0.89		0.04		32							
MW-8	3-Dec-01	111.4	6.40							3					0.61		0.01		39.6							
MW-8	12-Apr-02	50.7	6.00				42			3.5					0.81				31							
MW-8	5-Nov-02	43.8	6.05				11			3.4	0.42	0.7			1.1		0.06		29							
MW-8	17-Apr-03	171.4	6.30	1.70						4	0.33	2.3			1.1				13							
MW-8	4-Nov-03	127.0	5.15	1.68			22			3.9		0.7			1				44							
MW-8	14-Apr-04	234.9	5.86	1.58			371			3.82		2.2			0.912				52.8							
MW-8	20-May-08	62.9	5.83	1.42	<2	<5	631	<20	<20	5.85	0.158J	0.469J	59		5.46		<0.01		97	<0.2	<1	<1	<25	<1	<10	1.1
MW-8	10-Nov-08	55.0	5.84	0.26	<2	5	654	<20	<20	6.29	0.211J	0.603	60		<0.3		<0.01		101	<0.2	<1	<1	<25	<1	<10	1.4
MW-8	11-Mar-09	27.1	5.65	0.31	<2	<25	264	<100	<100	6.27	0.119J	0.752	68.7		0.793		<0.05		88	0.78	<1	<1	<25	<1	<10	1.1
MW-8	3-Dec-09	82.5	6.11	1.28	<2	20	647	<200	<200	6.09	0.256	0.749	63.5		1.07		<0.05		*	0.88	<1	<1	<25	<1	<10	2.1
MW-8	12-May-10	88.2	6.14	1.09	<2	9.6J	497	<2	<2	7.9	0.66J	1.3	73		2.2J		<0.1		127	0.793	<0.5	<0.5	<0.5	<0.5	<0.5	3.0
MW-8	25-Oct-10	-72.2	5.84	1.01	<2	14	572	<2	<2	16	0.3J	0.57J	72		3.3J		<0.1		139	0.068	<0.5	<0.5	1.7	<0.5	<0.5	4.9
MW-8	16-Mar-11	208.4	5.49	1.28	<2	<10	600	<2	<2	9.5B	0.12J	<1	68		2.8J		<0.1		148	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	2.2
MW-8	31-Oct-11	138.1	5.61	0.65	<2	11	1,750	<2	<3	7.8B	0.12J	0.84J	68		2.5J		<0.1		273D	0.130	0.99	<0.07	<0.14	0.33	<0.07	1.7
MW-9	3-Dec-98		6.27							15																
MW-9	20-Dec-00	102.0	4.79				3,340			21.9	0.09	12.3							176							
MW-9	16-Apr-01	63.6	5.79				790			19	0.24	5.5			0.75				121	1.28						1.28
MW-9	3-Dec-01	21.1	6.41				2,700			24					0.38				123	2.5						2.5
MW-9	12-Apr-02	76.8	6.11				1,200			29					0.32				136	9.8						9.8
MW-9	5-Nov-02	38.6	6.16				470			24		5.7			0.66				236	1.67						1.67
MW-9	17-Apr-03	-106.2	6.39	0.25			1,900			36		30.3			0.42				44	6.3						6.3
MW-9	4-Nov-03	-110.0	5.76	0.14			1,800			53		14.2			0.46				312	1.48						1.48
MW-9	14-Apr-04	57.6	6.33	0.81			3,500			92.5		13.3			0.386				299.2	ND						ND
MW-9	20-May-08	-97.3	6.28	1.39	7	10	2,980	<400	<400	20.1	<0.3	3.12	254		0.58		<0.01		260	18.3	<1	<1	<25	<1	<10	18.3
MW-9	11-Nov-08	-37.0	6.18	2.45	7	27	1,910	<200	<200	18.9	<0.3	3.36	263		<0.3		<0.01		264	15.4	<1	<1	<25	<1	<10	
MW-9	11-Mar-09	-8.9	6.03	2.07	<2	46	1,730	<200	<200	20.1	<0.3	4.56	262		0.608		<0.05		233	17.6	<1	0.4J	<25	0.4J	<10	
MW-9	3-Dec-09	-7.3	6.38	1.52	<2	44	1,740	<200	<200	20.5	<0.3	2.97	233		4.31		<0.05		167	14.8	<1	<1	<25	<1	<10	
MW-9	12-May-10	37.6	6.19	2.20	<2	66	1,150	<2	1J	27	0.076J	8.4	200		2.20J		<0.1		307	16.5	<0.5	<0.5	<0.5	2.9	<0.5	
MW-9	26-Oct-10	-71.2	6.30	3.54	<2	53	1,330	<2	<2	21	0.053J	3.0	270		2.60J		<0.1		348	8.5	2.3	<0.5	<0.5	2.5	<0.5	
MW-9	17-Mar-11	2.4	5.78	2.29	3	68	438	2.27	<2	18B	0.1J	5.8	220D		2.7J		<0.1		231D	7.7	<0.5	<0.5	<0.5	1.8	<0.5	
MW-9	1-Nov-11	6.3	5.95	1.94	<2	53	1,080	<2	<3	15B	0.075J	4.4	210D		2.9J		<0.1		414D	1.3	0.86	<0.07	<0.14	1.5	<0.07	

Table 5
Geochemical Data
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	ORP (mV)	pH	Dissolved Oxygen	BOD	COD	Methane (ug/l)	Ethane (ug/l)	Ethene (ug/l)	Chloride	Nitrate	Total Organic Carbon	Alkalinity (CaCO3 - Lab)	Alkalinity (CaCO3 - Field)	Sulfate (Lab)	Sulfate (Field)	Sulfide (Lab)	Free Chlorine	Carbon Dioxide	Ferrous Iron	Acetic Acid	Butyric Acid	Lactic Acid	Propionic Acid	Pyruvic Acid	Dissolved Hydrogen (nM)
MW-10	3-Dec-98		5.85							6.8																
MW-10	20-Dec-00	76.0	5.27				372			10.6	1.5	3.7							26							
MW-10	17-Apr-01	80.6	5.24				320			5.4	2.2	5.3			1.2				101							
MW-10	3-Dec-01	146.3	5.88							4.2	1.6				3				35.2							
MW-10	12-Apr-02	97.9	5.58				300			4.9					1.7				35							
MW-10	5-Nov-02	74.3	5.54				770			5.4	2	1.8			2.9		0.03		216							
MW-10	17-Apr-03	239.8	5.11	0.44			2,400			5	1.4	9.2			0.82				13							
MW-10	4-Nov-03	90.0	4.90	0.16						6.6	1	1.7			0.66				145							
MW-10	14-Apr-04	349.0	5.83	0.52			341			7.3	1.3	7.8			0.78				123							
MW-10	20-May-08	-14.6	5.61	0.55	3	35	1,950	<200	<200	3.77	0.162J	1.12	42		0.617		0.01		229	0.48	<1	<1	<25	<1	<10	0.48
MW-10	11-Nov-08	130.0	5.50	2.76	8	30	5,890	<200	<200	3.71	<0.3	1.31	96		<0.3		<0.01		370	1.79	1.4	<1	<25	<1	<10	
MW-10	11-Mar-09	97.8	5.34	2.56	<2	<25	2,310	<200	<200	3.04	<0.3	3.07	105		0.649		<0.05		339	1.23	<1	<1	<25	0.3J	<10	
MW-10	3-Dec-09	146.2	6.09	2.17	3	28	3,110	<200	<200	2.69	<0.3	1.02	112		0.624		<0.05		286	0.95	<1	<1	<25	<1	<10	
MW-10	12-May-10	80.2	5.74	2.21	3.2	25	1,830	<2	<2	5.6	<0.1	5.5	140		1.70J		<0.1		407	2.84	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-10	25-Oct-10	-39.2	5.66	2.77	2.4	31	2,620	<2	<2	4.2J	<0.1	1.5	130		2.20J		<0.1		583	0.38	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-10	17-Mar-11	119.7	5.29	3.18	<2	<10	2,000	<2	<2	4.3JB	0.039J	2.7	130		2.4J		<0.1		399D	0.26	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-10	31-Oct-11	120.1	5.41	2.12	<2	15	9,630	<2	<3	3.6JB	<0.1	1.1	130		2.4J		<0.1		777D	0.47	0.99	<0.07	0.12J	0.22	<0.07	
MW-24	8-Dec-98	145.9	5.75	1.02						4.2		2.5	66	140		2		0.07	260	0.78						0.78
MW-24	20-Dec-00	67.0	5.61				4,410			8.25	0.08	2.5							101							
MW-24	16-Apr-01	92.5	5.20				2,500			4.2	0.28	5			0.59				121	1.18						1.18
MW-24	3-Dec-01	102.8	5.83				2,100			2.9									52.8	0.3						0.3
MW-24	12-Apr-02	16.9	5.59				1,800			1.5									92	0.6						0.6
MW-24	5-Nov-02	62.1	5.76				2,200			0.56		1.6			0.48		0.01		171	0.21						0.21
MW-24	17-Apr-03	9.5	5.79	0.50			88			3.6	0.33	4.4			0.35				33							
MW-24	4-Nov-03	-20	4.92	0.42			17			2.9		1.7			0.46				141							
MW-24	14-Apr-04	178.0	6.29	2.09			139			2.94		6.2			0.42				88							
MW-24	20-May-08	100.9	5.84	4.56	4	<5	<7.2	<20	<20	3.6	0.273J	0.421J	39		<0.3		0.03		75	2.72	<1	<1	<25	<1	<10	2.72

Table 5
Geochemical Data
November 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill

Monitor Well	Sample Date	ORP (mV)	pH	Dissolved Oxygen	BOD	COD	Methane (ug/l)	Ethane (ug/l)	Ethene (ug/l)	Chloride	Nitrate	Total Organic Carbon	Alkalinity (CaCO3 - Lab)	Alkalinity (CaCO3 - Field)	Sulfate (Lab)	Sulfate (Field)	Sulfide (Lab)	Free Chlorine	Carbon Dioxide	Ferrous Iron	Acetic Acid	Butyric Acid	Lactic Acid	Propionic Acid	Pyruvic Acid	Dissolved Hydrogen (nM)
TB-1a	9-Dec-98	193.8	5.98	0.64						4.1		0.54	95	120		2		0.05	500	0.15						0.15
TB-1a	20-Dec-00	63.0	5.52				2,470			6.6	0.09	3.3							62							
TB-1a	17-Apr-01	78.3	5.63				1,500			5.1	0.29	2.4			0.58		0.1		99							
TB-1a	3-Dec-01	111.2	6.01							3.1									52.8							
TB-1a	12-Apr-02	41.8	5.70				990			1.6									84							
TB-1a	5-Nov-02	58.0	5.83				400			4.2		0.7			0.47				138							
TB-1a	17-Apr-03	162.6	5.82	0.54			17			6.1	0.79	8.5			0.82		0.03		4							
TB-1a	4-Nov-03	1.0	5.04	0.16						7.5		1.6			0.46				213							
TB-1a	14-Apr-04	256.6	5.36	0.94						8.47		4.8			0.577				101.2							
TB-1a	20-May-08	-102.1	5.94	2.22	<2	<5	<7.2	<20	<20	14.9	0.356	0.864	42		11.6		<0.01		48	0.24	<1	<1	<25	<1	0.9J	0.24
TB-1a	11-Nov-08	65.0	6.11	4.08	<2	50	5.1J	<20	<20	15.1	0.338	1.13	42		4.08		<0.01		106	1.59	<1	<1	<25	<1	<10	
TB-1a	11-Mar-09	-43.6	5.91	1.98	<2	<25	<7.2	<20	<20	12.8	0.209J	1.05	53.4		10.5		<0.05		114	3.06	<1	<1	<25	<1	<10	
TB-1a	3-Dec-09	88.1	6.24	1.97	<2	20	<7.2	<20	<20	12.7	0.456	1.22	61.6		11.9		<0.05		88	4.7	<1	<1	<25	<1	<10	
MW-36	12-May-10	160.9	5.87	1.51	<2	36	3	<2	<2	8.1	2.30J	2.9	74		5.30J		<0.1		162	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-36	26-Oct-10	-17.9	5.94	4.01	<2	51	307	1.52J	<2	7.2	0.19J	1.3	78		4.90J		<0.1		175	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-36	17-Mar-11	99.4	5.45	2.36	<2	38	44	<2	<2	7.2B	0.67J	1.5	84		4.6J		<0.1		140	<0.25	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-36	1-Nov-11	129.6	5.66	1.96	<2	36	618	<2	<3	6.4B	0.51J	0.8J	62		4.4J		<0.1		242D	0.052	0.99	<0.07	<0.14	0.21	<0.07	

Notes:

MW-11 & MW-11d are background wells for the site

All units are in milligrams per liter (parts per million), unless otherwise noted.

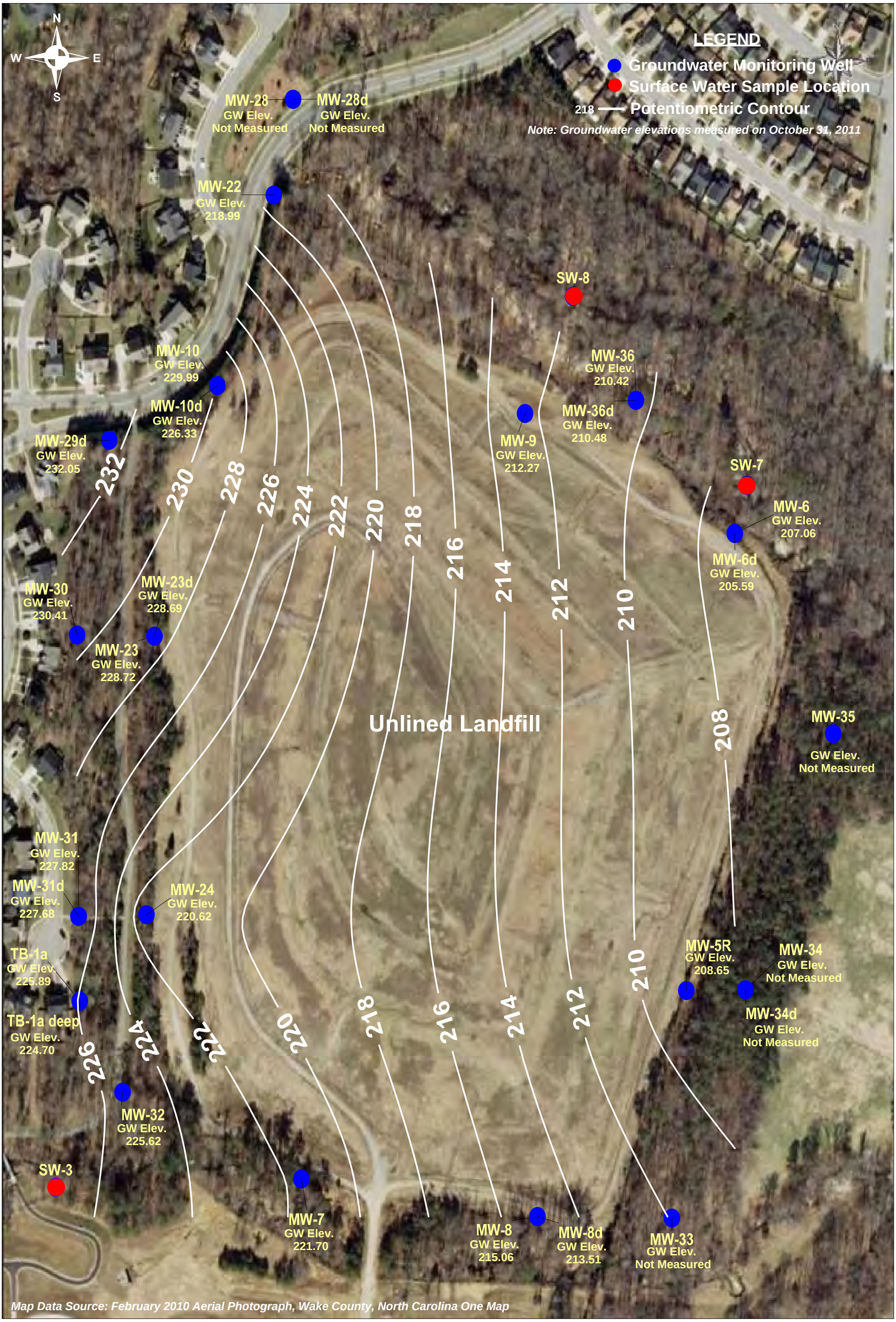
[ ] - Blank Cells Indicate No Data Collected

J - Indicates the analytical result is an estimated concentration between the Method Detection Limit and the Solid Waste Section Reporting Limit

B - Indicates that the amount detected in the method blank was greater than the Method Detection Limit

D - Analyzed at dilution.

* Carbon dioxide samples from MW-8 were not analyzed during the December 2009 sampling event due to laboratory oversight



CDM

Scale in Feet

83 0 166

Figure 1: Potentiometric Surface Map

October 2011 Semi-Annual Sampling Event
North Wake Unlined Landfill
Raleigh, North Carolina

Appendix A

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

Wednesday, November 23, 2011

CDM (CD004)

Attn: Aaron Weispfenning

5400 GLENWOOD AVE SUITE 300

RALEIGH, NC 27612-

RE: Laboratory Results for
Project Number: [none], Project Name/Desc: North Wake Unlined Landfill
ENCO Workorder: C113286

Dear Aaron Weispfenning,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, November 1, 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 199.

PROJECT NARRATIVE

Client: CDM (CD004)
Project: North Wake Unlined Landfill

Overview

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

Quality Control Samples

The BOD LCS (1K02015-BS1) associated with samples 9209-MW6, 9209-MW9 and 9209-MW36 apparently was not spiked at the time of it's preparation. The sample results are in line with historical data but should be considered minimum estimates. Due to method constraints, the sample analyses could not be repeated.

Quality Control Remarks

No Comments

Other Comments

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

Released By:
Environmental Conservation Laboratories, Inc.

Chuck Smith
Project Manager

www.encolabs.com

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 9209-MW5R | **Lab ID: C113286-01** | **Sampled: 10/31/11 15:15** | **Received: 11/01/11 13:22**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	11/28/11		11/07/11	13:26	11/8/2011 05:29
EPA 310.2	11/14/11		11/02/11	06:05	11/2/2011 08:49
EPA 353.2	11/02/11	15:15	11/02/11	07:33	11/2/2011 07:33
EPA 353.2	07/26/14		11/06/11	20:49	11/7/2011 13:33
EPA 6010C	04/28/12		11/03/11	09:29	11/7/2011 11:16
EPA 6020A	04/28/12		11/02/11	10:09	11/4/2011 11:07
EPA 7470A	11/28/11		11/14/11	06:35	11/14/2011 13:37
EPA 8260B	11/14/11		11/07/11	11:05	11/9/2011 07:58
RSK-175	11/07/11		11/03/11	10:04	11/3/2011 13:31
SM 5210B	11/02/11	15:15	11/01/11	17:23	11/1/2011 17:23
SM 5220D	11/28/11		11/04/11	11:42	11/4/2011 15:13
SM18 3500-Fe D	10/31/11	15:29	11/04/11	14:33	11/4/2011 14:45
SM18 4500-S D	11/07/11		11/07/11	11:49	11/7/2011 12:03
SM18 5310B	11/28/11		11/07/11	08:35	11/7/2011 15:03
VGC-13	11/14/11		11/04/11	11:39	11/4/2011 17:16

Client ID: 9209-MW5R | **Lab ID: C113286-01RE1** | **Sampled: 10/31/11 15:15** | **Received: 11/01/11 13:22**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 353.2	11/28/11		11/03/11	05:46	11/3/2011 12:21
RSK-175	11/07/11		11/03/11	10:04	11/3/2011 18:36

Client ID: 9209-MW6 | **Lab ID: C113286-02** | **Sampled: 11/01/11 08:30** | **Received: 11/01/11 13:22**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	11/29/11		11/07/11	13:26	11/8/2011 05:46
EPA 310.2	11/15/11		11/02/11	06:05	11/2/2011 08:50
EPA 353.2	11/03/11	08:30	11/02/11	07:34	11/2/2011 07:34
EPA 353.2	11/29/11		11/03/11	05:46	11/3/2011 11:10
EPA 353.2	07/27/14		11/06/11	20:49	11/7/2011 13:33
EPA 6010C	04/29/12		11/03/11	09:29	11/7/2011 11:41
EPA 6020A	04/29/12		11/02/11	10:09	11/4/2011 11:09
EPA 7470A	11/29/11		11/14/11	06:35	11/14/2011 14:40
EPA 8260B	11/15/11		11/07/11	11:05	11/9/2011 08:27
RSK-175	11/08/11		11/03/11	10:04	11/3/2011 13:47
SM 5210B	11/03/11	08:30	11/02/11	17:08	11/2/2011 17:08
SM 5220D	11/29/11		11/04/11	11:42	11/4/2011 15:13
SM18 3500-Fe D	11/01/11	08:44	11/04/11	14:33	11/4/2011 14:45
SM18 4500-S D	11/08/11		11/07/11	11:49	11/7/2011 12:03
SM18 5310B	11/29/11		11/07/11	08:35	11/7/2011 15:32
VGC-13	11/15/11		11/04/11	11:39	11/4/2011 17:39

Client ID: 9209-MW6 | **Lab ID: C113286-02RE1** | **Sampled: 11/01/11 08:30** | **Received: 11/01/11 13:22**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 300.0	11/29/11		11/07/11	13:26	11/8/2011 06:04
RSK-175	11/08/11		11/03/11	10:04	11/3/2011 18:52

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Client ID: 9209-MW6	Lab ID: C113286-02RE2	Sampled: 11/01/11 08:30	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	11/08/11	11/03/11 10:04	11/3/2011 19:08

Client ID: 9209-MW8	Lab ID: C113286-03	Sampled: 10/31/11 16:30	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	11/28/11	11/07/11 13:26	11/8/2011 06:21
EPA 310.2	11/14/11	11/02/11 06:05	11/2/2011 08:51
EPA 353.2	11/02/11 16:30	11/02/11 07:35	11/2/2011 07:35
EPA 353.2	11/28/11	11/03/11 05:46	11/3/2011 11:12
EPA 353.2	07/26/14	11/06/11 20:49	11/7/2011 13:33
EPA 6010C	04/28/12	11/03/11 09:29	11/7/2011 11:44
EPA 6020A	04/28/12	11/02/11 10:09	11/4/2011 11:10
EPA 7470A	11/28/11	11/14/11 06:35	11/14/2011 13:54
EPA 8260B	11/14/11	11/07/11 11:05	11/9/2011 08:57
RSK-175	11/07/11	11/03/11 10:04	11/3/2011 14:03
SM 5210B	11/02/11 16:30	11/01/11 17:23	11/1/2011 17:23
SM 5220D	11/28/11	11/04/11 11:42	11/4/2011 15:13
SM18 3500-Fe D	10/31/11 16:44	11/04/11 14:33	11/4/2011 14:45
SM18 4500-S D	11/07/11	11/07/11 11:49	11/7/2011 12:03
SM18 5310B	11/28/11	11/07/11 08:35	11/7/2011 15:53
VGC-13	11/14/11	11/04/11 11:39	11/4/2011 18:03

Client ID: 9209-MW8	Lab ID: C113286-03RE1	Sampled: 10/31/11 16:30	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	11/07/11	11/03/11 10:04	11/3/2011 19:24

Client ID: 9209-MW8	Lab ID: C113286-03RE2	Sampled: 10/31/11 16:30	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	11/07/11	11/03/11 10:04	11/3/2011 19:40

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Client ID: 9209-MW9	Lab ID: C113286-04	Sampled: 11/01/11 10:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	11/29/11	11/07/11 13:26	11/8/2011 06:39
EPA 310.2	11/15/11	11/02/11 06:05	11/2/2011 08:52
EPA 353.2	11/03/11 10:00	11/02/11 07:38	11/2/2011 07:38
EPA 353.2	11/29/11	11/03/11 05:46	11/3/2011 11:14
EPA 353.2	07/27/14	11/06/11 20:49	11/7/2011 13:33
EPA 6010C	04/29/12	11/03/11 09:29	11/7/2011 11:46
EPA 6020A	04/29/12	11/02/11 10:09	11/4/2011 11:12
EPA 7470A	11/29/11	11/14/11 06:35	11/14/2011 13:59
EPA 8260B	11/15/11	11/07/11 11:05	11/9/2011 09:26
RSK-175	11/08/11	11/03/11 10:04	11/3/2011 14:19
SM 5210B	11/03/11 10:00	11/02/11 17:08	11/2/2011 17:08
SM 5220D	11/29/11	11/04/11 11:42	11/4/2011 15:13
SM18 3500-Fe D	11/01/11 10:14	11/04/11 14:33	11/4/2011 14:45
SM18 4500-S D	11/08/11	11/07/11 11:49	11/7/2011 12:03
SM18 5310B	11/29/11	11/07/11 08:35	11/7/2011 16:17
VGC-13	11/15/11	11/04/11 11:39	11/4/2011 18:27

Client ID: 9209-MW9	Lab ID: C113286-04RE1	Sampled: 11/01/11 10:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	11/08/11	11/03/11 10:04	11/3/2011 19:56

Client ID: 9209-MW9	Lab ID: C113286-04RE2	Sampled: 11/01/11 10:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	11/08/11	11/03/11 10:04	11/3/2011 20:12

Client ID: 9209-MW10	Lab ID: C113286-05	Sampled: 10/31/11 14:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	11/28/11	11/07/11 13:26	11/8/2011 06:56
EPA 310.2	11/14/11	11/02/11 06:05	11/2/2011 08:53
EPA 353.2	11/02/11 14:00	11/02/11 07:39	11/2/2011 07:39
EPA 353.2	11/28/11	11/03/11 05:46	11/3/2011 11:16
EPA 353.2	07/26/14	11/06/11 20:49	11/7/2011 13:33
EPA 6010C	04/28/12	11/03/11 09:29	11/7/2011 11:48
EPA 6020A	04/28/12	11/02/11 10:09	11/4/2011 11:14
EPA 7470A	11/28/11	11/14/11 06:35	11/14/2011 14:01
EPA 8260B	11/14/11	11/07/11 11:05	11/9/2011 09:56
RSK-175	11/07/11	11/03/11 10:04	11/3/2011 14:35
SM 5210B	11/02/11 14:00	11/01/11 17:23	11/1/2011 17:23
SM 5220D	11/28/11	11/04/11 11:42	11/4/2011 15:13
SM18 3500-Fe D	10/31/11 14:14	11/04/11 14:33	11/4/2011 14:45
SM18 4500-S D	11/07/11	11/07/11 11:49	11/7/2011 12:03
SM18 5310B	11/28/11	11/07/11 08:35	11/7/2011 16:40
VGC-13	11/14/11	11/04/11 11:39	11/4/2011 18:50

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Client ID: 9209-MW10	Lab ID: C113286-05RE1	Sampled: 10/31/11 14:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	11/07/11	11/03/11 10:04	11/3/2011 20:28

Client ID: 9209-MW10	Lab ID: C113286-05RE2	Sampled: 10/31/11 14:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	11/07/11	11/03/11 10:04	11/3/2011 20:44

Client ID: 9209-MW11	Lab ID: C113286-06	Sampled: 11/01/11 10:50	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	11/29/11	11/07/11 13:26	11/8/2011 07:14
EPA 310.2	11/15/11	11/02/11 06:05	11/2/2011 08:53
EPA 353.2	11/03/11 10:50	11/02/11 07:40	11/2/2011 07:40
EPA 353.2	11/29/11	11/03/11 05:46	11/3/2011 11:18
EPA 353.2	07/27/14	11/06/11 20:49	11/7/2011 13:33
EPA 6010C	04/29/12	11/03/11 09:29	11/7/2011 11:50
EPA 6020A	04/29/12	11/02/11 10:09	11/4/2011 11:16
EPA 7470A	11/29/11	11/14/11 06:35	11/14/2011 14:03
EPA 8260B	11/15/11	11/07/11 11:05	11/9/2011 10:25
RSK-175	11/08/11	11/03/11 10:04	11/3/2011 14:51
SM 5210B	11/03/11 10:50	11/02/11 18:58	11/2/2011 18:58
SM 5220D	11/29/11	11/04/11 11:42	11/4/2011 15:13
SM18 3500-Fe D	11/01/11 11:04	11/04/11 14:33	11/4/2011 14:45
SM18 4500-S D	11/08/11	11/07/11 11:49	11/7/2011 12:03
SM18 5310B	11/29/11	11/07/11 08:35	11/7/2011 17:28
VGC-13	11/15/11	11/04/11 11:39	11/4/2011 19:14

Client ID: 9209-MW22	Lab ID: C113286-07	Sampled: 11/01/11 07:20	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/03/11 09:29	11/7/2011 11:52
EPA 6020A	04/29/12	11/02/11 10:09	11/4/2011 11:17
EPA 7470A	11/29/11	11/14/11 06:35	11/14/2011 14:05
EPA 8260B	11/15/11	11/07/11 11:05	11/9/2011 10:55

Client ID: 9209-MW30	Lab ID: C113286-08	Sampled: 11/01/11 11:50	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/03/11 09:29	11/7/2011 11:54
EPA 6020A	04/29/12	11/02/11 10:09	11/4/2011 11:19
EPA 7470A	11/29/11	11/14/11 06:35	11/14/2011 14:06
EPA 8260B	11/15/11	11/09/11 12:54	11/10/2011 02:36

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Client ID: 9209-MW31	Lab ID: C113286-09	Sampled: 11/01/11 12:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/03/11 09:29	11/7/2011 11:56
EPA 6020A	04/29/12	11/02/11 10:09	11/4/2011 11:29
EPA 7470A	11/29/11	11/14/11 06:35	11/14/2011 14:42
EPA 8260B	11/15/11	11/09/11 12:54	11/10/2011 03:05

Client ID: 9209-MW31d	Lab ID: C113286-10	Sampled: 10/31/11 09:40	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/28/12	11/03/11 09:29	11/7/2011 11:58
EPA 6020A	04/28/12	11/02/11 10:09	11/4/2011 11:31
EPA 7470A	11/28/11	11/14/11 06:35	11/14/2011 14:10
EPA 8260B	11/14/11	11/09/11 12:54	11/10/2011 03:34

Client ID: 9209-MW32	Lab ID: C113286-11	Sampled: 11/01/11 11:40	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/03/11 09:29	11/7/2011 12:06
EPA 6020A	04/29/12	11/02/11 10:09	11/4/2011 11:33
EPA 7470A	11/29/11	11/14/11 06:35	11/14/2011 14:12
EPA 8260B	11/15/11	11/09/11 12:54	11/10/2011 04:02

Client ID: 9209-TB1ad	Lab ID: C113286-12	Sampled: 10/31/11 10:30	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/28/12	11/03/11 09:29	11/7/2011 12:07
EPA 6020A	04/28/12	11/02/11 10:09	11/4/2011 11:34
EPA 7470A	11/28/11	11/14/11 06:35	11/14/2011 14:14
EPA 8260B	11/14/11	11/07/11 11:36	11/8/2011 03:04

Client ID: 9209-MW36	Lab ID: C113286-13	Sampled: 11/01/11 09:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 300.0	11/29/11	11/07/11 13:26	11/8/2011 08:06
EPA 310.2	11/15/11	11/02/11 06:05	11/2/2011 08:54
EPA 353.2	11/03/11 09:00	11/02/11 07:40	11/2/2011 07:40
EPA 353.2	11/29/11	11/03/11 05:46	11/3/2011 11:25
EPA 353.2	07/27/14	11/06/11 20:49	11/7/2011 13:33
EPA 6010C	04/29/12	11/03/11 09:29	11/7/2011 12:09
EPA 6020A	04/29/12	11/02/11 10:09	11/4/2011 11:36
EPA 7470A	11/29/11	11/14/11 06:35	11/14/2011 14:16
EPA 8260B	11/15/11	11/07/11 11:36	11/8/2011 03:33
RSK-175	11/08/11	11/03/11 10:04	11/3/2011 15:07
SM 5210B	11/03/11 09:00	11/02/11 17:08	11/2/2011 17:08
SM 5220D	11/29/11	11/04/11 11:42	11/4/2011 15:13
SM18 3500-Fe D	11/01/11 09:14	11/04/11 14:33	11/4/2011 14:45
SM18 4500-S D	11/08/11	11/07/11 11:49	11/7/2011 12:03
SM18 5310B	11/29/11	11/07/11 08:35	11/7/2011 17:51
VGC-13	11/15/11	11/04/11 11:39	11/4/2011 19:37

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Client ID: 9209-MW36	Lab ID: C113286-13RE1	Sampled: 11/01/11 09:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
RSK-175	11/08/11	11/03/11 10:04	11/3/2011 21:00

Client ID: 9209-DUP	Lab ID: C113286-14	Sampled: 11/01/11 07:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/03/11 09:29	11/7/2011 12:11
EPA 6020A	04/29/12	11/02/11 10:09	11/4/2011 11:38
EPA 7470A	11/29/11	11/14/11 06:35	11/14/2011 14:23
EPA 8260B	11/15/11	11/07/11 11:36	11/8/2011 04:02

Client ID: 9209-TripBlank	Lab ID: C113286-15	Sampled: 10/31/11 07:00	Received: 11/01/11 13:22

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	11/14/11	11/07/11 11:36	11/8/2011 04:30

Client ID: 9209-MW6d	Lab ID: C113476-01	Sampled: 11/02/11 10:00	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/30/12	11/08/11 08:22	11/9/2011 11:53
EPA 6020A	04/30/12	11/03/11 09:57	11/8/2011 11:17
EPA 7470A	11/30/11	11/14/11 06:39	11/14/2011 15:29
EPA 8260B	11/16/11	11/09/11 10:15	11/9/2011 18:57

Client ID: 9209-MW7	Lab ID: C113476-02	Sampled: 11/02/11 10:45	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/30/12	11/08/11 08:22	11/9/2011 11:55
EPA 6020A	04/30/12	11/03/11 09:57	11/8/2011 11:19
EPA 7470A	11/30/11	11/14/11 06:39	11/14/2011 15:31
EPA 8260B	11/16/11	11/09/11 10:15	11/9/2011 19:25

Client ID: 9209-MW8d	Lab ID: C113476-03	Sampled: 11/02/11 10:30	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/30/12	11/08/11 08:22	11/9/2011 11:57
EPA 6020A	04/30/12	11/03/11 09:57	11/8/2011 11:21
EPA 7470A	11/30/11	11/14/11 06:39	11/14/2011 15:33
EPA 8260B	11/16/11	11/09/11 10:15	11/9/2011 19:54

Client ID: 9209-MW10d	Lab ID: C113476-04	Sampled: 11/02/11 08:30	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/30/12	11/08/11 08:22	11/9/2011 12:28
EPA 6020A	04/30/12	11/03/11 09:57	11/8/2011 11:23
EPA 7470A	11/30/11	11/14/11 06:39	11/14/2011 15:39
EPA 8260B	11/16/11	11/09/11 10:15	11/9/2011 20:23

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Client ID: 9209-MW11d	Lab ID: C113476-05	Sampled: 11/02/11 07:45	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/30/12	11/08/11 08:22	11/9/2011 12:30
EPA 6020A	04/30/12	11/03/11 09:57	11/8/2011 11:25
EPA 7470A	11/30/11	11/14/11 06:39	11/14/2011 15:41
EPA 8260B	11/16/11	11/09/11 10:15	11/9/2011 20:51

Client ID: 9209-MW23	Lab ID: C113476-06	Sampled: 11/02/11 08:20	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/30/12	11/08/11 08:22	11/9/2011 12:31
EPA 6020A	04/30/12	11/03/11 09:57	11/8/2011 11:26
EPA 7470A	11/30/11	11/14/11 06:39	11/14/2011 15:43
EPA 8260B	11/16/11	11/09/11 10:15	11/9/2011 21:20

Client ID: 9209-MW23d	Lab ID: C113476-07	Sampled: 11/01/11 17:05	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/08/11 08:22	11/9/2011 12:33
EPA 6020A	04/29/12	11/03/11 09:57	11/8/2011 11:44
EPA 7470A	11/29/11	11/14/11 06:39	11/14/2011 15:45
EPA 8260B	11/15/11	11/09/11 10:15	11/9/2011 21:49

Client ID: 9209-MW24	Lab ID: C113476-08	Sampled: 11/02/11 08:05	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/30/12	11/08/11 08:22	11/9/2011 12:35
EPA 6020A	04/30/12	11/03/11 09:57	11/8/2011 11:46
EPA 7470A	11/30/11	11/14/11 06:39	11/14/2011 15:47
EPA 8260B	11/16/11	11/09/11 13:59	11/10/2011 00:11

Client ID: 9209-MW29d	Lab ID: C113476-09	Sampled: 11/01/11 13:30	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/08/11 08:22	11/9/2011 12:37
EPA 6020A	04/29/12	11/03/11 09:57	11/8/2011 11:48
EPA 7470A	11/29/11	11/14/11 06:39	11/14/2011 15:48
EPA 8260B	11/15/11	11/09/11 13:59	11/10/2011 00:41

Client ID: 9209-TB1a	Lab ID: C113476-10	Sampled: 11/01/11 12:45	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/08/11 08:22	11/9/2011 12:39
EPA 6020A	04/29/12	11/03/11 09:57	11/8/2011 11:49
EPA 7470A	11/29/11	11/14/11 06:39	11/14/2011 15:50
EPA 8260B	11/15/11	11/09/11 12:54	11/10/2011 04:31

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Client ID: 9209-MW36d	Lab ID: C113476-11	Sampled: 11/02/11 09:10	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/30/12	11/08/11 08:22	11/9/2011 12:41
EPA 6020A	04/30/12	11/03/11 09:57	11/8/2011 11:51
EPA 7470A	11/30/11	11/14/11 06:39	11/14/2011 15:52
EPA 8260B	11/16/11	11/09/11 12:54	11/10/2011 05:00

Client ID: 9209-EQBlank	Lab ID: C113476-12	Sampled: 11/02/11 09:20	Received: 11/02/11 11:54

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/30/12	11/08/11 08:22	11/9/2011 12:43
EPA 6020A	04/30/12	11/03/11 09:57	11/8/2011 11:53
EPA 7470A	11/30/11	11/14/11 06:39	11/14/2011 15:54
EPA 8260B	11/16/11	11/09/11 12:54	11/10/2011 05:29

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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 9209-MW5R **Lab ID: C113286-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetic Acid	510		1	40	70	NE	ug/L	VGC-13	
Barium - Total	123		1	1.00	10.0	100	ug/L	EPA 6010C	
Chloride	2700	JB	1	47	5000	NE	ug/L	EPA 300.0	J-01
Chromium - Total	3.28	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	2.17	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid)	110	J	1	62	140	NE	ug/L	VGC-13	
Methane	3.88		1	0.720	1.00	NE	ug/L	RSK-175	
Nickel - Total	5.83	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Nitrate as N	12000		1	25	100	10000	ug/L	EPA 353.2	
Nitrite as N	30	J	1	3.0	100	1000	ug/L	EPA 353.2	
Selenium - Total	1.13	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Sulfate as SO4	3900	J	1	20	5000	250000	ug/L	EPA 300.0	
Thallium - Total	0.152	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Total Alkalinity as CaCO3	110000	D	5	60000	75000	NE	ug/L	EPA 310.2	
Total Organic Carbon	1400		1	280	1000	NE	ug/L	SM18 5310B	
Zinc - Total	8.33	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW5R **Lab ID: C113286-01RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	335000	D	10	13000	25000	NE	ug/L	RSK-175	
Nitrate/Nitrite as N	12000	D	19.5	490	2000	NE	ug/L	EPA 353.2	

Client ID: 9209-MW6 **Lab ID: C113286-02**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	1.0	J	1	0.080	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	1.7		1	0.79	1.0	1	ug/L	EPA 8260B	
Antimony - Total	0.229	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Arsenic - Total	3.98	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	454		1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	3.6		1	0.68	1.0	1	ug/L	EPA 8260B	
Butyric Acid	8700		1	24	70	NE	ug/L	VGC-13	
Chemical Oxygen Demand	94000		1	10000	10000	NE	ug/L	SM 5220D	
Chlorobenzene	1.1	J	1	0.74	1.0	3	ug/L	EPA 8260B	
Chromium - Total	6.35	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	0.95	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	65.7		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	4.04	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Nickel - Total	18.2	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J-01
Nitrate as N	53	J	1	25	100	10000	ug/L	EPA 353.2	
Nitrate/Nitrite as N	53	J	1	25	100	NE	ug/L	EPA 353.2	
Propionic Acid	34000		1	57	70	NE	ug/L	VGC-13	
Selenium - Total	2.55	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Total	4.11	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Sulfate as SO4	12000	J	1	20	5000	250000	ug/L	EPA 300.0	
Total Alkalinity as CaCO3	600000	D	10	120000	150000	NE	ug/L	EPA 310.2	
Total Organic Carbon	22000		1	280	1000	NE	ug/L	SM18 5310B	
Zinc - Total	5.36	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW6 **Lab ID: C113286-02RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	820000	D	10	13000	25000	NE	ug/L	RSK-175	
Chloride	170000	BD	4	190	20000	NE	ug/L	EPA 300.0	QB-01

Client ID: 9209-MW6 **Lab ID: C113286-02RE2**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Methane	4600	D	100	72.0	100	NE	ug/L	RSK-175	

Client ID: 9209-MW8 **Lab ID: C113286-03**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	0.66	J	1	0.080	1.0	5	ug/L	EPA 8260B	
Acetic Acid	990		1	40	70	NE	ug/L	VGC-13	
Barium - Total	56.5	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	11000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	7800	B	1	47	5000	NE	ug/L	EPA 300.0	J-01
Chromium - Total	7.42	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	14		1	0.72	1.0	5	ug/L	EPA 8260B	
Copper - Total	4.53	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Nickel - Total	4.95	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Nitrate as N	120	J	1	25	100	10000	ug/L	EPA 353.2	
Nitrate/Nitrite as N	120		1	25	100	NE	ug/L	EPA 353.2	
Propionic Acid	330		1	57	70	NE	ug/L	VGC-13	
Sulfate as SO4	2500	J	1	20	5000	250000	ug/L	EPA 300.0	
Total Alkalinity as CaCO3	68000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Organic Carbon	840	J	1	280	1000	NE	ug/L	SM18 5310B	
Vanadium - Total	5.18	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	7.32	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW8 **Lab ID: C113286-03RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	273000	D	10	13000	25000	NE	ug/L	RSK-175	

Client ID: 9209-MW8 **Lab ID: C113286-03RE2**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Methane	1750	D	100	72.0	100	NE	ug/L	RSK-175	

Client ID: 9209-MW9 **Lab ID: C113286-04**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	11		1	0.080	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	5.9		1	0.79	1.0	1	ug/L	EPA 8260B	
Acetic Acid	860		1	40	70	NE	ug/L	VGC-13	
Barium - Total	209		1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	1.3		1	0.68	1.0	1	ug/L	EPA 8260B	
Beryllium - Total	0.425	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chemical Oxygen Demand	53000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	15000	B	1	47	5000	NE	ug/L	EPA 300.0	J-01
Chromium - Total	14.9		1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	11		1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	6.79	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	8.83	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Lead - Total	6.37	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	4.11	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J

Client ID: 9209-MW9 **Lab ID: C113286-04**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Nitrate as N	75	J	1	25	100	10000	ug/L	EPA 353.2	
Nitrate/Nitrite as N	75	J	1	25	100	NE	ug/L	EPA 353.2	
Propionic Acid	1500		1	57	70	NE	ug/L	VGC-13	
Selenium - Total	0.982	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Total	4.52	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Sulfate as SO4	2900	J	1	20	5000	250000	ug/L	EPA 300.0	
Thallium - Total	0.164	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Total Alkalinity as CaCO3	210000	D	2	24000	30000	NE	ug/L	EPA 310.2	
Total Organic Carbon	4400		1	280	1000	NE	ug/L	SM18 5310B	
Vanadium - Total	6.88	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Vinyl chloride	12		1	0.60	1.0	1	ug/L	EPA 8260B	
Zinc - Total	69.2		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW9 **Lab ID: C113286-04RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	414000	D	10	13000	25000	NE	ug/L	RSK-175	

Client ID: 9209-MW9 **Lab ID: C113286-04RE2**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Methane	1080	D	100	72.0	100	NE	ug/L	RSK-175	

Client ID: 9209-MW10 **Lab ID: C113286-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	4.9	J	1	0.080	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	0.90	J	1	0.79	1.0	1	ug/L	EPA 8260B	
Acetic Acid	990		1	40	70	NE	ug/L	VGC-13	
Barium - Total	28.1	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	3.2		1	0.68	1.0	1	ug/L	EPA 8260B	
Chemical Oxygen Demand	15000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	3600	JB	1	47	5000	NE	ug/L	EPA 300.0	J-01
Chloroethane	1.4	J	1	0.75	1.0	10	ug/L	EPA 8260B	
Chromium - Total	1.72	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	42		1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	1.61	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	3.56	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid)	120	J	1	62	140	NE	ug/L	VGC-13	
Nickel - Total	3.00	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Propionic Acid	220		1	57	70	NE	ug/L	VGC-13	
Silver - Total	1.94	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Sulfate as SO4	2400	J	1	20	5000	250000	ug/L	EPA 300.0	
Tetrachloroethene	2.9		1	0.73	1.0	1	ug/L	EPA 8260B	
Total Alkalinity as CaCO3	130000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Organic Carbon	1100		1	280	1000	NE	ug/L	SM18 5310B	
Trichloroethene	2.6		1	0.72	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	1.3		1	0.60	1.0	1	ug/L	EPA 8260B	
Zinc - Total	12.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW10 **Lab ID: C113286-05RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	777000	D	10	13000	25000	NE	ug/L	RSK-175	

Client ID: 9209-MW10 **Lab ID: C113286-05RE2**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Methane	9630	D	500	360	500	NE	ug/L	RSK-175	

Client ID: 9209-MW11 **Lab ID: C113286-06**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetic Acid	830		1	40	70	NE	ug/L	VGC-13	
Barium - Total	80.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Biochemical Oxygen Demand	3200		1	2000	2000	NE	ug/L	SM 5210B	
Carbon dioxide	164000		1	1300	2500	NE	ug/L	RSK-175	
Chloride	4100	JB	1	47	5000	NE	ug/L	EPA 300.0	J-01
Chromium - Total	1.90	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	6.33	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid)	77	J	1	62	140	NE	ug/L	VGC-13	
Nickel - Total	2.14	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Nitrate as N	710	J	1	25	100	10000	ug/L	EPA 353.2	
Nitrate/Nitrite as N	710		1	25	100	NE	ug/L	EPA 353.2	
Propionic Acid	160		1	57	70	NE	ug/L	VGC-13	
Sulfate as SO4	2200	J	1	20	5000	250000	ug/L	EPA 300.0	
Total Alkalinity as CaCO3	25000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Organic Carbon	350	J	1	280	1000	NE	ug/L	SM18 5310B	
Vanadium - Total	3.61	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	19.6		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW22 **Lab ID: C113286-07**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	41.2	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Cadmium - Total	7.96		1	0.360	1.00	1	ug/L	EPA 6010C	
Chromium - Total	4.25	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	46.7		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	5.24	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Nickel - Total	17.2	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J-01
Silver - Total	2.87	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Vanadium - Total	3.22	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	43.9		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW30 **Lab ID: C113286-08**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	147		1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total	0.302	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chromium - Total	47.5		1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	8.80	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	69.8	B	1	1.60	10.0	10	ug/L	EPA 6010C	QB-01
Lead - Total	3.90	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	22.2	JB	1	1.80	10.0	50	ug/L	EPA 6010C	QB-01
Silver - Total	3.51	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Thallium - Total	0.196	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Vanadium - Total	44.0		1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	60.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW31 **Lab ID: C113286-09**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	84.2	J	1	1.00	10.0	100	ug/L	EPA 6010C	

Client ID: 9209-MW31 **Lab ID: C113286-09**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Beryllium - Total	0.151	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chloroform	2.1	J	1	0.70	1.0	5	ug/L	EPA 8260B	
Chromium - Total	33.3		1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	2.57	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	23.9	B	1	1.60	10.0	10	ug/L	EPA 6010C	J-01
Lead - Total	7.27	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	13.7	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J-01
Silver - Total	2.66	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Thallium - Total	0.129	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Vanadium - Total	26.2		1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	57.9		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW31d **Lab ID: C113286-10**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	1.21	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total	21.2	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chloroform	23		1	0.70	1.0	5	ug/L	EPA 8260B	
Chromium - Total	13.4		1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	34.2	B	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	4.99	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Vanadium - Total	10.2	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	69.6		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW32 **Lab ID: C113286-11**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	5.75	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	14.2	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	3.41	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	1.47	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	10.0	B	1	1.60	10.0	10	ug/L	EPA 6010C	J-01
Nickel - Total	3.39	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Vanadium - Total	2.96	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	27.7		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-TB1ad **Lab ID: C113286-12**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.865	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total	14.2	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chloroform	31		1	0.70	1.0	5	ug/L	EPA 8260B	
Chromium - Total	22.9		1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	4.52	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Nickel - Total	6.60	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Selenium - Total	1.13	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Vanadium - Total	7.66	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	13.2		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW36 **Lab ID: C113286-13**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	8.9		1	0.080	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	0.86	J	1	0.79	1.0	1	ug/L	EPA 8260B	
Acetic Acid	990		1	40	70	NE	ug/L	VGC-13	

Client ID: 9209-MW36 **Lab ID: C113286-13**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	74.6	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chemical Oxygen Demand	36000		1	10000	10000	NE	ug/L	SM 5220D	
Chloride	6400	B	1	47	5000	NE	ug/L	EPA 300.0	J-01
Chromium - Total	12.1		1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	4.3	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	3.63	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	14.7	B	1	1.60	10.0	10	ug/L	EPA 6010C	J-01
Nickel - Total	7.15	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Nitrate as N	510	J	1	25	100	10000	ug/L	EPA 353.2	
Nitrate/Nitrite as N	510		1	25	100	NE	ug/L	EPA 353.2	
Propionic Acid	210		1	57	70	NE	ug/L	VGC-13	
Sulfate as SO4	4400	J	1	20	5000	250000	ug/L	EPA 300.0	
Total Alkalinity as CaCO3	62000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Organic Carbon	800	J	1	280	1000	NE	ug/L	SM18 5310B	
Trichloroethene	1.1		1	0.72	1.0	1	ug/L	EPA 8260B	
Vanadium - Total	14.8	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	31.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW36 **Lab ID: C113286-13RE1**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Carbon dioxide	242000	D	10	13000	25000	NE	ug/L	RSK-175	
Methane	618	D	10	7.20	10.0	NE	ug/L	RSK-175	

Client ID: 9209-DUP **Lab ID: C113286-14**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	10		1	0.080	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	5.9		1	0.79	1.0	1	ug/L	EPA 8260B	
Acetone	6.1	J	1	1.2	5.0	100	ug/L	EPA 8260B	
Barium - Total	191		1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	1.0		1	0.68	1.0	1	ug/L	EPA 8260B	
Beryllium - Total	0.256	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chloroethane	1.3	J	1	0.75	1.0	10	ug/L	EPA 8260B	
Chromium - Total	10.4		1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	12		1	0.72	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	5.81	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	5.32	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Lead - Total	3.99	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	3.08	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Selenium - Total	0.874	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Total	3.66	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Thallium - Total	0.127	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Vanadium - Total	3.26	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Vinyl chloride	10		1	0.60	1.0	1	ug/L	EPA 8260B	
Zinc - Total	50.1		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW6d **Lab ID: C113476-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	3.4	J	1	0.080	1.0	5	ug/L	EPA 8260B	
Antimony - Total	2.63	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total	100		1	1.00	10.0	100	ug/L	EPA 6010C	
Chloroform	0.72	J	1	0.70	1.0	5	ug/L	EPA 8260B	

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Client ID: 9209-MW6d **Lab ID: C113476-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Chromium - Total	5.42	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	1.26	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	6.46	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Dichlorodifluoromethane	1.5	J	1	0.56	1.0	5	ug/L	EPA 8260B	
Methylene chloride	0.43	J	1	0.14	1.0	1	ug/L	EPA 8260B	
Nickel - Total	4.68	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	3.98	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	13.1		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW7 **Lab ID: C113476-02**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,4-Dichlorobenzene	1.6		1	0.79	1.0	1	ug/L	EPA 8260B	
Acetone	7.6	J	1	1.2	5.0	100	ug/L	EPA 8260B	
Barium - Total	67.1	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	1.3		1	0.68	1.0	1	ug/L	EPA 8260B	
Cadmium - Total	0.380	J	1	0.360	1.00	1	ug/L	EPA 6010C	
Chromium - Total	14.9		1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	31.6		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	21.2	B	1	1.60	10.0	10	ug/L	EPA 6010C	J-01
Nickel - Total	13.4	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Selenium - Total	1.17	J	1	0.830	1.00	10	ug/L	EPA 6020A	
Silver - Total	3.27	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Vanadium - Total	9.74	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Vinyl chloride	1.4		1	0.60	1.0	1	ug/L	EPA 8260B	
Zinc - Total	44.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW8d **Lab ID: C113476-03**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.724	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total	25.0	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Cadmium - Total	1.05		1	0.360	1.00	1	ug/L	EPA 6010C	
Chromium - Total	5.02	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	5.02	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Nickel - Total	2.00	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	4.22	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	7.28	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW10d **Lab ID: C113476-04**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	2.2	J	1	0.080	1.0	5	ug/L	EPA 8260B	
Barium - Total	3.81	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	2.10	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	3.18	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Methylene chloride	0.92	J	1	0.14	1.0	1	ug/L	EPA 8260B	
Zinc - Total	4.14	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW11d **Lab ID: C113476-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	45.5	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	2.18	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	4.14	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J

Client ID: 9209-MW11d **Lab ID: C113476-05**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Vanadium - Total	2.45	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	5.86	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW23 **Lab ID: C113476-06**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	43.5	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	5.93	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	11.0	B	1	1.60	10.0	10	ug/L	EPA 6010C	J-01
Lead - Total	2.79	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	4.01	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	9.10	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	14.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW23d **Lab ID: C113476-07**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total	0.798	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total	35.8	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	3.92	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	4.12	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Vanadium - Total	3.75	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	10.9		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW24 **Lab ID: C113476-08**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	48.8	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chloroform	8.9		1	0.70	1.0	5	ug/L	EPA 8260B	
Chromium - Total	3.81	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	6.75	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Lead - Total	4.69	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	2.13	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	6.26	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	43.6		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW29d **Lab ID: C113476-09**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	42.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	6.46	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	1.21	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	12.4	B	1	1.60	10.0	10	ug/L	EPA 6010C	J-01
Nickel - Total	2.70	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	4.25	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	17.2		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-TB1a **Lab ID: C113476-10**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	126		1	1.00	10.0	100	ug/L	EPA 6010C	
Cadmium - Total	5.39		1	0.360	1.00	1	ug/L	EPA 6010C	
Chloroform	1.6	J	1	0.70	1.0	5	ug/L	EPA 8260B	
Chromium - Total	19.1		1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	11.5		1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	99.3	B	1	1.60	10.0	10	ug/L	EPA 6010C	QB-01

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Client ID: 9209-TB1a								Lab ID: C113476-10	
Analyte	**Results**	**Flag**	**DF**	**MDL**	**MRL**	**NC SWSL**	**Units**	**Method**	**Notes**
Nickel - Total	19.0	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Vanadium - Total	40.5		1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	91.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-MW36d								Lab ID: C113476-11	
Analyte	**Results**	**Flag**	**DF**	**MDL**	**MRL**	**NC SWSL**	**Units**	**Method**	**Notes**
1,1-Dichloroethane	9.2		1	0.080	1.0	5	ug/L	EPA 8260B	
Barium - Total	60.3	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	10.2		1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	4.0	J	1	0.72	1.0	5	ug/L	EPA 8260B	
Copper - Total	12.0	B	1	1.60	10.0	10	ug/L	EPA 6010C	J-01
Dichlorodifluoromethane	1.4	J	1	0.56	1.0	5	ug/L	EPA 8260B	
Methylene chloride	0.89	J	1	0.14	1.0	1	ug/L	EPA 8260B	
Nickel - Total	6.22	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Tetrachloroethene	1.0		1	0.73	1.0	1	ug/L	EPA 8260B	
Trichloroethene	1.4		1	0.72	1.0	1	ug/L	EPA 8260B	
Vanadium - Total	11.1	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	5.45	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-EQBlank								Lab ID: C113476-12	
Analyte	**Results**	**Flag**	**DF**	**MDL**	**MRL**	**NC SWSL**	**Units**	**Method**	**Notes**
Copper - Total	3.29	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J

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ANALYTICAL RESULTS

Description: 9209-MW5R
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-01
Sampled: 10/31/11 15:15
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/09/11 07:58	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 07:58	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 07:58	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 07:58	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 07:58	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 07:58	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 07:58	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 07:58	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 07:58	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 07:58	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 07:58	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 07:58	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 07:58	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 07:58	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 07:58	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 07:58	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 07:58	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 07:58	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 07:58	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 07:58	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 07:58	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 07:58	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 07:58	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 07:58	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 07:58	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 07:58	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 07:58	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 07:58	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 07:58	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 07:58	jkg	

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Description: 9209-MW5R
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-01
Sampled: 10/31/11 15:15
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/09/11 07:58	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 07:58	jkg	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 07:58	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 07:58	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 07:58	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 07:58	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 07:58	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 07:58	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 07:58	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 07:58	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 07:58	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 07:58	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 07:58	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*44*	*1*	*50.0*	*89 %*	*51-122*	*1K07015*	*EPA 8260B*	*11/09/11 07:58*	*jkg*	
Dibromofluoromethane	*42*	*1*	*50.0*	*83 %*	*68-117*	*1K07015*	*EPA 8260B*	*11/09/11 07:58*	*jkg*	
Toluene-d8	*43*	*1*	*50.0*	*87 %*	*67-127*	*1K07015*	*EPA 8260B*	*11/09/11 07:58*	*jkg*	

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Description:	9209-MW5R	**Lab Sample ID:**	C113286-01	**Received:**	11/01/11 13:22
Matrix:	Ground Water	**Sampled:**	10/31/11 15:15	**Work Order:**	C113286
Project:	North Wake Unlined Landfill	**Sampled By:**	Aaron Weispfenning		

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	11/14/11 13:37	KER	

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Description: 9209-MW5R
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-01
Sampled: 10/31/11 15:15
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/04/11 11:07	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:16	JDH	
Barium [7440-39-3] ^	**123**		ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:16	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:16	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:16	JDH	
Chromium [7440-47-3] ^	**3.28**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:16	JDH	
Cobalt [7440-48-4] ^	**2.17**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:16	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:16	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:16	JDH	
Nickel [7440-02-0] ^	**5.83**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:16	JDH	J
Selenium [7782-49-2] ^	**1.13**	J	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:07	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:16	JDH	
Thallium [7440-28-0] ^	**0.152**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:07	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:16	JDH	
Zinc [7440-66-6] ^	**8.33**	J	ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:16	JDH	

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Lab Sample ID: C113286-01
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Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	11/01/11 17:23	JOC	
Chemical Oxygen Demand [ECL-0035] ^	10000	U	ug/L	1	10000	10000	NE	SM 5220D	11/04/11 15:13	JOC	
Chloride [16887-00-6] ^	**2700**	JB	ug/L	1	47	5000	NE	EPA 300.0	11/08/11 05:29	CCB	J-01
Nitrate as N [14797-55-8] ^	**12000**		ug/L	1	25	100	10000	EPA 353.2	11/07/11 13:33	CCB	
Nitrate/Nitrite as N [ECL-0010] ^	**12000**	D	ug/L	19.5	490	2000	NE	EPA 353.2	11/03/11 12:21	CCB	
Nitrite as N [14797-65-0] ^	**30**	J	ug/L	1	3.0	100	1000	EPA 353.2	11/02/11 07:33	CCB	
Sulfate as SO4 [14808-79-8] ^	**3900**	J	ug/L	1	20	5000	250000	EPA 300.0	11/08/11 05:29	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	11/07/11 12:03	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**110000**	D	ug/L	5	60000	75000	NE	EPA 310.2	11/02/11 08:49	CCB	

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Lab Sample ID: C113286-01
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Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iron, Ferrous [7439-89-6]	**140**		ug/L	1	30	50		SM18 3500-Fe D	11/04/11 14:45	NP	Q

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Lab Sample ID: C113286-01
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Received: 11/01/11 13:22
Work Order: C113286

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**335000**	D	ug/L	10	13000	25000	NE	RSK-175	11/03/11 18:36	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	11/03/11 13:31	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	11/03/11 13:31	JDB	
Methane [74-82-8]	**3.88**		ug/L	1	0.720	1.00	NE	RSK-175	11/03/11 13:31	JDB	

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Description: 9209-MW5R
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-01
Sampled: 10/31/11 15:15
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	**510**		ug/L	1	40	70	NE	VGC-13	11/04/11 17:16	JWJ	
Butyric Acid [107-92-6]	24	U	ug/L	1	24	70	NE	VGC-13	11/04/11 17:16	JWJ	
Hexanoic Acid [142-62-1]	87	U	ug/L	1	87	100		VGC-13	11/04/11 17:16	JWJ	
iso-Hexanoic Acid [646-07-1]	89	U	ug/L	1	89	100		VGC-13	11/04/11 17:16	JWJ	
iso-Pentanoic Acid [503-74-2]	62	U	ug/L	1	62	70		VGC-13	11/04/11 17:16	JWJ	
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid) [50-21-5/594-61-6]	**110**	J	ug/L	1	62	140	NE	VGC-13	11/04/11 17:16	JWJ	
Pentanoic Acid [109-52-4]	48	U	ug/L	1	48	70		VGC-13	11/04/11 17:16	JWJ	
Propionic Acid [79-09-4]	57	U	ug/L	1	57	70	NE	VGC-13	11/04/11 17:16	JWJ	
Pyruvic Acid [127-17-3]	61	U	ug/L	1	61	70	NE	VGC-13	11/04/11 17:16	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*21000*	*1*	*20000*	*106 %*	*80-124*	*1K04009*	*VGC-13*	*11/04/11 17:16*	*JWJ*	

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Description: 9209-MW5R
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-01
Sampled: 10/31/11 15:15
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**1400**		ug/L	1	280	1000	NE	SM18 5310B	11/07/11 15:03	JSW	

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

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Description: 9209-MW6 | **Lab Sample ID:** C113286-02 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 08:30 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/09/11 08:27	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 08:27	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
1,1-Dichloroethane [75-34-3] ^	**1.0**	J	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 08:27	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 08:27	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 08:27	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 08:27	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 08:27	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 08:27	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 08:27	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
1,4-Dichlorobenzene [106-46-7] ^	**1.7**		ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 08:27	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 08:27	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 08:27	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 08:27	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 08:27	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 08:27	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 08:27	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 08:27	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 08:27	jkg	
Benzene [71-43-2] ^	**3.6**		ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 08:27	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 08:27	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 08:27	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 08:27	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Chlorobenzene [108-90-7] ^	**1.1**	J	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 08:27	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 08:27	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 08:27	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 08:27	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	**0.95**	J	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 08:27	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 08:27	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 08:27	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 08:27	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 08:27	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 08:27	jkg	

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Description: 9209-MW6 | **Lab Sample ID:** C113286-02 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 08:30 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 08:27	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 08:27	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 08:27	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 08:27	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 08:27	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 08:27	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 08:27	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 08:27	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 08:27	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 08:27	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 08:27	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*44*	*1*	*50.0*	*88 %*	*51-122*	*1K07015*	*EPA 8260B*	*11/09/11 08:27*	*jkg*	
Dibromofluoromethane	*41*	*1*	*50.0*	*82 %*	*68-117*	*1K07015*	*EPA 8260B*	*11/09/11 08:27*	*jkg*	
Toluene-d8	*43*	*1*	*50.0*	*87 %*	*67-127*	*1K07015*	*EPA 8260B*	*11/09/11 08:27*	*jkg*	

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Description:	9209-MW6	**Lab Sample ID:**	C113286-02	**Received:**	11/01/11 13:22
Matrix:	Ground Water	**Sampled:**	11/01/11 08:30	**Work Order:**	C113286
Project:	North Wake Unlined Landfill	**Sampled By:**	Aaron Weispfenning		

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	11/14/11 14:40	KER	

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Description: 9209-MW6
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-02
Sampled: 11/01/11 08:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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] ^	**0.229**	J	ug/L	1	0.220	2.00	6	EPA 6020A	11/04/11 11:09	VLO	
Arsenic [7440-38-2] ^	**3.98**	J	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:41	JDH	
Barium [7440-39-3] ^	**454**		ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:41	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:41	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:41	JDH	
Chromium [7440-47-3] ^	**6.35**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:41	JDH	
Cobalt [7440-48-4] ^	**65.7**		ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:41	JDH	
Copper [7440-50-8] ^	**4.04**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:41	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:41	JDH	
Nickel [7440-02-0] ^	**18.2**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:41	JDH	J-01
Selenium [7782-49-2] ^	**2.55**	J	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:09	VLO	
Silver [7440-22-4] ^	**4.11**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:41	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:09	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:41	JDH	
Zinc [7440-66-6] ^	**5.36**	J	ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:41	JDH	

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Description: 9209-MW6
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-02
Sampled: 11/01/11 08:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	11/02/11 17:08	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**94000**		ug/L	1	10000	10000	NE	SM 5220D	11/04/11 15:13	JOC	
Chloride [16887-00-6] ^	**170000**	BD	ug/L	4	190	20000	NE	EPA 300.0	11/08/11 06:04	CCB	QB-01
Nitrate as N [14797-55-8] ^	**53**	J	ug/L	1	25	100	10000	EPA 353.2	11/07/11 13:33	CCB	
Nitrate/Nitrite as N [ECL-0010] ^	**53**	J	ug/L	1	25	100	NE	EPA 353.2	11/03/11 11:10	CCB	
Nitrite as N [14797-65-0] ^	3.0	U	ug/L	1	3.0	100	1000	EPA 353.2	11/02/11 07:34	CCB	
Sulfate as SO4 [14808-79-8] ^	**12000**	J	ug/L	1	20	5000	250000	EPA 300.0	11/08/11 05:46	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	11/07/11 12:03	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**600000**	D	ug/L	10	120000	150000	NE	EPA 310.2	11/02/11 08:50	CCB	

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Description: 9209-MW6
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-02
Sampled: 11/01/11 08:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iron, Ferrous [7439-89-6]	**1500**		ug/L	1	30	50		SM18 3500-Fe D	11/04/11 14:45	NP	Q

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Description: 9209-MW6
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-02
Sampled: 11/01/11 08:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**820000**	D	ug/L	10	13000	25000	NE	RSK-175	11/03/11 18:52	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	11/03/11 13:47	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	11/03/11 13:47	JDB	
Methane [74-82-8]	**4600**	D	ug/L	100	72.0	100	NE	RSK-175	11/03/11 19:08	JDB	

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Description: 9209-MW6
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-02
Sampled: 11/01/11 08:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	40	U	ug/L	1	40	70	NE	VGC-13	11/04/11 17:39	JWJ	
Butyric Acid [107-92-6]	**8700**		ug/L	1	24	70	NE	VGC-13	11/04/11 17:39	JWJ	
Hexanoic Acid [142-62-1]	87	U	ug/L	1	87	100		VGC-13	11/04/11 17:39	JWJ	
iso-Hexanoic Acid [646-07-1]	89	U	ug/L	1	89	100		VGC-13	11/04/11 17:39	JWJ	
iso-Pentanoic Acid [503-74-2]	62	U	ug/L	1	62	70		VGC-13	11/04/11 17:39	JWJ	
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid) [50-21-5/594-61-6]	62	U	ug/L	1	62	140	NE	VGC-13	11/04/11 17:39	JWJ	
Pentanoic Acid [109-52-4]	48	U	ug/L	1	48	70		VGC-13	11/04/11 17:39	JWJ	
Propionic Acid [79-09-4]	**34000**		ug/L	1	57	70	NE	VGC-13	11/04/11 17:39	JWJ	
Pyruvic Acid [127-17-3]	61	U	ug/L	1	61	70	NE	VGC-13	11/04/11 17:39	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*22000*	*1*	*20000*	*109 %*	*80-124*	*1K04009*	*VGC-13*	*11/04/11 17:39*	*JWJ*	

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Description: 9209-MW6
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-02
Sampled: 11/01/11 08:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**22000**		ug/L	1	280	1000	NE	SM18 5310B	11/07/11 15:32	JSW	

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

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Description: 9209-MW8 | **Lab Sample ID:** C113286-03 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 10/31/11 16:30 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/09/11 08:57	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 08:57	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
1,1-Dichloroethane [75-34-3] ^	**0.66**	J	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 08:57	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 08:57	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 08:57	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 08:57	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 08:57	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 08:57	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 08:57	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 08:57	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 08:57	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 08:57	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 08:57	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 08:57	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 08:57	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 08:57	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 08:57	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 08:57	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 08:57	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 08:57	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 08:57	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 08:57	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 08:57	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 08:57	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 08:57	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 08:57	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	**14**		ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 08:57	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 08:57	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 08:57	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 08:57	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 08:57	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 08:57	jkg	

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Description: 9209-MW8 | **Lab Sample ID:** C113286-03 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 10/31/11 16:30 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 08:57	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 08:57	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 08:57	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 08:57	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 08:57	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 08:57	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 08:57	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 08:57	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 08:57	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 08:57	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 08:57	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*44*	*1*	*50.0*	*87 %*	*51-122*	*1K07015*	*EPA 8260B*	*11/09/11 08:57*	*jkg*	
Dibromofluoromethane	*41*	*1*	*50.0*	*81 %*	*68-117*	*1K07015*	*EPA 8260B*	*11/09/11 08:57*	*jkg*	
Toluene-d8	*43*	*1*	*50.0*	*86 %*	*67-127*	*1K07015*	*EPA 8260B*	*11/09/11 08:57*	*jkg*	

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Description: 9209-MW8
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-03
Sampled: 10/31/11 16:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 13:54	KER	

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Description: 9209-MW8 | **Lab Sample ID:** C113286-03 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 10/31/11 16:30 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/04/11 11:10	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:44	JDH	
Barium [7440-39-3] ^	**56.5**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:44	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:44	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:44	JDH	
Chromium [7440-47-3] ^	**7.42**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:44	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:44	JDH	
Copper [7440-50-8] ^	**4.53**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:44	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:44	JDH	
Nickel [7440-02-0] ^	**4.95**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:44	JDH	J
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:10	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:44	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:10	VLO	
Vanadium [7440-62-2] ^	**5.18**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:44	JDH	
Zinc [7440-66-6] ^	**7.32**	J	ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:44	JDH	

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Description: 9209-MW8 | **Lab Sample ID:** C113286-03 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 10/31/11 16:30 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	11/01/11 17:23	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**11000**		ug/L	1	10000	10000	NE	SM 5220D	11/04/11 15:13	JOC	
Chloride [16887-00-6] ^	**7800**	B	ug/L	1	47	5000	NE	EPA 300.0	11/08/11 06:21	CCB	J-01
Nitrate as N [14797-55-8] ^	**120**	J	ug/L	1	25	100	10000	EPA 353.2	11/07/11 13:33	CCB	
Nitrate/Nitrite as N [ECL-0010] ^	**120**		ug/L	1	25	100	NE	EPA 353.2	11/03/11 11:12	CCB	
Nitrite as N [14797-65-0] ^	3.0	U	ug/L	1	3.0	100	1000	EPA 353.2	11/02/11 07:35	CCB	
Sulfate as SO4 [14808-79-8] ^	**2500**	J	ug/L	1	20	5000	250000	EPA 300.0	11/08/11 06:21	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	11/07/11 12:03	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**68000**		ug/L	1	12000	15000	NE	EPA 310.2	11/02/11 08:51	CCB	

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Description: 9209-MW8
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-03
Sampled: 10/31/11 16:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iron, Ferrous [7439-89-6]	**130**		ug/L	1	30	50		SM18 3500-Fe D	11/04/11 14:45	NP	Q

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Description: 9209-MW8
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-03
Sampled: 10/31/11 16:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**273000**	D	ug/L	10	13000	25000	NE	RSK-175	11/03/11 19:24	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	11/03/11 14:03	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	11/03/11 14:03	JDB	
Methane [74-82-8]	**1750**	D	ug/L	100	72.0	100	NE	RSK-175	11/03/11 19:40	JDB	

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Description: 9209-MW8
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-03
Sampled: 10/31/11 16:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	**990**		ug/L	1	40	70	NE	VGC-13	11/04/11 18:03	JWJ	
Butyric Acid [107-92-6]	24	U	ug/L	1	24	70	NE	VGC-13	11/04/11 18:03	JWJ	
Hexanoic Acid [142-62-1]	87	U	ug/L	1	87	100		VGC-13	11/04/11 18:03	JWJ	
iso-Hexanoic Acid [646-07-1]	89	U	ug/L	1	89	100		VGC-13	11/04/11 18:03	JWJ	
iso-Pentanoic Acid [503-74-2]	62	U	ug/L	1	62	70		VGC-13	11/04/11 18:03	JWJ	
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid) [50-21-5/594-61-6]	62	U	ug/L	1	62	140	NE	VGC-13	11/04/11 18:03	JWJ	
Pentanoic Acid [109-52-4]	48	U	ug/L	1	48	70		VGC-13	11/04/11 18:03	JWJ	
Propionic Acid [79-09-4]	**330**		ug/L	1	57	70	NE	VGC-13	11/04/11 18:03	JWJ	
Pyruvic Acid [127-17-3]	61	U	ug/L	1	61	70	NE	VGC-13	11/04/11 18:03	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*21000*	*1*	*20000*	*106 %*	*80-124*	*1K04009*	*VGC-13*	*11/04/11 18:03*	*JWJ*	

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Description: 9209-MW8
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-03
Sampled: 10/31/11 16:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**840**	J	ug/L	1	280	1000	NE	SM18 5310B	11/07/11 15:53	JSW	

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

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Description: 9209-MW9 | **Lab Sample ID:** C113286-04 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 10:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/09/11 09:26	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 09:26	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
1,1-Dichloroethane [75-34-3] ^	**11**		ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 09:26	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 09:26	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 09:26	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 09:26	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 09:26	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 09:26	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 09:26	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
1,4-Dichlorobenzene [106-46-7] ^	**5.9**		ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 09:26	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 09:26	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 09:26	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 09:26	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 09:26	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 09:26	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 09:26	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 09:26	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 09:26	jkg	
Benzene [71-43-2] ^	**1.3**		ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 09:26	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 09:26	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 09:26	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 09:26	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 09:26	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 09:26	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 09:26	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 09:26	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	**11**		ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 09:26	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 09:26	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 09:26	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 09:26	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 09:26	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 09:26	jkg	

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Description: 9209-MW9 | **Lab Sample ID:** C113286-04 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 10:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 09:26	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 09:26	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 09:26	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 09:26	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 09:26	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 09:26	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 09:26	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 09:26	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 09:26	jkg	
Vinyl chloride [75-01-4] ^	**12**		ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 09:26	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 09:26	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*44*	*1*	*50.0*	*89 %*	*51-122*	*1K07015*	*EPA 8260B*	*11/09/11 09:26*	*jkg*	
Dibromofluoromethane	*41*	*1*	*50.0*	*82 %*	*68-117*	*1K07015*	*EPA 8260B*	*11/09/11 09:26*	*jkg*	
Toluene-d8	*43*	*1*	*50.0*	*86 %*	*67-127*	*1K07015*	*EPA 8260B*	*11/09/11 09:26*	*jkg*	

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Description: 9209-MW9
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-04
Sampled: 11/01/11 10:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 13:59	KER	

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Description: 9209-MW9 | **Lab Sample ID:** C113286-04 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 10:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/04/11 11:12	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:46	JDH	
Barium [7440-39-3] ^	**209**		ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:46	JDH	
Beryllium [7440-41-7] ^	**0.425**	J	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:46	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:46	JDH	
Chromium [7440-47-3] ^	**14.9**		ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:46	JDH	
Cobalt [7440-48-4] ^	**6.79**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:46	JDH	
Copper [7440-50-8] ^	**8.83**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:46	JDH	J
Lead [7439-92-1] ^	**6.37**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:46	JDH	
Nickel [7440-02-0] ^	**4.11**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:46	JDH	J
Selenium [7782-49-2] ^	**0.982**	J	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:12	VLO	
Silver [7440-22-4] ^	**4.52**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:46	JDH	
Thallium [7440-28-0] ^	**0.164**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:12	VLO	
Vanadium [7440-62-2] ^	**6.88**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:46	JDH	
Zinc [7440-66-6] ^	**69.2**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:46	JDH	

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Description: 9209-MW9 | **Lab Sample ID:** C113286-04 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 10:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	11/02/11 17:08	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**53000**		ug/L	1	10000	10000	NE	SM 5220D	11/04/11 15:13	JOC	
Chloride [16887-00-6] ^	**15000**	B	ug/L	1	47	5000	NE	EPA 300.0	11/08/11 06:39	CCB	J-01
Nitrate as N [14797-55-8] ^	**75**	J	ug/L	1	25	100	10000	EPA 353.2	11/07/11 13:33	CCB	
Nitrate/Nitrite as N [ECL-0010] ^	**75**	J	ug/L	1	25	100	NE	EPA 353.2	11/03/11 11:14	CCB	
Nitrite as N [14797-65-0] ^	3.0	U	ug/L	1	3.0	100	1000	EPA 353.2	11/02/11 07:38	CCB	
Sulfate as SO4 [14808-79-8] ^	**2900**	J	ug/L	1	20	5000	250000	EPA 300.0	11/08/11 06:39	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	11/07/11 12:03	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**210000**	D	ug/L	2	24000	30000	NE	EPA 310.2	11/02/11 08:52	CCB	

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Description: 9209-MW9
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-04
Sampled: 11/01/11 10:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iron, Ferrous [7439-89-6]	**1300**		ug/L	1	30	50		SM18 3500-Fe D	11/04/11 14:45	NP	Q

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Description: 9209-MW9
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-04
Sampled: 11/01/11 10:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**414000**	D	ug/L	10	13000	25000	NE	RSK-175	11/03/11 19:56	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	11/03/11 14:19	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	11/03/11 14:19	JDB	
Methane [74-82-8]	**1080**	D	ug/L	100	72.0	100	NE	RSK-175	11/03/11 20:12	JDB	

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Description: 9209-MW9
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-04
Sampled: 11/01/11 10:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	**860**		ug/L	1	40	70	NE	VGC-13	11/04/11 18:27	JWJ	
Butyric Acid [107-92-6]	24	U	ug/L	1	24	70	NE	VGC-13	11/04/11 18:27	JWJ	
Hexanoic Acid [142-62-1]	87	U	ug/L	1	87	100		VGC-13	11/04/11 18:27	JWJ	
iso-Hexanoic Acid [646-07-1]	89	U	ug/L	1	89	100		VGC-13	11/04/11 18:27	JWJ	
iso-Pentanoic Acid [503-74-2]	62	U	ug/L	1	62	70		VGC-13	11/04/11 18:27	JWJ	
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid) [50-21-5/594-61-6]	62	U	ug/L	1	62	140	NE	VGC-13	11/04/11 18:27	JWJ	
Pentanoic Acid [109-52-4]	48	U	ug/L	1	48	70		VGC-13	11/04/11 18:27	JWJ	
Propionic Acid [79-09-4]	**1500**		ug/L	1	57	70	NE	VGC-13	11/04/11 18:27	JWJ	
Pyruvic Acid [127-17-3]	61	U	ug/L	1	61	70	NE	VGC-13	11/04/11 18:27	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*21000*	*1*	*20000*	*105 %*	*80-124*	*1K04009*	*VGC-13*	*11/04/11 18:27*	*JWJ*	

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Description: 9209-MW9
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-04
Sampled: 11/01/11 10:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**4400**		ug/L	1	280	1000	NE	SM18 5310B	11/07/11 16:17	JSW	

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

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Description: 9209-MW10 | **Lab Sample ID:** C113286-05 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 10/31/11 14:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/09/11 09:56	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 09:56	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
1,1-Dichloroethane [75-34-3] ^	**4.9**	J	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 09:56	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 09:56	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 09:56	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 09:56	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 09:56	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 09:56	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 09:56	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
1,4-Dichlorobenzene [106-46-7] ^	**0.90**	J	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 09:56	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 09:56	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 09:56	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 09:56	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 09:56	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 09:56	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 09:56	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 09:56	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 09:56	jkg	
Benzene [71-43-2] ^	**3.2**		ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 09:56	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 09:56	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 09:56	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 09:56	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 09:56	jkg	
Chloroethane [75-00-3] ^	**1.4**	J	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 09:56	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 09:56	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 09:56	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	**42**		ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 09:56	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 09:56	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 09:56	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 09:56	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 09:56	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 09:56	jkg	

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Description: 9209-MW10 | **Lab Sample ID:** C113286-05 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 10/31/11 14:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 09:56	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 09:56	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 09:56	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 09:56	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 09:56	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 09:56	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Tetrachloroethene [127-18-4] ^	**2.9**		ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 09:56	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 09:56	jkg	
Trichloroethene [79-01-6] ^	**2.6**		ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 09:56	jkg	
Vinyl chloride [75-01-4] ^	**1.3**		ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 09:56	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 09:56	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*44*	*1*	*50.0*	*88 %*	*51-122*	*1K07015*	*EPA 8260B*	*11/09/11 09:56*	*jkg*	
Dibromofluoromethane	*41*	*1*	*50.0*	*82 %*	*68-117*	*1K07015*	*EPA 8260B*	*11/09/11 09:56*	*jkg*	
Toluene-d8	*42*	*1*	*50.0*	*85 %*	*67-127*	*1K07015*	*EPA 8260B*	*11/09/11 09:56*	*jkg*	

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Description: 9209-MW10
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-05
Sampled: 10/31/11 14:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 14:01	KER	

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Description: 9209-MW10 | **Lab Sample ID:** C113286-05 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 10/31/11 14:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/04/11 11:14	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:48	JDH	
Barium [7440-39-3] ^	**28.1**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:48	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:48	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:48	JDH	
Chromium [7440-47-3] ^	**1.72**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:48	JDH	
Cobalt [7440-48-4] ^	**1.61**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:48	JDH	
Copper [7440-50-8] ^	**3.56**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:48	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:48	JDH	
Nickel [7440-02-0] ^	**3.00**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:48	JDH	J
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:14	VLO	
Silver [7440-22-4] ^	**1.94**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:48	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:14	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:48	JDH	
Zinc [7440-66-6] ^	**12.8**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:48	JDH	

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Description: 9209-MW10 | **Lab Sample ID:** C113286-05 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 10/31/11 14:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	11/01/11 17:23	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**15000**		ug/L	1	10000	10000	NE	SM 5220D	11/04/11 15:13	JOC	
Chloride [16887-00-6] ^	**3600**	JB	ug/L	1	47	5000	NE	EPA 300.0	11/08/11 06:56	CCB	J-01
Nitrate as N [14797-55-8] ^	25	U	ug/L	1	25	100	10000	EPA 353.2	11/07/11 13:33	CCB	
Nitrate/Nitrite as N [ECL-0010] ^	25	U	ug/L	1	25	100	NE	EPA 353.2	11/03/11 11:16	CCB	
Nitrite as N [14797-65-0] ^	3.0	U	ug/L	1	3.0	100	1000	EPA 353.2	11/02/11 07:39	CCB	
Sulfate as SO4 [14808-79-8] ^	**2400**	J	ug/L	1	20	5000	250000	EPA 300.0	11/08/11 06:56	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	11/07/11 12:03	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**130000**		ug/L	1	12000	15000	NE	EPA 310.2	11/02/11 08:53	CCB	

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Description: 9209-MW10
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-05
Sampled: 10/31/11 14:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iron, Ferrous [7439-89-6]	**470**		ug/L	1	30	50		SM18 3500-Fe D	11/04/11 14:45	NP	Q

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Description: 9209-MW10
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-05
Sampled: 10/31/11 14:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**777000**	D	ug/L	10	13000	25000	NE	RSK-175	11/03/11 20:28	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	11/03/11 14:35	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	11/03/11 14:35	JDB	
Methane [74-82-8]	**9630**	D	ug/L	500	360	500	NE	RSK-175	11/03/11 20:44	JDB	

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Description: 9209-MW10
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-05
Sampled: 10/31/11 14:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	**990**		ug/L	1	40	70	NE	VGC-13	11/04/11 18:50	JWJ	
Butyric Acid [107-92-6]	24	U	ug/L	1	24	70	NE	VGC-13	11/04/11 18:50	JWJ	
Hexanoic Acid [142-62-1]	87	U	ug/L	1	87	100		VGC-13	11/04/11 18:50	JWJ	
iso-Hexanoic Acid [646-07-1]	89	U	ug/L	1	89	100		VGC-13	11/04/11 18:50	JWJ	
iso-Pentanoic Acid [503-74-2]	62	U	ug/L	1	62	70		VGC-13	11/04/11 18:50	JWJ	
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid) [50-21-5/594-61-6]	**120**	J	ug/L	1	62	140	NE	VGC-13	11/04/11 18:50	JWJ	
Pentanoic Acid [109-52-4]	48	U	ug/L	1	48	70		VGC-13	11/04/11 18:50	JWJ	
Propionic Acid [79-09-4]	**220**		ug/L	1	57	70	NE	VGC-13	11/04/11 18:50	JWJ	
Pyruvic Acid [127-17-3]	61	U	ug/L	1	61	70	NE	VGC-13	11/04/11 18:50	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*21000*	*1*	*20000*	*105 %*	*80-124*	*1K04009*	*VGC-13*	*11/04/11 18:50*	*JWJ*	

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Description: 9209-MW10
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-05
Sampled: 10/31/11 14:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**1100**		ug/L	1	280	1000	NE	SM18 5310B	11/07/11 16:40	JSW	

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

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Description: 9209-MW11 | **Lab Sample ID:** C113286-06 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 10:50 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/09/11 10:25	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 10:25	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 10:25	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 10:25	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 10:25	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 10:25	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 10:25	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 10:25	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 10:25	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 10:25	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 10:25	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 10:25	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 10:25	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 10:25	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 10:25	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 10:25	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 10:25	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 10:25	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 10:25	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 10:25	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 10:25	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 10:25	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 10:25	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 10:25	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 10:25	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 10:25	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 10:25	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 10:25	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 10:25	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 10:25	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 10:25	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 10:25	jkg	

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Description: 9209-MW11 | **Lab Sample ID:** C113286-06 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 10:50 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 10:25	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 10:25	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 10:25	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 10:25	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 10:25	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 10:25	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 10:25	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 10:25	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 10:25	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 10:25	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 10:25	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*44*	*1*	*50.0*	*87 %*	*51-122*	*1K07015*	*EPA 8260B*	*11/09/11 10:25*	*jkg*	
Dibromofluoromethane	*41*	*1*	*50.0*	*83 %*	*68-117*	*1K07015*	*EPA 8260B*	*11/09/11 10:25*	*jkg*	
Toluene-d8	*43*	*1*	*50.0*	*87 %*	*67-127*	*1K07015*	*EPA 8260B*	*11/09/11 10:25*	*jkg*	

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Description: 9209-MW11
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-06
Sampled: 11/01/11 10:50
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 14:03	KER	

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Description: 9209-MW11 | **Lab Sample ID:** C113286-06 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 10:50 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/04/11 11:16	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:50	JDH	
Barium [7440-39-3] ^	**80.7**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:50	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:50	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:50	JDH	
Chromium [7440-47-3] ^	**1.90**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:50	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:50	JDH	
Copper [7440-50-8] ^	**6.33**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:50	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:50	JDH	
Nickel [7440-02-0] ^	**2.14**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:50	JDH	J
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:16	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:50	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:16	VLO	
Vanadium [7440-62-2] ^	**3.61**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:50	JDH	
Zinc [7440-66-6] ^	**19.6**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:50	JDH	

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Description: 9209-MW11 | **Lab Sample ID:** C113286-06 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 10:50 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	**3200**		ug/L	1	2000	2000	NE	SM 5210B	11/02/11 18:58	JOC	
Chemical Oxygen Demand [ECL-0035] ^	10000	U	ug/L	1	10000	10000	NE	SM 5220D	11/04/11 15:13	JOC	
Chloride [16887-00-6] ^	**4100**	JB	ug/L	1	47	5000	NE	EPA 300.0	11/08/11 07:14	CCB	J-01
Nitrate as N [14797-55-8] ^	**710**	J	ug/L	1	25	100	10000	EPA 353.2	11/07/11 13:33	CCB	
Nitrate/Nitrite as N [ECL-0010] ^	**710**		ug/L	1	25	100	NE	EPA 353.2	11/03/11 11:18	CCB	
Nitrite as N [14797-65-0] ^	3.0	U	ug/L	1	3.0	100	1000	EPA 353.2	11/02/11 07:40	CCB	
Sulfate as SO4 [14808-79-8] ^	**2200**	J	ug/L	1	20	5000	250000	EPA 300.0	11/08/11 07:14	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	11/07/11 12:03	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**25000**		ug/L	1	12000	15000	NE	EPA 310.2	11/02/11 08:53	CCB	

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Description: 9209-MW11
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-06
Sampled: 11/01/11 10:50
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iron, Ferrous [7439-89-6]	30	U	ug/L	1	30	50		SM18 3500-Fe D	11/04/11 14:45	NP	Q

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Description: 9209-MW11
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-06
Sampled: 11/01/11 10:50
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**164000**		ug/L	1	1300	2500	NE	RSK-175	11/03/11 14:51	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	11/03/11 14:51	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	11/03/11 14:51	JDB	
Methane [74-82-8]	0.720	U	ug/L	1	0.720	1.00	NE	RSK-175	11/03/11 14:51	JDB	

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Description: 9209-MW11
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-06
Sampled: 11/01/11 10:50
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	**830**		ug/L	1	40	70	NE	VGC-13	11/04/11 19:14	JWJ	
Butyric Acid [107-92-6]	24	U	ug/L	1	24	70	NE	VGC-13	11/04/11 19:14	JWJ	
Hexanoic Acid [142-62-1]	87	U	ug/L	1	87	100		VGC-13	11/04/11 19:14	JWJ	
iso-Hexanoic Acid [646-07-1]	89	U	ug/L	1	89	100		VGC-13	11/04/11 19:14	JWJ	
iso-Pentanoic Acid [503-74-2]	62	U	ug/L	1	62	70		VGC-13	11/04/11 19:14	JWJ	
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid) [50-21-5/594-61-6]	**77**	J	ug/L	1	62	140	NE	VGC-13	11/04/11 19:14	JWJ	
Pentanoic Acid [109-52-4]	48	U	ug/L	1	48	70		VGC-13	11/04/11 19:14	JWJ	
Propionic Acid [79-09-4]	**160**		ug/L	1	57	70	NE	VGC-13	11/04/11 19:14	JWJ	
Pyruvic Acid [127-17-3]	61	U	ug/L	1	61	70	NE	VGC-13	11/04/11 19:14	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*21000*	*1*	*20000*	*106 %*	*80-124*	*1K04009*	*VGC-13*	*11/04/11 19:14*	*JWJ*	

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Description: 9209-MW11
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-06
Sampled: 11/01/11 10:50
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**350**	J	ug/L	1	280	1000	NE	SM18 5310B	11/07/11 17:28	JSW	

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Description: 9209-MW22 | **Lab Sample ID:** C113286-07 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 07:20 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/09/11 10:55	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 10:55	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 10:55	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 10:55	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 10:55	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 10:55	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 10:55	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 10:55	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 10:55	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 10:55	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 10:55	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 10:55	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 10:55	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 10:55	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 10:55	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 10:55	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 10:55	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 10:55	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 10:55	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 10:55	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 10:55	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 10:55	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 10:55	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 10:55	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 10:55	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 10:55	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 10:55	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 10:55	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 10:55	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 10:55	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 10:55	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 10:55	jkg	

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Description: 9209-MW22 | **Lab Sample ID:** C113286-07 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 07:20 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 10:55	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 10:55	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 10:55	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 10:55	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 10:55	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 10:55	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 10:55	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 10:55	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 10:55	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 10:55	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 10:55	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*44*	*1*	*50.0*	*89 %*	*51-122*	*1K07015*	*EPA 8260B*	*11/09/11 10:55*	*jkg*	
Dibromofluoromethane	*42*	*1*	*50.0*	*83 %*	*68-117*	*1K07015*	*EPA 8260B*	*11/09/11 10:55*	*jkg*	
Toluene-d8	*43*	*1*	*50.0*	*86 %*	*67-127*	*1K07015*	*EPA 8260B*	*11/09/11 10:55*	*jkg*	

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Description: 9209-MW22
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-07
Sampled: 11/01/11 07:20
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 14:05	KER	

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Description: 9209-MW22 | **Lab Sample ID:** C113286-07 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 07:20 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/04/11 11:17	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:52	JDH	
Barium [7440-39-3] ^	**41.2**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:52	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:52	JDH	
Cadmium [7440-43-9] ^	**7.96**		ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:52	JDH	
Chromium [7440-47-3] ^	**4.25**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:52	JDH	
Cobalt [7440-48-4] ^	**46.7**		ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:52	JDH	
Copper [7440-50-8] ^	**5.24**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:52	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:52	JDH	
Nickel [7440-02-0] ^	**17.2**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:52	JDH	J-01
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:17	VLO	
Silver [7440-22-4] ^	**2.87**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:52	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:17	VLO	
Vanadium [7440-62-2] ^	**3.22**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:52	JDH	
Zinc [7440-66-6] ^	**43.9**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:52	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: 9209-MW30 | **Lab Sample ID:** C113286-08 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 11:50 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/10/11 02:36	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/10/11 02:36	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/10/11 02:36	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/10/11 02:36	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/10/11 02:36	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 02:36	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/10/11 02:36	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/10/11 02:36	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/10/11 02:36	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/10/11 02:36	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/10/11 02:36	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/10/11 02:36	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/10/11 02:36	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/10/11 02:36	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/10/11 02:36	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/10/11 02:36	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/10/11 02:36	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/10/11 02:36	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/10/11 02:36	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/10/11 02:36	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 02:36	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/10/11 02:36	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/10/11 02:36	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/10/11 02:36	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/10/11 02:36	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/10/11 02:36	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/10/11 02:36	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/10/11 02:36	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/10/11 02:36	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/10/11 02:36	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/10/11 02:36	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/10/11 02:36	JKG	

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Description: 9209-MW30 | **Lab Sample ID:** C113286-08 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 11:50 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/10/11 02:36	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/10/11 02:36	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/10/11 02:36	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/10/11 02:36	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/10/11 02:36	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/10/11 02:36	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/10/11 02:36	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/10/11 02:36	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/10/11 02:36	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/10/11 02:36	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/10/11 02:36	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*46*	*1*	*50.0*	*93 %*	*51-122*	*1K09028*	*EPA 8260B*	*11/10/11 02:36*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*97 %*	*68-117*	*1K09028*	*EPA 8260B*	*11/10/11 02:36*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*97 %*	*67-127*	*1K09028*	*EPA 8260B*	*11/10/11 02:36*	*JKG*	

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Description:	9209-MW30	**Lab Sample ID:**	C113286-08	**Received:**	11/01/11 13:22
Matrix:	Ground Water	**Sampled:**	11/01/11 11:50	**Work Order:**	C113286
Project:	North Wake Unlined Landfill	**Sampled By:**	Aaron Weispfenning		

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	11/14/11 14:06	KER	

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Description: 9209-MW30 | **Lab Sample ID:** C113286-08 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 11:50 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/04/11 11:19	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:54	JDH	
Barium [7440-39-3] ^	**147**		ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:54	JDH	
Beryllium [7440-41-7] ^	**0.302**	J	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:54	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:54	JDH	
Chromium [7440-47-3] ^	**47.5**		ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:54	JDH	
Cobalt [7440-48-4] ^	**8.80**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:54	JDH	
Copper [7440-50-8] ^	**69.8**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:54	JDH	QB-01
Lead [7439-92-1] ^	**3.90**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:54	JDH	
Nickel [7440-02-0] ^	**22.2**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:54	JDH	QB-01
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:19	VLO	
Silver [7440-22-4] ^	**3.51**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:54	JDH	
Thallium [7440-28-0] ^	**0.196**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:19	VLO	
Vanadium [7440-62-2] ^	**44.0**		ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:54	JDH	
Zinc [7440-66-6] ^	**60.8**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:54	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: 9209-MW31 | **Lab Sample ID:** C113286-09 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 12:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/10/11 03:05	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/10/11 03:05	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/10/11 03:05	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/10/11 03:05	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/10/11 03:05	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 03:05	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/10/11 03:05	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/10/11 03:05	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/10/11 03:05	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/10/11 03:05	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/10/11 03:05	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/10/11 03:05	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/10/11 03:05	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/10/11 03:05	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/10/11 03:05	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/10/11 03:05	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/10/11 03:05	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/10/11 03:05	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/10/11 03:05	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/10/11 03:05	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 03:05	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/10/11 03:05	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/10/11 03:05	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/10/11 03:05	JKG	
Chloroform [67-66-3] ^	**2.1**	J	ug/L	1	0.70	1.0	5	EPA 8260B	11/10/11 03:05	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/10/11 03:05	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/10/11 03:05	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/10/11 03:05	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/10/11 03:05	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/10/11 03:05	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/10/11 03:05	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/10/11 03:05	JKG	

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Description: 9209-MW31 | **Lab Sample ID:** C113286-09 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 12:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/10/11 03:05	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/10/11 03:05	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/10/11 03:05	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/10/11 03:05	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/10/11 03:05	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/10/11 03:05	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/10/11 03:05	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/10/11 03:05	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/10/11 03:05	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/10/11 03:05	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/10/11 03:05	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1K09028*	*EPA 8260B*	*11/10/11 03:05*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*99 %*	*68-117*	*1K09028*	*EPA 8260B*	*11/10/11 03:05*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*1K09028*	*EPA 8260B*	*11/10/11 03:05*	*JKG*	

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Description: 9209-MW31
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-09
Sampled: 11/01/11 12:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 14:42	KER	

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Description: 9209-MW31 | **Lab Sample ID:** C113286-09 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 12:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/04/11 11:29	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:56	JDH	
Barium [7440-39-3] ^	**84.2**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:56	JDH	
Beryllium [7440-41-7] ^	**0.151**	J	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:56	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:56	JDH	
Chromium [7440-47-3] ^	**33.3**		ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:56	JDH	
Cobalt [7440-48-4] ^	**2.57**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:56	JDH	
Copper [7440-50-8] ^	**23.9**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:56	JDH	J-01
Lead [7439-92-1] ^	**7.27**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:56	JDH	
Nickel [7440-02-0] ^	**13.7**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:56	JDH	J-01
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:29	VLO	
Silver [7440-22-4] ^	**2.66**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:56	JDH	
Thallium [7440-28-0] ^	**0.129**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:29	VLO	
Vanadium [7440-62-2] ^	**26.2**		ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:56	JDH	
Zinc [7440-66-6] ^	**57.9**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:56	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: 9209-MW31d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-10
Sampled: 10/31/11 09:40
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/10/11 03:34	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/10/11 03:34	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/10/11 03:34	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/10/11 03:34	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/10/11 03:34	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 03:34	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/10/11 03:34	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/10/11 03:34	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/10/11 03:34	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/10/11 03:34	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/10/11 03:34	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/10/11 03:34	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/10/11 03:34	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/10/11 03:34	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/10/11 03:34	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/10/11 03:34	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/10/11 03:34	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/10/11 03:34	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/10/11 03:34	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/10/11 03:34	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 03:34	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/10/11 03:34	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/10/11 03:34	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/10/11 03:34	JKG	
Chloroform [67-66-3] ^	**23**		ug/L	1	0.70	1.0	5	EPA 8260B	11/10/11 03:34	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/10/11 03:34	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/10/11 03:34	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/10/11 03:34	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/10/11 03:34	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/10/11 03:34	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/10/11 03:34	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/10/11 03:34	JKG	

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Description: 9209-MW31d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-10
Sampled: 10/31/11 09:40
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/10/11 03:34	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/10/11 03:34	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/10/11 03:34	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/10/11 03:34	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/10/11 03:34	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/10/11 03:34	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/10/11 03:34	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/10/11 03:34	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/10/11 03:34	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/10/11 03:34	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/10/11 03:34	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*51-122*	*1K09028*	*EPA 8260B*	*11/10/11 03:34*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*98 %*	*68-117*	*1K09028*	*EPA 8260B*	*11/10/11 03:34*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*98 %*	*67-127*	*1K09028*	*EPA 8260B*	*11/10/11 03:34*	*JKG*	

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Description: 9209-MW31d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-10
Sampled: 10/31/11 09:40
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 14:10	KER	

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Description: 9209-MW31d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-10
Sampled: 10/31/11 09:40
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	**1.21**	J	ug/L	1	0.220	2.00	6	EPA 6020A	11/04/11 11:31	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 11:58	JDH	
Barium [7440-39-3] ^	**21.2**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 11:58	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 11:58	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 11:58	JDH	
Chromium [7440-47-3] ^	**13.4**		ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 11:58	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 11:58	JDH	
Copper [7440-50-8] ^	**34.2**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 11:58	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:58	JDH	
Nickel [7440-02-0] ^	**4.99**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 11:58	JDH	J
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:31	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 11:58	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:31	VLO	
Vanadium [7440-62-2] ^	**10.2**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 11:58	JDH	
Zinc [7440-66-6] ^	**69.6**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 11:58	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: 9209-MW32 | **Lab Sample ID:** C113286-11 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 11:40 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/10/11 04:02	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/10/11 04:02	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/10/11 04:02	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/10/11 04:02	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/10/11 04:02	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 04:02	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/10/11 04:02	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/10/11 04:02	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/10/11 04:02	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/10/11 04:02	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/10/11 04:02	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/10/11 04:02	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/10/11 04:02	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/10/11 04:02	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/10/11 04:02	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/10/11 04:02	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/10/11 04:02	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/10/11 04:02	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/10/11 04:02	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/10/11 04:02	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 04:02	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/10/11 04:02	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/10/11 04:02	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/10/11 04:02	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/10/11 04:02	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/10/11 04:02	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/10/11 04:02	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/10/11 04:02	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/10/11 04:02	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/10/11 04:02	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/10/11 04:02	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/10/11 04:02	JKG	

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Description: 9209-MW32 | **Lab Sample ID:** C113286-11 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 11:40 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/10/11 04:02	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/10/11 04:02	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/10/11 04:02	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/10/11 04:02	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/10/11 04:02	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/10/11 04:02	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/10/11 04:02	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/10/11 04:02	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/10/11 04:02	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/10/11 04:02	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/10/11 04:02	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*95 %*	*51-122*	*1K09028*	*EPA 8260B*	*11/10/11 04:02*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*97 %*	*68-117*	*1K09028*	*EPA 8260B*	*11/10/11 04:02*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*99 %*	*67-127*	*1K09028*	*EPA 8260B*	*11/10/11 04:02*	*JKG*	

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Description: 9209-MW32
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-11
Sampled: 11/01/11 11:40
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 14:12	KER	

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Description: 9209-MW32 | **Lab Sample ID:** C113286-11 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 11:40 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/04/11 11:33	VLO	
Arsenic [7440-38-2] ^	**5.75**	J	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 12:06	JDH	
Barium [7440-39-3] ^	**14.2**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 12:06	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 12:06	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 12:06	JDH	
Chromium [7440-47-3] ^	**3.41**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 12:06	JDH	
Cobalt [7440-48-4] ^	**1.47**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 12:06	JDH	
Copper [7440-50-8] ^	**10.0**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 12:06	JDH	J-01
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 12:06	JDH	
Nickel [7440-02-0] ^	**3.39**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 12:06	JDH	J
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:33	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 12:06	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:33	VLO	
Vanadium [7440-62-2] ^	**2.96**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 12:06	JDH	
Zinc [7440-66-6] ^	**27.7**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 12:06	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: 9209-TB1ad
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-12
Sampled: 10/31/11 10:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/08/11 03:04	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/08/11 03:04	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/08/11 03:04	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/08/11 03:04	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/08/11 03:04	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/08/11 03:04	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/08/11 03:04	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/08/11 03:04	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/08/11 03:04	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/08/11 03:04	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/08/11 03:04	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/08/11 03:04	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/08/11 03:04	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/08/11 03:04	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/08/11 03:04	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/08/11 03:04	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/08/11 03:04	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/08/11 03:04	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/08/11 03:04	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/08/11 03:04	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/08/11 03:04	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/08/11 03:04	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/08/11 03:04	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/08/11 03:04	JKG	
Chloroform [67-66-3] ^	**31**		ug/L	1	0.70	1.0	5	EPA 8260B	11/08/11 03:04	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/08/11 03:04	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/08/11 03:04	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/08/11 03:04	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/08/11 03:04	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/08/11 03:04	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/08/11 03:04	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/08/11 03:04	JKG	

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Description: 9209-TB1ad
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-12
Sampled: 10/31/11 10:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/08/11 03:04	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/08/11 03:04	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/08/11 03:04	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/08/11 03:04	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/08/11 03:04	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/08/11 03:04	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/08/11 03:04	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/08/11 03:04	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/08/11 03:04	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/08/11 03:04	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/08/11 03:04	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*46*	*1*	*50.0*	*93 %*	*51-122*	*1K07016*	*EPA 8260B*	*11/08/11 03:04*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*99 %*	*68-117*	*1K07016*	*EPA 8260B*	*11/08/11 03:04*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*97 %*	*67-127*	*1K07016*	*EPA 8260B*	*11/08/11 03:04*	*JKG*	

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Description: 9209-TB1ad
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-12
Sampled: 10/31/11 10:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 14:14	KER	

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Description: 9209-TB1ad
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-12
Sampled: 10/31/11 10:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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] ^	**0.865**	J	ug/L	1	0.220	2.00	6	EPA 6020A	11/04/11 11:34	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 12:07	JDH	
Barium [7440-39-3] ^	**14.2**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 12:07	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 12:07	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 12:07	JDH	
Chromium [7440-47-3] ^	**22.9**		ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 12:07	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 12:07	JDH	
Copper [7440-50-8] ^	**4.52**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 12:07	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 12:07	JDH	
Nickel [7440-02-0] ^	**6.60**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 12:07	JDH	J
Selenium [7782-49-2] ^	**1.13**	J	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:34	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 12:07	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:34	VLO	
Vanadium [7440-62-2] ^	**7.66**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 12:07	JDH	
Zinc [7440-66-6] ^	**13.2**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 12:07	JDH	

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

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Description: 9209-MW36 | **Lab Sample ID:** C113286-13 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 09:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/08/11 03:33	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/08/11 03:33	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
1,1-Dichloroethane [75-34-3] ^	**8.9**		ug/L	1	0.080	1.0	5	EPA 8260B	11/08/11 03:33	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/08/11 03:33	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/08/11 03:33	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/08/11 03:33	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/08/11 03:33	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/08/11 03:33	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/08/11 03:33	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**0.86**	J	ug/L	1	0.79	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/08/11 03:33	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/08/11 03:33	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/08/11 03:33	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/08/11 03:33	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/08/11 03:33	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/08/11 03:33	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/08/11 03:33	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/08/11 03:33	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/08/11 03:33	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/08/11 03:33	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/08/11 03:33	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/08/11 03:33	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/08/11 03:33	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/08/11 03:33	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/08/11 03:33	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/08/11 03:33	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/08/11 03:33	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**4.3**	J	ug/L	1	0.72	1.0	5	EPA 8260B	11/08/11 03:33	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/08/11 03:33	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/08/11 03:33	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/08/11 03:33	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/08/11 03:33	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/08/11 03:33	JKG	

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Description: 9209-MW36 | **Lab Sample ID:** C113286-13 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 09:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/08/11 03:33	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/08/11 03:33	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/08/11 03:33	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/08/11 03:33	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/08/11 03:33	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/08/11 03:33	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/08/11 03:33	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/08/11 03:33	JKG	
Trichloroethene [79-01-6] ^	**1.1**		ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/08/11 03:33	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/08/11 03:33	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/08/11 03:33	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*93 %*	*51-122*	*1K07016*	*EPA 8260B*	*11/08/11 03:33*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*97 %*	*68-117*	*1K07016*	*EPA 8260B*	*11/08/11 03:33*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*98 %*	*67-127*	*1K07016*	*EPA 8260B*	*11/08/11 03:33*	*JKG*	

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Description: 9209-MW36
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-13
Sampled: 11/01/11 09:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 14:16	KER	

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Description: 9209-MW36 | **Lab Sample ID:** C113286-13 | **Received:** 11/01/11 13:22

Matrix: Ground Water | **Sampled:** 11/01/11 09:00 | **Work Order:** C113286

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/04/11 11:36	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 12:09	JDH	
Barium [7440-39-3] ^	**74.6**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 12:09	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 12:09	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 12:09	JDH	
Chromium [7440-47-3] ^	**12.1**		ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 12:09	JDH	
Cobalt [7440-48-4] ^	**3.63**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 12:09	JDH	
Copper [7440-50-8] ^	**14.7**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 12:09	JDH	J-01
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 12:09	JDH	
Nickel [7440-02-0] ^	**7.15**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 12:09	JDH	J
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:36	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 12:09	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:36	VLO	
Vanadium [7440-62-2] ^	**14.8**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 12:09	JDH	
Zinc [7440-66-6] ^	**31.8**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 12:09	JDH	

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Description: 9209-MW36
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-13
Sampled: 11/01/11 09:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	2000	U	ug/L	1	2000	2000	NE	SM 5210B	11/02/11 17:08	JOC	
Chemical Oxygen Demand [ECL-0035] ^	**36000**		ug/L	1	10000	10000	NE	SM 5220D	11/04/11 15:13	JOC	
Chloride [16887-00-6] ^	**6400**	B	ug/L	1	47	5000	NE	EPA 300.0	11/08/11 08:06	CCB	J-01
Nitrate as N [14797-55-8] ^	**510**	J	ug/L	1	25	100	10000	EPA 353.2	11/07/11 13:33	CCB	
Nitrate/Nitrite as N [ECL-0010] ^	**510**		ug/L	1	25	100	NE	EPA 353.2	11/03/11 11:25	CCB	
Nitrite as N [14797-65-0] ^	3.0	U	ug/L	1	3.0	100	1000	EPA 353.2	11/02/11 07:40	CCB	
Sulfate as SO4 [14808-79-8] ^	**4400**	J	ug/L	1	20	5000	250000	EPA 300.0	11/08/11 08:06	CCB	
Sulfide [18496-25-8] ^	10	U	ug/L	1	10	100	1000	SM18 4500-S D	11/07/11 12:03	JOC	
Total Alkalinity as CaCO3 [471-34-1] ^	**62000**		ug/L	1	12000	15000	NE	EPA 310.2	11/02/11 08:54	CCB	

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Description: 9209-MW36
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-13
Sampled: 11/01/11 09:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iron, Ferrous [7439-89-6]	**52**		ug/L	1	30	50		SM18 3500-Fe D	11/04/11 14:45	NP	Q

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Description: 9209-MW36
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-13
Sampled: 11/01/11 09:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Dissolved Gases by GC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Carbon dioxide [124-38-9]	**242000**	D	ug/L	10	13000	25000	NE	RSK-175	11/03/11 21:00	JDB	
Ethane [74-84-0]	1.00	U	ug/L	1	1.00	2.00	NE	RSK-175	11/03/11 15:07	JDB	
Ethene [74-85-1]	2.30	U	ug/L	1	2.30	3.00	NE	RSK-175	11/03/11 15:07	JDB	
Methane [74-82-8]	**618**	D	ug/L	10	7.20	10.0	NE	RSK-175	11/03/11 21:00	JDB	

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Description: 9209-MW36
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-13
Sampled: 11/01/11 09:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Fatty Acids by HPLC

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Acetic Acid [64-19-7]	**990**		ug/L	1	40	70	NE	VGC-13	11/04/11 19:37	JWJ	
Butyric Acid [107-92-6]	24	U	ug/L	1	24	70	NE	VGC-13	11/04/11 19:37	JWJ	
Hexanoic Acid [142-62-1]	87	U	ug/L	1	87	100		VGC-13	11/04/11 19:37	JWJ	
iso-Hexanoic Acid [646-07-1]	89	U	ug/L	1	89	100		VGC-13	11/04/11 19:37	JWJ	
iso-Pentanoic Acid [503-74-2]	62	U	ug/L	1	62	70		VGC-13	11/04/11 19:37	JWJ	
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid) [50-21-5/594-61-6]	62	U	ug/L	1	62	140	NE	VGC-13	11/04/11 19:37	JWJ	
Pentanoic Acid [109-52-4]	48	U	ug/L	1	48	70		VGC-13	11/04/11 19:37	JWJ	
Propionic Acid [79-09-4]	**210**		ug/L	1	57	70	NE	VGC-13	11/04/11 19:37	JWJ	
Pyruvic Acid [127-17-3]	61	U	ug/L	1	61	70	NE	VGC-13	11/04/11 19:37	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Trimethylacetic acid	*21000*	*1*	*20000*	*105 %*	*80-124*	*1K04009*	*VGC-13*	*11/04/11 19:37*	*JWJ*	

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Description:	9209-MW36	**Lab Sample ID:**	C113286-13	**Received:**	11/01/11 13:22
Matrix:	Ground Water	**Sampled:**	11/01/11 09:00	**Work Order:**	C113286
Project:	North Wake Unlined Landfill	**Sampled By:**	Aaron Weispfenning		

Classical Chemistry Parameters

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Total Organic Carbon [ECL-0165] ^	**800**	J	ug/L	1	280	1000	NE	SM18 5310B	11/07/11 17:51	JSW	

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Description: 9209-DUP
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-14
Sampled: 11/01/11 07:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/08/11 04:02	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/08/11 04:02	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
1,1-Dichloroethane [75-34-3] ^	**10**		ug/L	1	0.080	1.0	5	EPA 8260B	11/08/11 04:02	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/08/11 04:02	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/08/11 04:02	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/08/11 04:02	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/08/11 04:02	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/08/11 04:02	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/08/11 04:02	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**5.9**		ug/L	1	0.79	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/08/11 04:02	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/08/11 04:02	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/08/11 04:02	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/08/11 04:02	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/08/11 04:02	JKG	
Acetone [67-64-1] ^	**6.1**	J	ug/L	1	1.2	5.0	100	EPA 8260B	11/08/11 04:02	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/08/11 04:02	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/08/11 04:02	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/08/11 04:02	JKG	
Benzene [71-43-2] ^	**1.0**		ug/L	1	0.68	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/08/11 04:02	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/08/11 04:02	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/08/11 04:02	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/08/11 04:02	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/08/11 04:02	JKG	
Chloroethane [75-00-3] ^	**1.3**	J	ug/L	1	0.75	1.0	10	EPA 8260B	11/08/11 04:02	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/08/11 04:02	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/08/11 04:02	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**12**		ug/L	1	0.72	1.0	5	EPA 8260B	11/08/11 04:02	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/08/11 04:02	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/08/11 04:02	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/08/11 04:02	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/08/11 04:02	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/08/11 04:02	JKG	

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Description: 9209-DUP
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-14
Sampled: 11/01/11 07:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/08/11 04:02	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/08/11 04:02	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/08/11 04:02	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/08/11 04:02	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/08/11 04:02	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/08/11 04:02	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/08/11 04:02	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/08/11 04:02	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/08/11 04:02	JKG	
Vinyl chloride [75-01-4] ^	**10**		ug/L	1	0.60	1.0	1	EPA 8260B	11/08/11 04:02	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/08/11 04:02	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*46*	*1*	*50.0*	*92 %*	*51-122*	*1K07016*	*EPA 8260B*	*11/08/11 04:02*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*97 %*	*68-117*	*1K07016*	*EPA 8260B*	*11/08/11 04:02*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*96 %*	*67-127*	*1K07016*	*EPA 8260B*	*11/08/11 04:02*	*JKG*	

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Description: 9209-DUP
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-14
Sampled: 11/01/11 07:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/14/11 14:23	KER	

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Description: 9209-DUP
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-14
Sampled: 11/01/11 07:00
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113286

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	11/04/11 11:38	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 12:11	JDH	
Barium [7440-39-3] ^	**191**		ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 12:11	JDH	
Beryllium [7440-41-7] ^	**0.256**	J	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 12:11	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 12:11	JDH	
Chromium [7440-47-3] ^	**10.4**		ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 12:11	JDH	
Cobalt [7440-48-4] ^	**5.81**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 12:11	JDH	
Copper [7440-50-8] ^	**5.32**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 12:11	JDH	J
Lead [7439-92-1] ^	**3.99**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 12:11	JDH	
Nickel [7440-02-0] ^	**3.08**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 12:11	JDH	J
Selenium [7782-49-2] ^	**0.874**	J	ug/L	1	0.830	1.00	10	EPA 6020A	11/04/11 11:38	VLO	
Silver [7440-22-4] ^	**3.66**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 12:11	JDH	
Thallium [7440-28-0] ^	**0.127**	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/04/11 11:38	VLO	
Vanadium [7440-62-2] ^	**3.26**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 12:11	JDH	
Zinc [7440-66-6] ^	**50.1**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 12:11	JDH	

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

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Description: 9209-TripBlank
Matrix: Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-15
Sampled: 10/31/11 07:00
Sampled By: ENCO

Received: 11/01/11 13:22
Work Order: C113286

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	11/08/11 04:30	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/08/11 04:30	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/08/11 04:30	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/08/11 04:30	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/08/11 04:30	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/08/11 04:30	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/08/11 04:30	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/08/11 04:30	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/08/11 04:30	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/08/11 04:30	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/08/11 04:30	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/08/11 04:30	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/08/11 04:30	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/08/11 04:30	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/08/11 04:30	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/08/11 04:30	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/08/11 04:30	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/08/11 04:30	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/08/11 04:30	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/08/11 04:30	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/08/11 04:30	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/08/11 04:30	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/08/11 04:30	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/08/11 04:30	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/08/11 04:30	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/08/11 04:30	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/08/11 04:30	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/08/11 04:30	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/08/11 04:30	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/08/11 04:30	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/08/11 04:30	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/08/11 04:30	JKG	

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Description: 9209-TripBlank
Matrix: Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113286-15
Sampled: 10/31/11 07:00
Sampled By: ENCO

Received: 11/01/11 13:22
Work Order: C113286

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/08/11 04:30	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/08/11 04:30	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/08/11 04:30	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/08/11 04:30	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/08/11 04:30	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/08/11 04:30	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/08/11 04:30	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/08/11 04:30	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/08/11 04:30	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/08/11 04:30	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/08/11 04:30	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1K07016*	*EPA 8260B*	*11/08/11 04:30*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*68-117*	*1K07016*	*EPA 8260B*	*11/08/11 04:30*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*101 %*	*67-127*	*1K07016*	*EPA 8260B*	*11/08/11 04:30*	*JKG*	

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

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Description: 9209-MW6d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-01
Sampled: 11/02/11 10:00
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/09/11 18:57	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 18:57	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
1,1-Dichloroethane [75-34-3] ^	**3.4**	J	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 18:57	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 18:57	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 18:57	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 18:57	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 18:57	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 18:57	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 18:57	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 18:57	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 18:57	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 18:57	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 18:57	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 18:57	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 18:57	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 18:57	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 18:57	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 18:57	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 18:57	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 18:57	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 18:57	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 18:57	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 18:57	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 18:57	JKG	
Chloroform [67-66-3] ^	**0.72**	J	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 18:57	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 18:57	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 18:57	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 18:57	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 18:57	JKG	
Dichlorodifluoromethane [75-71-8] ^	**1.5**	J	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 18:57	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 18:57	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 18:57	JKG	

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Description: 9209-MW6d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-01
Sampled: 11/02/11 10:00
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 18:57	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 18:57	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 18:57	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 18:57	JKG	
Methylene chloride [75-09-2] ^	**0.43**	J	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 18:57	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 18:57	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 18:57	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 18:57	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 18:57	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 18:57	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 18:57	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1K09021*	*EPA 8260B*	*11/09/11 18:57*	*JKG*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*68-117*	*1K09021*	*EPA 8260B*	*11/09/11 18:57*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*1K09021*	*EPA 8260B*	*11/09/11 18:57*	*JKG*	

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Description: 9209-MW6d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-01
Sampled: 11/02/11 10:00
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:29	KER	

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Description: 9209-MW6d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-01
Sampled: 11/02/11 10:00
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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] ^	**2.63**	J	ug/L	1	0.220	2.00	6	EPA 6020A	11/08/11 11:17	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 11:53	JDH	
Barium [7440-39-3] ^	**100**		ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 11:53	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 11:53	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 11:53	JDH	
Chromium [7440-47-3] ^	**5.42**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 11:53	JDH	
Cobalt [7440-48-4] ^	**1.26**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 11:53	JDH	
Copper [7440-50-8] ^	**6.46**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 11:53	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 11:53	JDH	
Nickel [7440-02-0] ^	**4.68**	J	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 11:53	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:17	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 11:53	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:17	VLO	
Vanadium [7440-62-2] ^	**3.98**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 11:53	JDH	
Zinc [7440-66-6] ^	**13.1**		ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 11:53	JDH	

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Description: 9209-MW7 | **Lab Sample ID:** C113476-02 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 10:45 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/09/11 19:25	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 19:25	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 19:25	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 19:25	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 19:25	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 19:25	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 19:25	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 19:25	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 19:25	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
1,4-Dichlorobenzene [106-46-7] ^	**1.6**		ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 19:25	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 19:25	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 19:25	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 19:25	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 19:25	JKG	
Acetone [67-64-1] ^	**7.6**	J	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 19:25	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 19:25	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 19:25	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 19:25	JKG	
Benzene [71-43-2] ^	**1.3**		ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 19:25	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 19:25	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 19:25	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 19:25	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 19:25	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 19:25	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 19:25	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 19:25	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 19:25	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 19:25	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 19:25	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 19:25	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 19:25	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 19:25	JKG	

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Description: 9209-MW7 | **Lab Sample ID:** C113476-02 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 10:45 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 19:25	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 19:25	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 19:25	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 19:25	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 19:25	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 19:25	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 19:25	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 19:25	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 19:25	JKG	
Vinyl chloride [75-01-4] ^	**1.4**		ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 19:25	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 19:25	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*93 %*	*51-122*	*1K09021*	*EPA 8260B*	*11/09/11 19:25*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*99 %*	*68-117*	*1K09021*	*EPA 8260B*	*11/09/11 19:25*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*98 %*	*67-127*	*1K09021*	*EPA 8260B*	*11/09/11 19:25*	*JKG*	

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Description: 9209-MW7
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-02
Sampled: 11/02/11 10:45
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:31	KER	

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Description: 9209-MW7 | **Lab Sample ID:** C113476-02 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 10:45 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/08/11 11:19	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 11:55	JDH	
Barium [7440-39-3] ^	**67.1**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 11:55	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 11:55	JDH	
Cadmium [7440-43-9] ^	**0.380**	J	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 11:55	JDH	
Chromium [7440-47-3] ^	**14.9**		ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 11:55	JDH	
Cobalt [7440-48-4] ^	**31.6**		ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 11:55	JDH	
Copper [7440-50-8] ^	**21.2**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 11:55	JDH	J-01
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 11:55	JDH	
Nickel [7440-02-0] ^	**13.4**	J	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 11:55	JDH	
Selenium [7782-49-2] ^	**1.17**	J	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:19	VLO	
Silver [7440-22-4] ^	**3.27**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 11:55	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:19	VLO	
Vanadium [7440-62-2] ^	**9.74**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 11:55	JDH	
Zinc [7440-66-6] ^	**44.8**		ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 11:55	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: 9209-MW8d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-03
Sampled: 11/02/11 10:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/09/11 19:54	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 19:54	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 19:54	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 19:54	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 19:54	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 19:54	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 19:54	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 19:54	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 19:54	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 19:54	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 19:54	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 19:54	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 19:54	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 19:54	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 19:54	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 19:54	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 19:54	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 19:54	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 19:54	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 19:54	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 19:54	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 19:54	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 19:54	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 19:54	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 19:54	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 19:54	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 19:54	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 19:54	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 19:54	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 19:54	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 19:54	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 19:54	JKG	

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Description: 9209-MW8d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-03
Sampled: 11/02/11 10:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 19:54	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 19:54	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 19:54	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 19:54	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 19:54	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 19:54	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 19:54	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 19:54	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 19:54	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 19:54	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 19:54	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*93 %*	*51-122*	*1K09021*	*EPA 8260B*	*11/09/11 19:54*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*99 %*	*68-117*	*1K09021*	*EPA 8260B*	*11/09/11 19:54*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*99 %*	*67-127*	*1K09021*	*EPA 8260B*	*11/09/11 19:54*	*JKG*	

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Description:	9209-MW8d	**Lab Sample ID:**	C113476-03	**Received:**	11/02/11 11:54
Matrix:	Ground Water	**Sampled:**	11/02/11 10:30	**Work Order:**	C113476
Project:	North Wake Unlined Landfill	**Sampled By:**	Aaron Weispfenning		

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	11/14/11 15:33	KER	

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Description: 9209-MW8d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-03
Sampled: 11/02/11 10:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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] ^	**0.724**	J	ug/L	1	0.220	2.00	6	EPA 6020A	11/08/11 11:21	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 11:57	JDH	
Barium [7440-39-3] ^	**25.0**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 11:57	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 11:57	JDH	
Cadmium [7440-43-9] ^	**1.05**		ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 11:57	JDH	
Chromium [7440-47-3] ^	**5.02**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 11:57	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 11:57	JDH	
Copper [7440-50-8] ^	**5.02**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 11:57	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 11:57	JDH	
Nickel [7440-02-0] ^	**2.00**	J	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 11:57	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:21	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 11:57	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:21	VLO	
Vanadium [7440-62-2] ^	**4.22**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 11:57	JDH	
Zinc [7440-66-6] ^	**7.28**	J	ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 11:57	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: 9209-MW10d | **Lab Sample ID:** C113476-04 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 08:30 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/09/11 20:23	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 20:23	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
1,1-Dichloroethane [75-34-3] ^	**2.2**	J	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 20:23	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 20:23	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 20:23	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 20:23	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 20:23	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 20:23	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 20:23	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 20:23	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 20:23	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 20:23	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 20:23	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 20:23	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 20:23	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 20:23	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 20:23	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 20:23	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 20:23	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 20:23	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 20:23	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 20:23	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 20:23	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 20:23	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 20:23	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 20:23	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 20:23	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 20:23	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 20:23	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 20:23	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 20:23	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 20:23	JKG	

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Description: 9209-MW10d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-04
Sampled: 11/02/11 08:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 20:23	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 20:23	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 20:23	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 20:23	JKG	
Methylene chloride [75-09-2] ^	**0.92**	J	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 20:23	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 20:23	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 20:23	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 20:23	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 20:23	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 20:23	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 20:23	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1K09021*	*EPA 8260B*	*11/09/11 20:23*	*JKG*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*68-117*	*1K09021*	*EPA 8260B*	*11/09/11 20:23*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*101 %*	*67-127*	*1K09021*	*EPA 8260B*	*11/09/11 20:23*	*JKG*	

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Description: 9209-MW10d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-04
Sampled: 11/02/11 08:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:39	KER	

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Description: 9209-MW10d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-04
Sampled: 11/02/11 08:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/08/11 11:23	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 12:28	JDH	
Barium [7440-39-3] ^	**3.81**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 12:28	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 12:28	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 12:28	JDH	
Chromium [7440-47-3] ^	**2.10**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 12:28	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 12:28	JDH	
Copper [7440-50-8] ^	**3.18**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 12:28	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:28	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 12:28	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:23	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:28	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:23	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 12:28	JDH	
Zinc [7440-66-6] ^	**4.14**	J	ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 12:28	JDH	

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Description: 9209-MW11d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-05
Sampled: 11/02/11 07:45
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/09/11 20:51	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 20:51	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 20:51	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 20:51	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 20:51	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 20:51	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 20:51	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 20:51	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 20:51	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 20:51	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 20:51	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 20:51	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 20:51	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 20:51	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 20:51	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 20:51	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 20:51	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 20:51	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 20:51	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 20:51	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 20:51	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 20:51	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 20:51	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 20:51	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 20:51	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 20:51	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 20:51	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 20:51	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 20:51	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 20:51	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 20:51	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 20:51	JKG	

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Description: 9209-MW11d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-05
Sampled: 11/02/11 07:45
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 20:51	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 20:51	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 20:51	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 20:51	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 20:51	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 20:51	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 20:51	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 20:51	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 20:51	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 20:51	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 20:51	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*95 %*	*51-122*	*1K09021*	*EPA 8260B*	*11/09/11 20:51*	*JKG*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*68-117*	*1K09021*	*EPA 8260B*	*11/09/11 20:51*	*JKG*	
Toluene-d8	*51*	*1*	*50.0*	*102 %*	*67-127*	*1K09021*	*EPA 8260B*	*11/09/11 20:51*	*JKG*	

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Description: 9209-MW11d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-05
Sampled: 11/02/11 07:45
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:41	KER	

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Description: 9209-MW11d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-05
Sampled: 11/02/11 07:45
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/08/11 11:25	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 12:30	JDH	
Barium [7440-39-3] ^	**45.5**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 12:30	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 12:30	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 12:30	JDH	
Chromium [7440-47-3] ^	**2.18**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 12:30	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 12:30	JDH	
Copper [7440-50-8] ^	**4.14**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 12:30	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:30	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 12:30	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:25	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:30	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:25	VLO	
Vanadium [7440-62-2] ^	**2.45**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 12:30	JDH	
Zinc [7440-66-6] ^	**5.86**	J	ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 12:30	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: 9209-MW23 | **Lab Sample ID:** C113476-06 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 08:20 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/09/11 21:20	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 21:20	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 21:20	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 21:20	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 21:20	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 21:20	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 21:20	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 21:20	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 21:20	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 21:20	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 21:20	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 21:20	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 21:20	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 21:20	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 21:20	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 21:20	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 21:20	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 21:20	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 21:20	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 21:20	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 21:20	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 21:20	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 21:20	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 21:20	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 21:20	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 21:20	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 21:20	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 21:20	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 21:20	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 21:20	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 21:20	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 21:20	JKG	

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Description: 9209-MW23 | **Lab Sample ID:** C113476-06 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 08:20 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 21:20	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 21:20	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 21:20	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 21:20	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 21:20	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 21:20	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 21:20	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 21:20	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 21:20	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 21:20	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 21:20	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*51-122*	*1K09021*	*EPA 8260B*	*11/09/11 21:20*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*101 %*	*68-117*	*1K09021*	*EPA 8260B*	*11/09/11 21:20*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*1K09021*	*EPA 8260B*	*11/09/11 21:20*	*JKG*	

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Description: 9209-MW23
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-06
Sampled: 11/02/11 08:20
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:43	KER	

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Description: 9209-MW23 | **Lab Sample ID:** C113476-06 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 08:20 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/08/11 11:26	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 12:31	JDH	
Barium [7440-39-3] ^	**43.5**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 12:31	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 12:31	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 12:31	JDH	
Chromium [7440-47-3] ^	**5.93**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 12:31	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 12:31	JDH	
Copper [7440-50-8] ^	**11.0**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 12:31	JDH	J-01
Lead [7439-92-1] ^	**2.79**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:31	JDH	
Nickel [7440-02-0] ^	**4.01**	J	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 12:31	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:26	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:31	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:26	VLO	
Vanadium [7440-62-2] ^	**9.10**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 12:31	JDH	
Zinc [7440-66-6] ^	**14.8**		ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 12:31	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: 9209-MW23d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-07
Sampled: 11/01/11 17:05
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/09/11 21:49	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/09/11 21:49	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/09/11 21:49	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/09/11 21:49	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/09/11 21:49	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 21:49	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/09/11 21:49	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/09/11 21:49	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/09/11 21:49	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/09/11 21:49	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/09/11 21:49	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/09/11 21:49	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/09/11 21:49	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/09/11 21:49	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/09/11 21:49	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/09/11 21:49	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/09/11 21:49	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/09/11 21:49	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/09/11 21:49	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/09/11 21:49	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/09/11 21:49	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/09/11 21:49	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/09/11 21:49	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/09/11 21:49	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/09/11 21:49	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/09/11 21:49	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/09/11 21:49	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/09/11 21:49	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/09/11 21:49	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/09/11 21:49	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/09/11 21:49	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/09/11 21:49	JKG	

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Description: 9209-MW23d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-07
Sampled: 11/01/11 17:05
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/09/11 21:49	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/09/11 21:49	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/09/11 21:49	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/09/11 21:49	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/09/11 21:49	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/09/11 21:49	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/09/11 21:49	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/09/11 21:49	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/09/11 21:49	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/09/11 21:49	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/09/11 21:49	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*46*	*1*	*50.0*	*92 %*	*51-122*	*1K09021*	*EPA 8260B*	*11/09/11 21:49*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*99 %*	*68-117*	*1K09021*	*EPA 8260B*	*11/09/11 21:49*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*98 %*	*67-127*	*1K09021*	*EPA 8260B*	*11/09/11 21:49*	*JKG*	

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Description: 9209-MW23d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-07
Sampled: 11/01/11 17:05
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:45	KER	

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Description: 9209-MW23d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-07
Sampled: 11/01/11 17:05
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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] ^	**0.798**	J	ug/L	1	0.220	2.00	6	EPA 6020A	11/08/11 11:44	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 12:33	JDH	
Barium [7440-39-3] ^	**35.8**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 12:33	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 12:33	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 12:33	JDH	
Chromium [7440-47-3] ^	**3.92**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 12:33	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 12:33	JDH	
Copper [7440-50-8] ^	**4.12**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 12:33	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:33	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 12:33	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:44	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:33	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:44	VLO	
Vanadium [7440-62-2] ^	**3.75**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 12:33	JDH	
Zinc [7440-66-6] ^	**10.9**		ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 12:33	JDH	

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Description: 9209-MW24 | **Lab Sample ID:** C113476-08 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 08:05 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/10/11 00:11	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/10/11 00:11	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/10/11 00:11	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/10/11 00:11	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/10/11 00:11	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 00:11	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/10/11 00:11	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/10/11 00:11	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/10/11 00:11	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/10/11 00:11	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/10/11 00:11	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/10/11 00:11	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/10/11 00:11	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/10/11 00:11	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/10/11 00:11	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/10/11 00:11	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/10/11 00:11	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/10/11 00:11	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/10/11 00:11	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/10/11 00:11	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 00:11	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/10/11 00:11	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/10/11 00:11	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/10/11 00:11	jkg	
Chloroform [67-66-3] ^	**8.9**		ug/L	1	0.70	1.0	5	EPA 8260B	11/10/11 00:11	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/10/11 00:11	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/10/11 00:11	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/10/11 00:11	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/10/11 00:11	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/10/11 00:11	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/10/11 00:11	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/10/11 00:11	jkg	

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Description: 9209-MW24 | **Lab Sample ID:** C113476-08 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 08:05 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/10/11 00:11	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/10/11 00:11	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/10/11 00:11	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/10/11 00:11	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/10/11 00:11	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/10/11 00:11	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/10/11 00:11	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/10/11 00:11	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/10/11 00:11	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/10/11 00:11	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/10/11 00:11	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*43*	*1*	*50.0*	*87 %*	*51-122*	*1K09027*	*EPA 8260B*	*11/10/11 00:11*	*jkg*	
Dibromofluoromethane	*41*	*1*	*50.0*	*83 %*	*68-117*	*1K09027*	*EPA 8260B*	*11/10/11 00:11*	*jkg*	
Toluene-d8	*43*	*1*	*50.0*	*86 %*	*67-127*	*1K09027*	*EPA 8260B*	*11/10/11 00:11*	*jkg*	

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Description: 9209-MW24
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-08
Sampled: 11/02/11 08:05
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:47	KER	

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Description: 9209-MW24 | **Lab Sample ID:** C113476-08 | **Received:** 11/02/11 11:54

Matrix: Ground Water | **Sampled:** 11/02/11 08:05 | **Work Order:** C113476

Project: North Wake Unlined Landfill | **Sampled By:** Aaron Weispfenning

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	11/08/11 11:46	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 12:35	JDH	
Barium [7440-39-3] ^	**48.8**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 12:35	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 12:35	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 12:35	JDH	
Chromium [7440-47-3] ^	**3.81**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 12:35	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 12:35	JDH	
Copper [7440-50-8] ^	**6.75**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 12:35	JDH	J
Lead [7439-92-1] ^	**4.69**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:35	JDH	
Nickel [7440-02-0] ^	**2.13**	J	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 12:35	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:46	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:35	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:46	VLO	
Vanadium [7440-62-2] ^	**6.26**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 12:35	JDH	
Zinc [7440-66-6] ^	**43.6**		ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 12:35	JDH	

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Description: 9209-MW29d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-09
Sampled: 11/01/11 13:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/10/11 00:41	jkg	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/10/11 00:41	jkg	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/10/11 00:41	jkg	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/10/11 00:41	jkg	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/10/11 00:41	jkg	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 00:41	jkg	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/10/11 00:41	jkg	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/10/11 00:41	jkg	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/10/11 00:41	jkg	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/10/11 00:41	jkg	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/10/11 00:41	jkg	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/10/11 00:41	jkg	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/10/11 00:41	jkg	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/10/11 00:41	jkg	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/10/11 00:41	jkg	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/10/11 00:41	jkg	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/10/11 00:41	jkg	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/10/11 00:41	jkg	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/10/11 00:41	jkg	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/10/11 00:41	jkg	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 00:41	jkg	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/10/11 00:41	jkg	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/10/11 00:41	jkg	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/10/11 00:41	jkg	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/10/11 00:41	jkg	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/10/11 00:41	jkg	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/10/11 00:41	jkg	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/10/11 00:41	jkg	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/10/11 00:41	jkg	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/10/11 00:41	jkg	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/10/11 00:41	jkg	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/10/11 00:41	jkg	

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Description: 9209-MW29d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-09
Sampled: 11/01/11 13:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/10/11 00:41	jkg	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/10/11 00:41	jkg	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/10/11 00:41	jkg	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/10/11 00:41	jkg	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/10/11 00:41	jkg	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/10/11 00:41	jkg	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/10/11 00:41	jkg	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/10/11 00:41	jkg	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/10/11 00:41	jkg	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/10/11 00:41	jkg	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/10/11 00:41	jkg	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*44*	*1*	*50.0*	*87 %*	*51-122*	*1K09027*	*EPA 8260B*	*11/10/11 00:41*	*jkg*	
Dibromofluoromethane	*41*	*1*	*50.0*	*83 %*	*68-117*	*1K09027*	*EPA 8260B*	*11/10/11 00:41*	*jkg*	
Toluene-d8	*43*	*1*	*50.0*	*86 %*	*67-127*	*1K09027*	*EPA 8260B*	*11/10/11 00:41*	*jkg*	

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Description: 9209-MW29d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-09
Sampled: 11/01/11 13:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:48	KER	

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Description: 9209-MW29d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-09
Sampled: 11/01/11 13:30
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/08/11 11:48	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 12:37	JDH	
Barium [7440-39-3] ^	**42.7**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 12:37	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 12:37	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 12:37	JDH	
Chromium [7440-47-3] ^	**6.46**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 12:37	JDH	
Cobalt [7440-48-4] ^	**1.21**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 12:37	JDH	
Copper [7440-50-8] ^	**12.4**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 12:37	JDH	J-01
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:37	JDH	
Nickel [7440-02-0] ^	**2.70**	J	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 12:37	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:48	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:37	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:48	VLO	
Vanadium [7440-62-2] ^	**4.25**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 12:37	JDH	
Zinc [7440-66-6] ^	**17.2**		ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 12:37	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: 9209-TB1a
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-10
Sampled: 11/01/11 12:45
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/10/11 04:31	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/10/11 04:31	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/10/11 04:31	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/10/11 04:31	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/10/11 04:31	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 04:31	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/10/11 04:31	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/10/11 04:31	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/10/11 04:31	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/10/11 04:31	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/10/11 04:31	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/10/11 04:31	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/10/11 04:31	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/10/11 04:31	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/10/11 04:31	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/10/11 04:31	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/10/11 04:31	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/10/11 04:31	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/10/11 04:31	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/10/11 04:31	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 04:31	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/10/11 04:31	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/10/11 04:31	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/10/11 04:31	JKG	
Chloroform [67-66-3] ^	**1.6**	J	ug/L	1	0.70	1.0	5	EPA 8260B	11/10/11 04:31	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/10/11 04:31	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/10/11 04:31	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/10/11 04:31	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/10/11 04:31	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/10/11 04:31	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/10/11 04:31	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/10/11 04:31	JKG	

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Description: 9209-TB1a
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-10
Sampled: 11/01/11 12:45
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/10/11 04:31	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/10/11 04:31	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/10/11 04:31	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/10/11 04:31	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/10/11 04:31	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/10/11 04:31	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/10/11 04:31	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/10/11 04:31	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/10/11 04:31	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/10/11 04:31	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/10/11 04:31	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*46*	*1*	*50.0*	*91 %*	*51-122*	*1K09028*	*EPA 8260B*	*11/10/11 04:31*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*98 %*	*68-117*	*1K09028*	*EPA 8260B*	*11/10/11 04:31*	*JKG*	
Toluene-d8	*48*	*1*	*50.0*	*97 %*	*67-127*	*1K09028*	*EPA 8260B*	*11/10/11 04:31*	*JKG*	

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Description:	9209-TB1a	**Lab Sample ID:**	C113476-10	**Received:**	11/02/11 11:54
Matrix:	Ground Water	**Sampled:**	11/01/11 12:45	**Work Order:**	C113476
Project:	North Wake Unlined Landfill	**Sampled By:**	Aaron Weispfenning		

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	11/14/11 15:50	KER	

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Description: 9209-TB1a
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-10
Sampled: 11/01/11 12:45
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/08/11 11:49	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 12:39	JDH	
Barium [7440-39-3] ^	**126**		ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 12:39	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 12:39	JDH	
Cadmium [7440-43-9] ^	**5.39**		ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 12:39	JDH	
Chromium [7440-47-3] ^	**19.1**		ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 12:39	JDH	
Cobalt [7440-48-4] ^	**11.5**		ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 12:39	JDH	
Copper [7440-50-8] ^	**99.3**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 12:39	JDH	QB-01
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:39	JDH	
Nickel [7440-02-0] ^	**19.0**	J	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 12:39	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:49	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:39	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:49	VLO	
Vanadium [7440-62-2] ^	**40.5**		ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 12:39	JDH	
Zinc [7440-66-6] ^	**91.8**		ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 12:39	JDH	

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

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Description: 9209-MW36d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-11
Sampled: 11/02/11 09:10
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/10/11 05:00	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/10/11 05:00	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
1,1-Dichloroethane [75-34-3] ^	**9.2**		ug/L	1	0.080	1.0	5	EPA 8260B	11/10/11 05:00	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/10/11 05:00	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/10/11 05:00	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 05:00	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/10/11 05:00	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/10/11 05:00	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/10/11 05:00	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/10/11 05:00	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/10/11 05:00	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/10/11 05:00	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/10/11 05:00	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/10/11 05:00	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/10/11 05:00	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/10/11 05:00	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/10/11 05:00	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/10/11 05:00	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/10/11 05:00	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/10/11 05:00	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 05:00	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/10/11 05:00	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/10/11 05:00	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/10/11 05:00	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/10/11 05:00	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/10/11 05:00	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	**4.0**	J	ug/L	1	0.72	1.0	5	EPA 8260B	11/10/11 05:00	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/10/11 05:00	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/10/11 05:00	JKG	
Dichlorodifluoromethane [75-71-8] ^	**1.4**	J	ug/L	1	0.56	1.0	5	EPA 8260B	11/10/11 05:00	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/10/11 05:00	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/10/11 05:00	JKG	

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Description: 9209-MW36d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-11
Sampled: 11/02/11 09:10
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/10/11 05:00	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/10/11 05:00	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/10/11 05:00	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/10/11 05:00	JKG	
Methylene chloride [75-09-2] ^	**0.89**	J	ug/L	1	0.14	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/10/11 05:00	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/10/11 05:00	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Tetrachloroethene [127-18-4] ^	**1.0**		ug/L	1	0.73	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/10/11 05:00	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/10/11 05:00	JKG	
Trichloroethene [79-01-6] ^	**1.4**		ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/10/11 05:00	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/10/11 05:00	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/10/11 05:00	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*96 %*	*51-122*	*1K09028*	*EPA 8260B*	*11/10/11 05:00*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*68-117*	*1K09028*	*EPA 8260B*	*11/10/11 05:00*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*99 %*	*67-127*	*1K09028*	*EPA 8260B*	*11/10/11 05:00*	*JKG*	

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Description: 9209-MW36d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-11
Sampled: 11/02/11 09:10
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:52	KER	

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Description: 9209-MW36d
Matrix: Ground Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-11
Sampled: 11/02/11 09:10
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/08/11 11:51	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 12:41	JDH	
Barium [7440-39-3] ^	**60.3**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 12:41	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 12:41	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 12:41	JDH	
Chromium [7440-47-3] ^	**10.2**		ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 12:41	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 12:41	JDH	
Copper [7440-50-8] ^	**12.0**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 12:41	JDH	J-01
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:41	JDH	
Nickel [7440-02-0] ^	**6.22**	J	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 12:41	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:51	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:41	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:51	VLO	
Vanadium [7440-62-2] ^	**11.1**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 12:41	JDH	
Zinc [7440-66-6] ^	**5.45**	J	ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 12:41	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: 9209-EQBlank
Matrix: Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-12
Sampled: 11/02/11 09:20
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/10/11 05:29	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/10/11 05:29	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/10/11 05:29	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/10/11 05:29	JKG	
1,1-Dichloropropene [563-58-6] ^	0.66	U	ug/L	1	0.66	1.0	5	EPA 8260B	11/10/11 05:29	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
1,2,4-Trichlorobenzene [120-82-1] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 05:29	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/10/11 05:29	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/10/11 05:29	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
1,3-Dichlorobenzene [541-73-1] ^	0.79	U	ug/L	1	0.79	1.0	5	EPA 8260B	11/10/11 05:29	JKG	
1,3-Dichloropropane [142-28-9] ^	0.67	U	ug/L	1	0.67	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
2,2-Dichloropropane [594-20-7] ^	0.56	U	ug/L	1	0.56	1.0	15	EPA 8260B	11/10/11 05:29	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/10/11 05:29	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/10/11 05:29	JKG	
3-Chloropropene [107-05-1] ^	0.11	U	ug/L	1	0.11	1.0	10	EPA 8260B	11/10/11 05:29	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/10/11 05:29	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/10/11 05:29	JKG	
Acetonitrile [75-05-8] ^	5.0	U	ug/L	1	5.0	10	55	EPA 8260B	11/10/11 05:29	JKG	
Acrolein [107-02-8] ^	4.0	U	ug/L	1	4.0	10	53	EPA 8260B	11/10/11 05:29	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/10/11 05:29	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/10/11 05:29	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/10/11 05:29	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/10/11 05:29	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/10/11 05:29	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/10/11 05:29	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/10/11 05:29	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/10/11 05:29	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Chloroprene [126-99-8] ^	0.64	U	ug/L	1	0.64	1.0	20	EPA 8260B	11/10/11 05:29	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/10/11 05:29	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/10/11 05:29	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/10/11 05:29	JKG	
Dichlorodifluoromethane [75-71-8] ^	0.56	U	ug/L	1	0.56	1.0	5	EPA 8260B	11/10/11 05:29	JKG	
Ethyl Methacrylate [97-63-2] ^	0.38	U	ug/L	1	0.38	1.0	10	EPA 8260B	11/10/11 05:29	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Hexachlorobutadiene [87-68-3] ^	0.88	U	ug/L	1	0.88	1.0	10	EPA 8260B	11/10/11 05:29	JKG	

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Description: 9209-EQBlank
Matrix: Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-12
Sampled: 11/02/11 09:20
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/10/11 05:29	JKG	
Isobutyl alcohol [78-83-1] ^	11	U	ug/L	1	11	50	100	EPA 8260B	11/10/11 05:29	JKG	
Methacrylonitrile [126-98-7] ^	4.9	U	ug/L	1	4.9	10	100	EPA 8260B	11/10/11 05:29	JKG	
Methyl Methacrylate [80-62-6] ^	0.51	U	ug/L	1	0.51	1.0	30	EPA 8260B	11/10/11 05:29	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Naphthalene [91-20-3] ^	0.46	U	ug/L	1	0.46	1.0	10	EPA 8260B	11/10/11 05:29	JKG	
Propionitrile [107-12-0] ^	5.0	U	ug/L	1	5.0	10	150	EPA 8260B	11/10/11 05:29	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/10/11 05:29	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/10/11 05:29	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/10/11 05:29	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/10/11 05:29	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/10/11 05:29	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*93 %*	*51-122*	*1K09028*	*EPA 8260B*	*11/10/11 05:29*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*99 %*	*68-117*	*1K09028*	*EPA 8260B*	*11/10/11 05:29*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*99 %*	*67-127*	*1K09028*	*EPA 8260B*	*11/10/11 05:29*	*JKG*	

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Description: 9209-EQBlank
Matrix: Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-12
Sampled: 11/02/11 09:20
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/14/11 15:54	KER	

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Description: 9209-EQBlank
Matrix: Water
Project: North Wake Unlined Landfill

Lab Sample ID: C113476-12
Sampled: 11/02/11 09:20
Sampled By: Aaron Weispfenning

Received: 11/02/11 11:54
Work Order: C113476

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	11/08/11 11:53	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/09/11 12:43	JDH	
Barium [7440-39-3] ^	1.00	U	ug/L	1	1.00	10.0	100	EPA 6010C	11/09/11 12:43	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/09/11 12:43	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/09/11 12:43	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	11/09/11 12:43	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/09/11 12:43	JDH	
Copper [7440-50-8] ^	**3.29**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/09/11 12:43	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:43	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	11/09/11 12:43	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:53	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/09/11 12:43	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:53	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	11/09/11 12:43	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	11/09/11 12:43	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 1K07015 - EPA 5030B_MS

Blank (1K07015-BLK1) Prepared: 11/07/2011 11:05 Analyzed: 11/09/2011 01:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.90	U	1.0	ug/L							
1,1,1-Trichloroethane	0.65	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.75	U	1.0	ug/L							
1,1,2-Trichloroethane	0.66	U	1.0	ug/L							
1,1-Dichloroethane	0.080	U	1.0	ug/L							
1,1-Dichloroethene	0.60	U	1.0	ug/L							
1,1-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							
Hexachlorobutadiene	0.88	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Isobutyl alcohol	11	U	50	ug/L							
Methacrylonitrile	4.9	U	10	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1K07015 - EPA 5030B_MS

Blank (1K07015-BLK1) Continued Prepared: 11/07/2011 11:05 Analyzed: 11/09/2011 01:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Methyl Methacrylate	0.51	U	1.0	ug/L							
Methylene chloride	0.14	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	*45*			*ug/L*	*50.0*		*90*	*51-122*			
Surrogate: Dibromofluoromethane	*41*			*ug/L*	*50.0*		*82*	*68-117*			
Surrogate: Toluene-d8	*43*			*ug/L*	*50.0*		*87*	*67-127*			

LCS (1K07015-BS1) Prepared: 11/07/2011 11:05 Analyzed: 11/09/2011 01:31

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0		96	75-133			
Benzene	20		1.0	ug/L	20.0		100	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		99	83-117			
Toluene	20		1.0	ug/L	20.0		100	71-118			
Trichloroethene	20		1.0	ug/L	20.0		98	75-115			
Surrogate: 4-Bromofluorobenzene	*44*			*ug/L*	*50.0*		*88*	*51-122*			
Surrogate: Dibromofluoromethane	*41*			*ug/L*	*50.0*		*82*	*68-117*			
Surrogate: Toluene-d8	*43*			*ug/L*	*50.0*		*87*	*67-127*			

Matrix Spike (1K07015-MS1) Prepared: 11/07/2011 11:05 Analyzed: 11/09/2011 02:00

Source: C113583-02

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			
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	98	83-117			
Toluene	20		1.0	ug/L	20.0	0.85 U	98	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.72 U	103	75-115			
Surrogate: 4-Bromofluorobenzene	*44*			*ug/L*	*50.0*		*88*	*51-122*			
Surrogate: Dibromofluoromethane	*42*			*ug/L*	*50.0*		*83*	*68-117*			
Surrogate: Toluene-d8	*44*			*ug/L*	*50.0*		*88*	*67-127*			

Matrix Spike Dup (1K07015-MSD1) Prepared: 11/07/2011 11:05 Analyzed: 11/09/2011 02:30

Source: C113583-02

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1K07015 - EPA 5030B_MS

Matrix Spike Dup (1K07015-MSD1) Continued Prepared: 11/07/2011 11:05 Analyzed: 11/09/2011 02:30

Source: C113583-02

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	4	20	
Benzene	19		1.0	ug/L	20.0	0.68 U	97	81-134	5	17	
Chlorobenzene	19		1.0	ug/L	20.0	0.74 U	94	83-117	5	16	
Toluene	19		1.0	ug/L	20.0	0.85 U	95	71-118	3	17	
Trichloroethene	20		1.0	ug/L	20.0	0.72 U	99	75-115	4	18	
Surrogate: 4-Bromofluorobenzene	*44*			*ug/L*	*50.0*		*89*	*51-122*			
Surrogate: Dibromofluoromethane	*42*			*ug/L*	*50.0*		*83*	*68-117*			
Surrogate: Toluene-d8	*44*			*ug/L*	*50.0*		*88*	*67-127*			

Batch 1K07016 - EPA 5030B_MS

Blank (1K07016-BLK1) Prepared: 11/07/2011 11:36 Analyzed: 11/07/2011 23:15

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 1K07016 - EPA 5030B_MS

Blank (1K07016-BLK1) Continued Prepared: 11/07/2011 11:36 Analyzed: 11/07/2011 23:15

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							
Hexachlorobutadiene	0.88	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	*47*			*ug/L*	*50.0*		*93*	*51-122*			
Surrogate: Dibromofluoromethane	*48*			*ug/L*	*50.0*		*96*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*97*	*67-127*			

LCS (1K07016-BS1) Prepared: 11/07/2011 11:36 Analyzed: 11/07/2011 23:43

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	16		1.0	ug/L	20.0		82	75-133			
Benzene	19		1.0	ug/L	20.0		93	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		101	83-117			
Toluene	20		1.0	ug/L	20.0		99	71-118			
Trichloroethene	21		1.0	ug/L	20.0		103	75-115			
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*68-117*			
Surrogate: Toluene-d8	*51*			*ug/L*	*50.0*		*101*	*67-127*			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1K07016 - EPA 5030B_MS

Matrix Spike (1K07016-MS1) Prepared: 11/07/2011 11:36 Analyzed: 11/08/2011 00:12

Source: C113583-04

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	101	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	106	83-117			
Toluene	21		1.0	ug/L	20.0	0.85 U	107	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	111	75-115			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*97*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*93*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*100*	*67-127*			

Matrix Spike Dup (1K07016-MSD1) Prepared: 11/07/2011 11:36 Analyzed: 11/08/2011 00:40

Source: C113583-04

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	0.8	20	
Benzene	20		1.0	ug/L	20.0	0.68 U	98	81-134	3	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	103	83-117	3	16	
Toluene	20		1.0	ug/L	20.0	0.85 U	102	71-118	4	17	
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	108	75-115	2	18	
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*92*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*99*	*67-127*			

Batch 1K09021 - EPA 5030B_MS

Blank (1K09021-BLK1) Prepared: 11/09/2011 10:15 Analyzed: 11/09/2011 12:14

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							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1K09021 - EPA 5030B_MS

Blank (1K09021-BLK1) Continued Prepared: 11/09/2011 10:15 Analyzed: 11/09/2011 12:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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							
Hexachlorobutadiene	0.88	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	*45*			*ug/L*	*50.0*		*91*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*68-117*			
Surrogate: Toluene-d8	*48*			*ug/L*	*50.0*		*96*	*67-127*			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1K09021 - EPA 5030B_MS

LCS (1K09021-BS1) Prepared: 11/09/2011 10:15 Analyzed: 11/09/2011 12:43

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0		90	75-133			
Benzene	19		1.0	ug/L	20.0		96	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		100	83-117			
Toluene	20		1.0	ug/L	20.0		100	71-118			
Trichloroethene	20		1.0	ug/L	20.0		102	75-115			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			
Surrogate: Dibromofluoromethane	*48*			*ug/L*	*50.0*		*95*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*101*	*67-127*			

Matrix Spike (1K09021-MS1) Prepared: 11/09/2011 10:15 Analyzed: 11/09/2011 13:12

Source: C113583-11

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	98	75-133			
Benzene	20		1.0	ug/L	20.0	0.68 U	100	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	103	83-117			
Toluene	21		1.0	ug/L	20.0	0.85 U	104	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.72 U	107	75-115			
Surrogate: 4-Bromofluorobenzene	*46*			*ug/L*	*50.0*		*93*	*51-122*			
Surrogate: Dibromofluoromethane	*45*			*ug/L*	*50.0*		*89*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*97*	*67-127*			

Matrix Spike Dup (1K09021-MSD1) Prepared: 11/09/2011 10:15 Analyzed: 11/09/2011 13:41

Source: C113583-11

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	98	75-133	0.6	20	
Benzene	20		1.0	ug/L	20.0	0.68 U	99	81-134	0.4	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	105	83-117	2	16	
Toluene	21		1.0	ug/L	20.0	0.85 U	105	71-118	0.7	17	
Trichloroethene	21		1.0	ug/L	20.0	0.72 U	106	75-115	0.7	18	
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*92*	*68-117*			
Surrogate: Toluene-d8	*51*			*ug/L*	*50.0*		*101*	*67-127*			

Batch 1K09027 - EPA 5030B_MS

Blank (1K09027-BLK1) Prepared: 11/09/2011 12:28 Analyzed: 11/09/2011 14:49

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							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1K09027 - EPA 5030B_MS

Blank (1K09027-BLK1) Continued Prepared: 11/09/2011 12:28 Analyzed: 11/09/2011 14:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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							
Hexachlorobutadiene	0.88	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							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1K09027 - EPA 5030B_MS

Blank (1K09027-BLK1) Continued Prepared: 11/09/2011 12:28 Analyzed: 11/09/2011 14:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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	*44*			*ug/L*	*50.0*		*89*	*51-122*			
Surrogate: Dibromofluoromethane	*41*			*ug/L*	*50.0*		*82*	*68-117*			
Surrogate: Toluene-d8	*44*			*ug/L*	*50.0*		*87*	*67-127*			

LCS (1K09027-BS1) Prepared: 11/09/2011 12:28 Analyzed: 11/09/2011 15:19

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		104	75-133			
Benzene	20		1.0	ug/L	20.0		100	81-134			
Chlorobenzene	19		1.0	ug/L	20.0		96	83-117			
Toluene	19		1.0	ug/L	20.0		97	71-118			
Trichloroethene	19		1.0	ug/L	20.0		96	75-115			
Surrogate: 4-Bromofluorobenzene	*43*			*ug/L*	*50.0*		*87*	*51-122*			
Surrogate: Dibromofluoromethane	*41*			*ug/L*	*50.0*		*82*	*68-117*			
Surrogate: Toluene-d8	*44*			*ug/L*	*50.0*		*87*	*67-127*			

Matrix Spike (1K09027-MS1) Prepared: 11/09/2011 12:28 Analyzed: 11/09/2011 15:49

Source: C113257-02

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	98	75-133			
Benzene	18		1.0	ug/L	20.0	0.68 U	91	81-134			
Chlorobenzene	18		1.0	ug/L	20.0	0.74 U	89	83-117			
Toluene	18		1.0	ug/L	20.0	0.85 U	89	71-118			
Trichloroethene	18		1.0	ug/L	20.0	0.72 U	90	75-115			
Surrogate: 4-Bromofluorobenzene	*44*			*ug/L*	*50.0*		*87*	*51-122*			
Surrogate: Dibromofluoromethane	*41*			*ug/L*	*50.0*		*81*	*68-117*			
Surrogate: Toluene-d8	*43*			*ug/L*	*50.0*		*87*	*67-127*			

Matrix Spike Dup (1K09027-MSD1) Prepared: 11/09/2011 12:28 Analyzed: 11/09/2011 16:18

Source: C113257-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.60 U	108	75-133	9	20	
Benzene	20		1.0	ug/L	20.0	0.68 U	101	81-134	10	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.74 U	98	83-117	10	16	
Toluene	20		1.0	ug/L	20.0	0.85 U	100	71-118	11	17	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1K09027 - EPA 5030B_MS

Matrix Spike Dup (1K09027-MSD1) Continued Prepared: 11/09/2011 12:28 Analyzed: 11/09/2011 16:18

Source: C113257-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	20		1.0	ug/L	20.0	0.72 U	100	75-115	10	18	
Surrogate: 4-Bromofluorobenzene	*44*			*ug/L*	*50.0*		*88*	*51-122*			
Surrogate: Dibromofluoromethane	*41*			*ug/L*	*50.0*		*83*	*68-117*			
Surrogate: Toluene-d8	*44*			*ug/L*	*50.0*		*88*	*67-127*			

Batch 1K09028 - EPA 5030B_MS

Blank (1K09028-BLK1) Prepared: 11/09/2011 12:54 Analyzed: 11/10/2011 00:13

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							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 1K09028 - EPA 5030B_MS

Blank (1K09028-BLK1) Continued Prepared: 11/09/2011 12:54 Analyzed: 11/10/2011 00:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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							
Hexachlorobutadiene	0.88	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	*46*			*ug/L*	*50.0*		*91*	*51-122*			
Surrogate: Dibromofluoromethane	*49*			*ug/L*	*50.0*		*98*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*97*	*67-127*			

LCS (1K09028-BS1) Prepared: 11/09/2011 12:54 Analyzed: 11/10/2011 00:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0		91	75-133			
Benzene	19		1.0	ug/L	20.0		94	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		98	83-117			
Toluene	19		1.0	ug/L	20.0		97	71-118			
Trichloroethene	20		1.0	ug/L	20.0		100	75-115			
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*93*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*92*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*99*	*67-127*			

Matrix Spike (1K09028-MS1) Prepared: 11/09/2011 12:54 Analyzed: 11/10/2011 01:10

Source: C113583-16

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 1K09028 - EPA 5030B_MS

Matrix Spike (1K09028-MS1) Continued Prepared: 11/09/2011 12:54 Analyzed: 11/10/2011 01:10

Source: C113583-16

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			
Benzene	20		1.0	ug/L	20.0	0.68 U	101	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	103	83-117			
Toluene	21		1.0	ug/L	20.0	0.85 U	106	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	108	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*	*67-127*			

Matrix Spike Dup (1K09028-MSD1) Prepared: 11/09/2011 12:54 Analyzed: 11/10/2011 01:39

Source: C113583-16

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	3	20	
Benzene	20		1.0	ug/L	20.0	0.68 U	98	81-134	4	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	104	83-117	1	16	
Toluene	21		1.0	ug/L	20.0	0.85 U	103	71-118	2	17	
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	109	75-115	1	18	
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*91*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*97*	*67-127*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1K14003 - EPA 7470A

Blank (1K14003-BLK1) Prepared: 11/14/2011 06:35 Analyzed: 11/14/2011 13:34

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 (1K14003-BS1) Prepared: 11/14/2011 06:35 Analyzed: 11/14/2011 13:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.84		0.200	ug/L	5.00		97	85-115			

Matrix Spike (1K14003-MS1) Prepared: 11/14/2011 06:35 Analyzed: 11/14/2011 13:39

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.76		0.200	ug/L	5.00	0.170 U	95	85-115			

Matrix Spike Dup (1K14003-MSD1) Prepared: 11/14/2011 06:35 Analyzed: 11/14/2011 13:41

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1K14003 - EPA 7470A

Matrix Spike Dup (1K14003-MSD1) Continued Prepared: 11/14/2011 06:35 Analyzed: 11/14/2011 13:41

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.34		0.200	ug/L	5.00	0.170 U	87	85-115	9	15	

Post Spike (1K14003-PS1) Prepared: 11/14/2011 06:35 Analyzed: 11/14/2011 13:43

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.32		0.200	ug/L	5.00	-0.0130	87	75-125			

Batch 1K14006 - EPA 7470A

Blank (1K14006-BLK1) Prepared: 11/14/2011 06:39 Analyzed: 11/14/2011 14:28

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 (1K14006-BS1) Prepared: 11/14/2011 06:39 Analyzed: 11/14/2011 14:30

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.60		0.200	ug/L	5.00		92	85-115			

Matrix Spike (1K14006-MS1) Prepared: 11/14/2011 06:39 Analyzed: 11/14/2011 14:48

Source: C113257-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.69		0.200	ug/L	5.00	0.170 U	94	85-115			

Matrix Spike Dup (1K14006-MSD1) Prepared: 11/14/2011 06:39 Analyzed: 11/14/2011 14:50

Source: C113257-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.34		0.200	ug/L	5.00	0.170 U	87	85-115	8	15	

Post Spike (1K14006-PS1) Prepared: 11/14/2011 06:39 Analyzed: 11/14/2011 14:52

Source: C113257-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.10		0.200	ug/L	5.00	-0.0400	83	75-125			

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

Batch 1K02020 - EPA 3005A

Blank (1K02020-BLK1) Prepared: 11/02/2011 10:09 Analyzed: 11/04/2011 10:44

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 1K02020 - EPA 3005A

Blank (1K02020-BLK1) Continued Prepared: 11/02/2011 10:09 Analyzed: 11/04/2011 10:44

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 (1K02020-BS1) Prepared: 11/02/2011 10:09 Analyzed: 11/04/2011 10:46

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	189		2.00	ug/L	200		94	80-120			
Selenium	211		1.00	ug/L	200		106	80-120			
Thallium	191		1.00	ug/L	200		96	80-120			

Matrix Spike (1K02020-MS1) Prepared: 11/02/2011 10:09 Analyzed: 11/04/2011 10:49

Source: C112853-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	187		2.00	ug/L	200	0.220 U	94	75-125			
Selenium	200		1.00	ug/L	200	0.830 U	100	75-125			
Thallium	181		1.00	ug/L	200	0.110 U	91	75-125			

Matrix Spike Dup (1K02020-MSD1) Prepared: 11/02/2011 10:09 Analyzed: 11/04/2011 10:51

Source: C112853-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	188		2.00	ug/L	200	0.220 U	94	75-125	0.3	20	
Selenium	207		1.00	ug/L	200	0.830 U	103	75-125	4	20	
Thallium	183		1.00	ug/L	200	0.110 U	92	75-125	0.9	20	

Post Spike (1K02020-PS1) Prepared: 11/02/2011 10:09 Analyzed: 11/04/2011 10:53

Source: C112853-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	188		2.00	ug/L	200	0.105	94	80-120			
Selenium	211		1.00	ug/L	200	0.360	105	80-120			
Thallium	184		1.00	ug/L	200	0.0939	92	80-120			

Batch 1K03011 - EPA 3005A

Blank (1K03011-BLK1) Prepared: 11/03/2011 09:29 Analyzed: 11/07/2011 11:07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	**2.59**	**J**	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							

QUALITY CONTROL

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

Batch 1K03011 - EPA 3005A

Blank (1K03011-BLK1) Continued Prepared: 11/03/2011 09:29 Analyzed: 11/07/2011 11:07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nickel	**1.86**	**J**	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (1K03011-BS1) Prepared: 11/03/2011 09:29 Analyzed: 11/07/2011 11:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	211		10.0	ug/L	200		106	80-120			
Barium	203		10.0	ug/L	200		102	80-120			
Beryllium	20.2		1.00	ug/L	20.0		101	80-120			
Cadmium	21.3		1.00	ug/L	20.0		106	80-120			
Chromium	206		10.0	ug/L	200		103	80-120			
Cobalt	212		10.0	ug/L	200		106	80-120			
Copper	206	B	10.0	ug/L	200		103	80-120			
Lead	208		10.0	ug/L	200		104	80-120			
Nickel	210	B	10.0	ug/L	200		105	80-120			
Silver	213		10.0	ug/L	200		107	80-120			
Vanadium	205		10.0	ug/L	200		102	80-120			
Zinc	219		10.0	ug/L	200		110	80-120			

Matrix Spike (1K03011-MS1) Prepared: 11/03/2011 09:29 Analyzed: 11/07/2011 11:20

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	218		10.0	ug/L	200	2.80 U	109	75-125			
Barium	332		10.0	ug/L	200	123	104	75-125			
Beryllium	21.5		1.00	ug/L	20.0	0.100 U	108	75-125			
Cadmium	22.0		1.00	ug/L	20.0	0.360 U	110	75-125			
Chromium	215		10.0	ug/L	200	3.28	106	75-125			
Cobalt	219		10.0	ug/L	200	2.17	108	75-125			
Copper	211	B	10.0	ug/L	200	1.60 U	106	75-125			
Lead	214		10.0	ug/L	200	1.90 U	107	75-125			
Nickel	217	B	10.0	ug/L	200	5.83	106	75-125			
Silver	221		10.0	ug/L	200	1.90 U	111	75-125			
Vanadium	213		10.0	ug/L	200	1.40 U	107	75-125			
Zinc	232		10.0	ug/L	200	8.33	112	75-125			

Matrix Spike Dup (1K03011-MSD1) Prepared: 11/03/2011 09:29 Analyzed: 11/07/2011 11:22

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	223		10.0	ug/L	200	2.80 U	112	75-125	2	20	
Barium	334		10.0	ug/L	200	123	106	75-125	0.8	20	
Beryllium	21.8		1.00	ug/L	20.0	0.100 U	109	75-125	1	20	
Cadmium	22.4		1.00	ug/L	20.0	0.360 U	112	75-125	2	20	
Chromium	217		10.0	ug/L	200	3.28	107	75-125	1	20	

QUALITY CONTROL

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

Batch 1K03011 - EPA 3005A

Matrix Spike Dup (1K03011-MSD1) Continued Prepared: 11/03/2011 09:29 Analyzed: 11/07/2011 11:22

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cobalt	226		10.0	ug/L	200	2.17	112	75-125	3	20	
Copper	215	B	10.0	ug/L	200	1.60 U	107	75-125	2	20	
Lead	220		10.0	ug/L	200	1.90 U	110	75-125	3	20	
Nickel	220	B	10.0	ug/L	200	5.83	107	75-125	1	20	
Silver	224		10.0	ug/L	200	1.90 U	112	75-125	1	20	
Vanadium	216		10.0	ug/L	200	1.40 U	108	75-125	1	20	
Zinc	238		10.0	ug/L	200	8.33	115	75-125	3	20	

Post Spike (1K03011-PS1) Prepared: 11/03/2011 09:29 Analyzed: 11/07/2011 11:24

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.212		0.0100	mg/L	0.200	-0.00323	107	80-120			
Barium	0.316		0.0100	mg/L	0.200	0.123	96	80-120			
Beryllium	0.0204		0.00100	mg/L	0.0200	-0.000147	103	80-120			
Cadmium	0.0210		0.00100	mg/L	0.0200	0.000202	104	80-120			
Chromium	0.204		0.0100	mg/L	0.200	0.00328	100	80-120			
Cobalt	0.208		0.0100	mg/L	0.200	0.00217	103	80-120			
Copper	0.200	B	0.0100	mg/L	0.200	0.000705	100	80-120			
Lead	0.202		0.0100	mg/L	0.200	-0.00154	102	80-120			
Nickel	0.206	B	0.0100	mg/L	0.200	0.00583	100	80-120			
Silver	0.209		0.0100	mg/L	0.200	0.00158	104	80-120			
Vanadium	0.202		0.0100	mg/L	0.200	-0.000482	101	80-120			
Zinc	0.221		0.0100	mg/L	0.200	0.00833	106	80-120			

Batch 1K03013 - EPA 3005A

Blank (1K03013-BLK1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 10:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (1K03013-BS1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 12:34

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	205		2.00	ug/L	200		102	80-120			
Selenium	214		1.00	ug/L	200		107	80-120			
Thallium	203		1.00	ug/L	200		102	80-120			

Matrix Spike (1K03013-MS1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 12:12

Source: C113287-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	193		2.00	ug/L	200	0.220 U	97	75-125			

QUALITY CONTROL

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

Batch 1K03013 - EPA 3005A

Matrix Spike (1K03013-MS1) Continued Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 12:12

Source: C113287-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Selenium	219		1.00	ug/L	200	0.830 U	109	75-125			
Thallium	185		1.00	ug/L	200	0.110 U	93	75-125			

Matrix Spike Dup (1K03013-MSD1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 12:14

Source: C113287-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	190		2.00	ug/L	200	0.220 U	95	75-125	2	20	
Selenium	224		1.00	ug/L	200	0.830 U	112	75-125	2	20	
Thallium	188		1.00	ug/L	200	0.110 U	94	75-125	2	20	

Post Spike (1K03013-PS1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 11:03

Source: C113287-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	200		2.00	ug/L	200	-0.0158	100	80-120			
Selenium	228		1.00	ug/L	200	0.119	114	80-120			
Thallium	197		1.00	ug/L	200	-0.0602	99	80-120			

Batch 1K08003 - EPA 3005A

Blank (1K08003-BLK1) Prepared: 11/08/2011 08:22 Analyzed: 11/09/2011 11:18

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	**2.49**	**J**	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (1K08003-BS1) Prepared: 11/08/2011 08:22 Analyzed: 11/09/2011 11:20

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	196		10.0	ug/L	200		98	80-120			
Barium	202		10.0	ug/L	200		101	80-120			
Beryllium	19.8		1.00	ug/L	20.0		99	80-120			
Cadmium	20.3		1.00	ug/L	20.0		102	80-120			
Chromium	200		10.0	ug/L	200		100	80-120			
Cobalt	207		10.0	ug/L	200		103	80-120			

QUALITY CONTROL

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

Batch 1K08003 - EPA 3005A

LCS (1K08003-BS1) Continued Prepared: 11/08/2011 08:22 Analyzed: 11/09/2011 11:20

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Copper	200	B	10.0	ug/L	200		100	80-120			
Lead	201		10.0	ug/L	200		101	80-120			
Nickel	203		10.0	ug/L	200		102	80-120			
Silver	204		10.0	ug/L	200		102	80-120			
Vanadium	202		10.0	ug/L	200		101	80-120			
Zinc	207		10.0	ug/L	200		103	80-120			

Matrix Spike (1K08003-MS1) Prepared: 11/08/2011 08:22 Analyzed: 11/09/2011 11:29

Source: C113315-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	197		10.0	ug/L	200	2.80 U	99	75-125			
Barium	205		10.0	ug/L	200	6.64	99	75-125			
Beryllium	19.6		1.00	ug/L	20.0	0.100 U	98	75-125			
Cadmium	19.9		1.00	ug/L	20.0	0.360 U	100	75-125			
Chromium	197		10.0	ug/L	200	1.00 U	98	75-125			
Cobalt	205		10.0	ug/L	200	1.10 U	103	75-125			
Copper	209	B	10.0	ug/L	200	15.9	97	75-125			
Lead	199		10.0	ug/L	200	1.90 U	100	75-125			
Nickel	197		10.0	ug/L	200	1.80 U	99	75-125			
Silver	200		10.0	ug/L	200	1.90 U	100	75-125			
Vanadium	201		10.0	ug/L	200	1.65	100	75-125			
Zinc	215		10.0	ug/L	200	10.6	102	75-125			

Matrix Spike Dup (1K08003-MSD1) Prepared: 11/08/2011 08:22 Analyzed: 11/09/2011 11:31

Source: C113315-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	195		10.0	ug/L	200	2.80 U	97	75-125	1	20	
Barium	213		10.0	ug/L	200	6.64	103	75-125	4	20	
Beryllium	20.3		1.00	ug/L	20.0	0.100 U	102	75-125	4	20	
Cadmium	20.6		1.00	ug/L	20.0	0.360 U	103	75-125	3	20	
Chromium	205		10.0	ug/L	200	1.00 U	102	75-125	4	20	
Cobalt	209		10.0	ug/L	200	1.10 U	105	75-125	2	20	
Copper	218	B	10.0	ug/L	200	15.9	101	75-125	4	20	
Lead	203		10.0	ug/L	200	1.90 U	102	75-125	2	20	
Nickel	205		10.0	ug/L	200	1.80 U	102	75-125	4	20	
Silver	207		10.0	ug/L	200	1.90 U	104	75-125	4	20	
Vanadium	209		10.0	ug/L	200	1.65	104	75-125	4	20	
Zinc	219		10.0	ug/L	200	10.6	104	75-125	2	20	

Post Spike (1K08003-PS1) Prepared: 11/08/2011 08:22 Analyzed: 11/09/2011 11:43

Source: C113315-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.196		0.0100	mg/L	0.200	-0.00456	100	80-120			
Barium	0.201		0.0100	mg/L	0.200	0.00664	97	80-120			

QUALITY CONTROL

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

Batch 1K08003 - EPA 3005A

Post Spike (1K08003-PS1) Continued Prepared: 11/08/2011 08:22 Analyzed: 11/09/2011 11:43

Source: C113315-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Beryllium	0.0192		0.00100	mg/L	0.0200	-0.000153	97	80-120			
Cadmium	0.0193		0.00100	mg/L	0.0200	-4.77E-5	97	80-120			
Chromium	0.194		0.0100	mg/L	0.200	0.000657	97	80-120			
Cobalt	0.201		0.0100	mg/L	0.200	0.000242	101	80-120			
Copper	0.206	B	0.0100	mg/L	0.200	0.0159	95	80-120			
Lead	0.194		0.0100	mg/L	0.200	-0.00166	98	80-120			
Nickel	0.194		0.0100	mg/L	0.200	0.000654	97	80-120			
Silver	0.194		0.0100	mg/L	0.200	0.00129	97	80-120			
Vanadium	0.198		0.0100	mg/L	0.200	0.00165	98	80-120			
Zinc	0.212		0.0100	mg/L	0.200	0.0106	101	80-120			

Classical Chemistry Parameters - Quality Control

Batch 1K01029 - NO PREP

Blank (1K01029-BLK1) Prepared & Analyzed: 11/01/2011 17:23

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

LCS (1K01029-BS1) Prepared & Analyzed: 11/01/2011 17:23

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	160		2.0	mg/L	198		83	85-115			B-07

Duplicate (1K01029-DUP1) Prepared & Analyzed: 11/01/2011 17:23

Source: C113286-01

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

Batch 1K02001 - NO PREP

Blank (1K02001-BLK1) Prepared: 11/02/2011 07:23 Analyzed: 11/02/2011 07:23

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	3.0	U	100	ug/L							

LCS (1K02001-BS1) Prepared: 11/02/2011 07:25 Analyzed: 11/02/2011 07:25

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	0.98		0.10	mg/L	1.00		98	90-110			

Matrix Spike (1K02001-MS1) Prepared: 11/02/2011 08:05 Analyzed: 11/02/2011 08:05

Source: C113215-01RE1

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1K02001 - NO PREP

Matrix Spike (1K02001-MS1) Continued Prepared: 11/02/2011 08:05 Analyzed: 11/02/2011 08:05

Source: C113215-01RE1

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1.7		0.10	mg/L	1.00	0.75	100	90-110			

Matrix Spike Dup (1K02001-MSD1) Prepared: 11/02/2011 08:06 Analyzed: 11/02/2011 08:06

Source: C113215-01RE1

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1.8		0.10	mg/L	1.00	0.75	101	90-110	0.4	10	

Batch 1K02003 - NO PREP

Blank (1K02003-BLK1) Prepared: 11/02/2011 06:05 Analyzed: 11/02/2011 08:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	12000	U	15000	ug/L							

LCS (1K02003-BS1) Prepared: 11/02/2011 06:05 Analyzed: 11/02/2011 08:37

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	98		15	mg/L	100		98	80-120			

Matrix Spike (1K02003-MS1) Prepared: 11/02/2011 06:05 Analyzed: 11/02/2011 08:38

Source: C112853-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	40		15	mg/L	37.8	1.0	102	80-120			

Matrix Spike Dup (1K02003-MSD1) Prepared: 11/02/2011 06:05 Analyzed: 11/02/2011 08:39

Source: C112853-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	37		15	mg/L	37.8	1.0	96	80-120	7	25	

Batch 1K02015 - NO PREP

Blank (1K02015-BLK1) Prepared & Analyzed: 11/02/2011 17:08

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

LCS (1K02015-BS1) Prepared & Analyzed: 11/02/2011 17:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	1.0		2.0	mg/L	198		0.5	85-115			B-07

Duplicate (1K02015-DUP1) Prepared & Analyzed: 11/02/2011 17:08

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1K02015 - NO PREP

Duplicate (1K02015-DUP1) Continued Prepared & Analyzed: 11/02/2011 17:08

Source: C113133-01

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

Batch 1K02016 - NO PREP

Blank (1K02016-BLK1) Prepared & Analyzed: 11/02/2011 18:58

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

LCS (1K02016-BS1) Prepared & Analyzed: 11/02/2011 18:58

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	170		2.0	mg/L	198		88	85-115			

Duplicate (1K02016-DUP1) Prepared & Analyzed: 11/02/2011 18:58

Source: C112024-01

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

Batch 1K03003 - NO PREP

Blank (1K03003-BLK1) Prepared: 11/03/2011 05:46 Analyzed: 11/03/2011 10:33

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

LCS (1K03003-BS1) Prepared: 11/03/2011 05:46 Analyzed: 11/03/2011 10:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	1.2		0.10	mg/L	1.25		92	90-110			

Matrix Spike (1K03003-MS1) Prepared: 11/03/2011 05:46 Analyzed: 11/03/2011 10:37

Source: C112053-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	1.4		0.10	mg/L	0.500	0.90	99	90-110			

Matrix Spike Dup (1K03003-MSD1) Prepared: 11/03/2011 05:46 Analyzed: 11/03/2011 10:39

Source: C112053-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	1.3		0.10	mg/L	0.500	0.90	91	90-110	3	10	

Batch 1K04011 - Same

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QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Blank (1K04011-BLK1) Prepared: 11/04/2011 11:42 Analyzed: 11/04/2011 15:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	10000	U	10000	ug/L							

LCS (1K04011-BS1) Prepared: 11/04/2011 11:42 Analyzed: 11/04/2011 15:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	500		10	mg/L	500		100	90-110			

Matrix Spike (1K04011-MS1) Prepared: 11/04/2011 11:42 Analyzed: 11/04/2011 15:13

Source: C113153-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	610		10	mg/L	500	94	102	90-110			

Matrix Spike Dup (1K04011-MSD1) Prepared: 11/04/2011 11:42 Analyzed: 11/04/2011 15:13

Source: C113153-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	600		10	mg/L	500	94	101	90-110	1	10	

Batch 1K07014 - NO PREP

Blank (1K07014-BLK1) Prepared: 11/07/2011 11:49 Analyzed: 11/07/2011 12:03

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

LCS (1K07014-BS1) Prepared: 11/07/2011 11:49 Analyzed: 11/07/2011 12:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.45		0.10	mg/L	0.401		112	80-120			

Matrix Spike (1K07014-MS1) Prepared: 11/07/2011 11:49 Analyzed: 11/07/2011 12:03

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.23		0.10	mg/L	0.401	-0.008	59	80-120			QM-05

Matrix Spike Dup (1K07014-MSD1) Prepared: 11/07/2011 11:49 Analyzed: 11/07/2011 12:03

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfide	0.25		0.10	mg/L	0.401	-0.008	63	80-120	7	25	QM-05

Batch 1K07021 - NO PREP

Blank (1K07021-BLK1) Prepared: 11/07/2011 13:26 Analyzed: 11/07/2011 23:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1K07021 - NO PREP

Blank (1K07021-BLK1) Continued Prepared: 11/07/2011 13:26 Analyzed: 11/07/2011 23:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	**1500**	**J**	5000	ug/L							
Sulfate as SO4	20	U	5000	ug/L							

LCS (1K07021-BS1) Prepared: 11/07/2011 13:26 Analyzed: 11/07/2011 23:21

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	48	B	5.0	mg/L	50.0		96	90-110			
Sulfate as SO4	48		5.0	mg/L	50.0		95	90-110			

Matrix Spike (1K07021-MS1) Prepared: 11/07/2011 13:26 Analyzed: 11/07/2011 23:38

Source: C113257-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	21	B	5.0	mg/L	20.0	4.2	86	90-110			QM-05
Sulfate as SO4	28		5.0	mg/L	20.0	11	87	90-110			QM-05

Matrix Spike Dup (1K07021-MSD1) Prepared: 11/07/2011 13:26 Analyzed: 11/07/2011 23:56

Source: C113257-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	22	B	5.0	mg/L	20.0	4.2	87	90-110	0.8	10	QM-05
Sulfate as SO4	28		5.0	mg/L	20.0	11	89	90-110	1	10	QM-05

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 1K03017 - Same

Blank (1K03017-BLK1) Prepared: 11/03/2011 10:04 Analyzed: 11/03/2011 12:42

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	1300	U	2500	ug/L							
Ethane	1.00	U	2.00	ug/L							
Ethene	2.30	U	3.00	ug/L							
Methane	0.720	U	1.00	ug/L							

LCS (1K03017-BS1) Prepared: 11/03/2011 10:04 Analyzed: 11/03/2011 12:58

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	54300		2.50	mg/L	50400		108	71-119			
Ethane	550		0.00200	mg/L	500		110	75-123			
Ethene	539		0.00300	mg/L	500		108	72-131			
Methane	527		0.00100	mg/L	500		105	74-116			

LCS Dup (1K03017-BSD1) Prepared: 11/03/2011 10:04 Analyzed: 11/03/2011 13:15

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL

Dissolved Gases by GC - Quality Control

Batch 1K03017 - Same

LCS Dup (1K03017-BSD1) Continued Prepared: 11/03/2011 10:04 Analyzed: 11/03/2011 13:15

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	53300		2.50	mg/L	50400		106	71-119	2	10	
Ethane	543		0.00200	mg/L	500		109	75-123	1	14	
Ethene	531		0.00300	mg/L	500		106	72-131	2	12	
Methane	523		0.00100	mg/L	500		105	74-116	0.8	18	

Duplicate (1K03017-DUP1) Prepared: 11/03/2011 10:04 Analyzed: 11/03/2011 18:20

Source: C113286-06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon dioxide	165000		2500	ug/L		164000			0.6	200	
Ethane	1.00	U	2.00	ug/L		1.00 U				200	
Ethene	2.30	U	3.00	ug/L		2.30 U				200	
Methane	0.720	U	1.00	ug/L		0.720 U				200	

Volatile Fatty Acids by HPLC - Quality Control

Batch 1K04009 - NO PREP

Blank (1K04009-BLK1) Prepared: 11/04/2011 11:39 Analyzed: 11/04/2011 15:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	40	U	70	ug/L							
Butyric Acid	24	U	70	ug/L							
Hexanoic Acid	87	U	100	ug/L							
iso-Hexanoic Acid	89	U	100	ug/L							
iso-Pentanoic Acid	62	U	70	ug/L							
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid)	62	U	140	ug/L							
Pentanoic Acid	48	U	70	ug/L							
Propionic Acid	57	U	70	ug/L							
Pyruvic Acid	61	U	70	ug/L							
Surrogate: Trimethylacetic acid	*21000*			*ug/L*	*20000*		*103*	*80-124*			

LCS (1K04009-BS1) Prepared: 11/04/2011 11:39 Analyzed: 11/04/2011 15:39

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	21000		70	ug/L	20000		103	73-125			
Butyric Acid	22000		70	ug/L	20000		112	80-120			
Hexanoic Acid	16000		100	ug/L	20000		79	78-120			
iso-Hexanoic Acid	17000		100	ug/L	20000		85	80-120			
iso-Pentanoic Acid	21000		70	ug/L	20000		103	78-120			
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid)	41000		140	ug/L	40000		103	70-130			
Pentanoic Acid	17000		70	ug/L	20000		86	77-120			
Propionic Acid	20000		70	ug/L	20000		100	80-120			
Pyruvic Acid	24000		70	ug/L	20000		120	37-142			
Surrogate: Trimethylacetic acid	*22000*			*ug/L*	*20000*		*111*	*80-124*			

Matrix Spike (1K04009-MS1) Prepared: 11/04/2011 11:39 Analyzed: 11/04/2011 16:14

QUALITY CONTROL

Volatile Fatty Acids by HPLC - Quality Control

Batch 1K04009 - NO PREP

Matrix Spike (1K04009-MS1) Continued Prepared: 11/04/2011 11:39 Analyzed: 11/04/2011 16:14

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	22000		70	ug/L	20000	510	105	73-125			
Butyric Acid	23000		70	ug/L	20000	24 U	113	80-120			
Hexanoic Acid	16000		100	ug/L	20000	87 U	80	78-120			
iso-Hexanoic Acid	17000		100	ug/L	20000	89 U	87	80-120			
iso-Pentanoic Acid	21000		70	ug/L	20000	62 U	104	78-120			
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid)	42000		140	ug/L	40000	110	105	70-130			
Pentanoic Acid	18000		70	ug/L	20000	48 U	88	77-120			
Propionic Acid	20000		70	ug/L	20000	57 U	101	80-120			
Pyruvic Acid	49000		70	ug/L	20000	61 U	245	37-142			QM-07
Surrogate: Trimethylacetic acid	*22000*			*ug/L*	*20000*		*112*	*80-124*			

Matrix Spike Dup (1K04009-MSD1) Prepared: 11/04/2011 11:39 Analyzed: 11/04/2011 16:38

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetic Acid	21000		70	ug/L	20000	510	103	73-125	2	10	
Butyric Acid	22000		70	ug/L	20000	24 U	111	80-120	2	10	
Hexanoic Acid	16000		100	ug/L	20000	87 U	78	78-120	2	34	
iso-Hexanoic Acid	17000		100	ug/L	20000	89 U	86	80-120	1	15	
iso-Pentanoic Acid	20000		70	ug/L	20000	62 U	102	78-120	2	15	
Lactic Acid/HIBA (2-Hydroxyisobutyric Acid)	41000		140	ug/L	40000	110	103	70-130	2	30	
Pentanoic Acid	18000		70	ug/L	20000	48 U	89	77-120	1	10	
Propionic Acid	20000		70	ug/L	20000	57 U	99	80-120	1	10	
Pyruvic Acid	48000		70	ug/L	20000	61 U	241	37-142	2	10	QM-07
Surrogate: Trimethylacetic acid	*22000*			*ug/L*	*20000*		*110*	*80-124*			

Classical Chemistry Parameters - Quality Control

Batch 1K07002 - NO PREP

Blank (1K07002-BLK1) Prepared: 11/07/2011 08:35 Analyzed: 11/07/2011 13:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	280	U	1000	ug/L							

LCS (1K07002-BS1) Prepared: 11/07/2011 08:35 Analyzed: 11/07/2011 14:15

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	44000		1000	ug/L	40000		111	80-120			

LCS Dup (1K07002-BSD1) Prepared: 11/07/2011 08:35 Analyzed: 11/07/2011 14:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Organic Carbon	44000		1000	ug/L	40000		109	80-120	2	25	

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 1K04032 - NO PREP

Blank (1K04032-BLK1) Prepared: 11/04/2011 14:33 Analyzed: 11/04/2011 14:45

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron, Ferrous	30	U	50	ug/L							

LCS (1K04032-BS1) Prepared: 11/04/2011 14:33 Analyzed: 11/04/2011 14:45

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron, Ferrous	1500		50	ug/L	1500		97	88-114			

Matrix Spike (1K04032-MS1) Prepared: 11/04/2011 14:33 Analyzed: 11/04/2011 14:45

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron, Ferrous	1500		50	ug/L	1500	140	90	88-114			

Matrix Spike Dup (1K04032-MSD1) Prepared: 11/04/2011 14:33 Analyzed: 11/04/2011 14:45

Source: C113286-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron, Ferrous	1500		50	ug/L	1500	140	93	88-114	3	11	

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
B-07	LCS exceeded control limits for this test. The test can not be repeated due to method constraints. The result should be considered an estimated value.
J-01	Result is estimated due to positive results in the associated method blank.
Q	Analysis performed outside of method - specified holding time.
QB-01	The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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Page 1 of 6

Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone

Requested Analyses

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: C113286

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 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn	Alkalinity 310.2,Chloride 300,Nitrite as N 353.2	BOD SM5210B	COD SM5220D	Fatty Acids	Fe/Ferrous	Hg	Hydrogen,RSK 175 + CO2	Nitrate Calc 353.2	Sample Comments
	9209-MW5R	10/3/11	1515	G	GW	19	X	X	X	X	X	X	X	X	X	X	Report according
	9209-MW6	11/1/11	830	G	GW	19	X	X	X	X	X	X	X	X	X	X	to SWS guidelines
	9209-MW6d				GW	4	X	X						X			+ provide edd
	9209-MW7				GW	4	X	X						X			+ report "J" values
	9209-MW8	10/31/11	1630	G	GW	19	X	X	X	X	X	X	X	X	X	X	
	9209-MW8d				GW	4	X	X						X			
	9209-MW9	11/1/11	1000	G	GW	19	X	X	X	X	X	X	X	X		X	
	9209-MW10	10/31/11	1400	G	GW	19	X	X	X	X	X	X	X	X		X	
	9209-MW10d				GW	4	X	X						X			
	9209-MW11	11/1/11	1050	G	GW	19	X	X	X	X	X	X	X	X		X	
	9209-MW11d				GW	4	X	X						X			
	9209-MW22	11/1/11	720	G	GW	4	X	X						X			
						<-- Total # of Containers											

Sample Kit Prepared By: JK	Date/Time: 10/27/11	Relinquished By: [signature]	Date/Time: 11/1/11 1225	Received By: [signature]	Date/Time: 11/1/11 1225
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: [signature]	Date/Time: 11/1/11 122
		Cooler #'s & Temps on Receipt: C 301 C 826 0.7°C C 369 C 614 0.9°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

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Page 2 of 6

Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info
Tel: 325-3500 Fax: ()-	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: C113286

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	NOX 353.2	RSK 175 + CO2	Sulfate 300	Sulfide SM4500-S D	TOC SM5310B						Sample Comments
	9209-MW5R	10/31/11	1515	G	GW	19	X		X	X	X						See page 1
	9209-MW6	11/1/11	830	G	GW	19	X		X	X	X						
	9209-MW6d				GW	4											
	9209-MW7				GW	4											
	9209-MW8	10/31/11	1630	G	GW	19	X		X	X	X						
	9209-MW8d				GW	4											
	9209-MW9	11/1/11	1000	G	GW	19	X	X	X	X	X						
	9209-MW10	10/31/11	1400	G	GW	19	X	X	X	X	X						
	9209-MW10d				GW	4											
	9209-MW11	11/1/11	1050	G	GW	19	X	X	X	X	X						
	9209-MW11d				GW	4											
	9209-MW22	11/1/11	720	G	GW	4											

Preservation (See Codes) (Combine as necessary)

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Comments/Special Reporting Requirements		[signature]	11/1/11 1225	[signature]	11/1/11 1225
		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By [signature]	11/1/11 122
		Cooler #'s & Temps on Receipt: C-826 0.7°C C-644 0.9°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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Page 3 of 5

Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: C113286

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 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn	Alkalinity 310.2,Chloride 300,Nitrite as N 353.2	BOD SM5210B	COD SM5220D	Fatty Acids	Fe/Ferrous	Hg	Hydrogen,RSK 175 + CO2	Nitrate Calc 353.2	Sample Comments
	9209-MW23				GW	4	X	X						X			See page 1
	9209-MW23d				GW	4	X	X						X			
	9209-MW24				GW	4	X	X						X			
	9209-MW29d				GW	4	X	X						X			
	9209-MW30	11/1/11	1150	G	GW	4	X	X						X			
	9209-MW31	11/1/11	1200	G	GW	4	X	X						X			
	9209-MW31d	10/31/11	940	G	GW	4	X	X						X			
	9209-MW32	11/1/11	1140	G	GW	4	X	X						X			
	9209-TB1a				GW	4	X	X						X			
	9209-TB1ad	10/31/11	1030	G	GW	4	X	X						X			
	9209-MW36	11/1/11	900	G	GW	19	X	X	X	X	X	X	X	X		X	
	9209-MW36d				GW	4	X	X						X			

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 11/1/11 1225	Received By: [signature]	Date/Time: 11/1/11 1225
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: [signature]	Date/Time: 11/1/11 122
		Cooler #'s & Temps on Receipt: C-836 0.7°C C-614 0.9°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone

Requested Analyses: NOX 353.2; RSK 175 + CO2; Sulfate 300; Sulfide SM4500-S D; TOC SM5310B

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: C113286

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	NOX 353.2	RSK 175 + CO2	Sulfate 300	Sulfide SM4500-S D	TOC SM5310B						Sample Comments
	9209-MW23				GW	4											See page 1
	9209-MW23d				GW	4											
	9209-MW24				GW	4											
	9209-MW29d				GW	4											
	9209-MW30	11/1/11	1150	G	GW	4											
	9209-MW31	11/1/11	1200	G	GW	4											
	9209-MW31d	10/31/11	940	G	GW	4											
	9209-MW32	11/1/11	1140	G	GW	4											
	9209-TB1a				GW	4											
	9209-TB1ad	10/31/11	1030	G	GW	4											
	9209-MW36	11/1/11	900	G	GW	19	X	X	X	X	X						
	9209-MW36d				GW	4											

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 11/1/11 1225	Received By: [signature]	Date/Time: 11/1/11 1225
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: [signature]	Date/Time: 11/1/11 122
		Cooler #'s & Temps on Receipt: C-826 0.7°C C-614 0.9°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **DW**-Drinking Water **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments) **Preservation:** I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info
Tel: 325-3500 Fax: ()-	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: C113286

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 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn	Alkalinity 310.2,Chloride 300,Nitrite as N 353.2	BOD SM5210B	COD SM5220D	Fatty Acids	Fe/Ferrous	Hg	Hydrogen,RSK 175 + CO2	Nitrate Calc 353.2	Sample Comments
	9209-DUP	11/1/11	700	G	GW	4	X	X						X			See page 1
	9209-EQBlank				WA	4	X	X						X			
	9209-TripBlank	—	—	—	WA	2	X										

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 11/1/11 1225	Received By: [signature]	Date/Time: 11/1/11 1225		
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time		
		Relinquished By	Date/Time	Received By: [signature]	Date/Time: 11/1/11 1222		
		Cooler #'s & Temps on Receipt: C-826 0.7°C C-614 0.9°C			Condition Upon Receipt: X Acceptable ___ Unacceptable		

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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

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Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone

Requested Analyses: NOX 353.2; RSK 175 + CO2; Sulfate 300; Sulfide SM4500-S D; TOC SM5310B

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: C113286

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	Sample Comments
	9209-DUP	11/1/11	700	G	GW	4	See page 1
	9209-EQBlank				WA	4	
	9209-TripBlank	—	—	—	WA	2	

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Comments/Special Reporting Requirements		[signature]	11/1/11 1225	[signature]	11/1/11 1225
		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By [signature]	11/1/11 122

Cooler #'s & Temps on Receipt: C-826 0.7°C C-614 0.9°C

Condition Upon Receipt: X Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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Page 1 of 6

Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: ~~C113296~~ C113476

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 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn	Alkalinity 310.2,Chloride 300,Nitrite as N 353.2	BOD SM5210B	COD SM5220D	Fatty Acids	Fe/Ferrous	Hg	Hydrogen,RSK 175 + CO2	Nitrate Calc 353.2	Sample Comments
	9209-MW5R				GW	19	X	X	X	X	X	X	X	X	X	X	-report according to
	9209-MW6				GW	19	X	X	X	X	X	X	X	X	X	X	SWS guidelines
	9209-MW6d	11/2/11	1000	G	GW	4	X	X						X			-report "J" values
	9209-MW7	11/2/11	1045	G	GW	4	X	X						X			-provide edd
	9209-MW8	[illegible]	[illegible]	[illegible]	GW	19	X	X	X	X	X	X	X	X	X	X	
	9209-MW8d	11/2/11	1030	G	GW	4	X	X						X			
	9209-MW9				GW	19	X	X	X	X	X	X	X	X		X	
	9209-MW10				GW	19	X	X	X	X	X	X	X	X		X	
	9209-MW10d	11/2/11	830	G	GW	4	X	X						X			
	9209-MW11				GW	19	X	X	X	X	X	X	X	X		X	
	9209-MW11d	11/2/11	745	G	GW	4	X	X						X			
	9209-MW22				GW	4	X	X						X			

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 11/2/11 1155	Received By	Date/Time
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: MEStamper	Date/Time: 11/2/11 1154
		Cooler #'s & Temps on Receipt: 0.5°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **DW**-Drinking Water **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments) **Preservation:** **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

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Page 2 of 6

Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info:
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone:

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: ~~C113286~~

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	NOX 353.2	RSK 175 + CO2	Sulfate 300	Sulfide SM4500-S D	TOC SM5310B						Sample Comments
	9209-MW5R				GW	19	X		X	X	X						See page C 113476
	9209-MW6				GW	19	X		X	X	X						
	9209-MW6d	11/2/11	1000	G	GW	4											
	9209-MW7	11/2/11	1045	G	GW	4											
	9209-MW8				GW	19	X		X	X	X						
	9209-MW8d	11/2/11	1030	G	GW	4											
	9209-MW9				GW	19	X	X	X	X	X						
	9209-MW10				GW	19	X	X	X	X	X						
	9209-MW10d	11/2/11	830	G	GW	4											
	9209-MW11				GW	19	X	X	X	X	X						
	9209-MW11d	11/2/11	745	G	GW	4											
	9209-MW22				GW	4											

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 11/2/11 1155	Received By	Date/Time
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: MC Stamper	Date/Time: 11/2/11 1154
		Cooler #'s & Temps on Receipt		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **DW**-Drinking Water **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments) **Preservation:** **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

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

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Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info:
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anerosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone:

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: C113286

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 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn	Alkalinity 310.2,Chloride 300,Nitrite as N 353.2	BOD SM5210B	COD SM5220D	Fatty Acids	Fe/Ferrous	Hg	Hydrogen,RSK 175 + CO2	Nitrate Calc 353.2	Sample Comments
	9209-MW23	11/2/11	820	G	GW	4	X	X						X			See page 1
	9209-MW23d	11/1/11	1705	G	GW	4	X	X						X			C113476
	9209-MW24	11/2/11	805	G	GW	4	X	X						X			
	9209-MW29d	11/1/11	1330	G	GW	4	X	X						X			
	9209-MW30				GW	4	X	X						X			
	9209-MW31				GW	4	X	X						X			
	9209-MW31d				GW	4	X	X						X			
	9209-MW32				GW	4	X	X						X			
	9209-TB1a	11/1/11	1245	G	GW	4	X	X						X			
	9209-TB1ad				GW	4	X	X						X			
	9209-MW36				GW	19	X	X	X	X	X	X	X	X		X	
	9209-MW36d	11/2/11	910	G	GW	4	X	X						X			

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 11/2/11 1155	Received By	Date/Time
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: [signature]	Date/Time: 11/2/11 1154
		Cooler #'s & Temps on Receipt: 0.5°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **DW**-Drinking Water **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments) **Preservation:** **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

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Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info:
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone:

Requested Analyses: NOX 353.2; RSK 175 + CO2; Sulfate 300; Sulfide SM4500-S D; TOC SM5310B

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: ~~C113286~~

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	NOX 353.2	RSK 175 + CO2	Sulfate 300	Sulfide SM4500-S D	TOC SM5310B						Sample Comments
	9209-MW23	11/2/11	820	G	GW	4											See page 1
	9209-MW23d	11/1/11	1705	G	GW	4											C113476
	9209-MW24	11/2/11	805	G	GW	4											
	9209-MW29d	11/1/11	1330	G	GW	4											
	9209-MW30				GW	4											
	9209-MW31				GW	4											
	9209-MW31d				GW	4											
	9209-MW32				GW	4											
	9209-TB1a	11/1/11	1245	G	GW	4											
	9209-TB1ad				GW	4											
	9209-MW36				GW	19	X	X	X	X	X						
	9209-MW36d	11/2/11	910	G	GW	4											

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Comments/Special Reporting Requirements		[signature]	11/2/11 1155		
		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: ME Stamper	Date/Time: 11/2/11 1154
		Cooler #'s & Temps on Receipt: 0.5°		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **DW**-Drinking Water **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments) **Preservation:** **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

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Page 5 of 6

Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info:
Tel: 325-3500 Fax: ()-	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone:

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: ~~C113286~~

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 2	Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn	Alkalinity 310.2,Chloride 300,Nitrite as N 353.2	BOD SM5210B	COD SM5220D	Fatty Acids	Fe/Ferrous	Hg	Hydrogen,RSK 175 + CO2	Nitrate Calc 353.2	Sample Comments
	9209-DUP				GW	4	X	X						X			See page 1
	9209-EQBlank	11/2/11	920	G	WA	4	X	X						X			C113476
	9209-TripBlank				WA	2	X										

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 11/2/11 1155	Received By	Date/Time
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: [signature]	Date/Time: 11/2/11 1157
		Cooler #'s & Temps on Receipt: 2.5°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

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

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

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Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: North Wake Unlined Landfill
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info:
Tel: 325-3500 Fax: () -	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone:

Requested Analyses: NOX 353.2; RSK 175 + CO2; Sulfate 300; Sulfide SM4500-S D; TOC SM5310B

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due __/__/__

Lab Workorder: ~~C113286~~

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	Sample Comments
	9209-DUP				GW	4	See page 1
	9209-EQBlank	11/2/11	920	G	WA	4	C113476
	9209-TripBlank				WA	2	

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 11/2/11 1155	Received By	Date/Time
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: Jme Stamper	Date/Time: 11/2/11 1157
		Cooler #'s & Temps on Receipt: 0.5°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

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

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

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

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

November 16, 2011

Chuck Smith
Environmental Conservation Labs, Inc.
102A Woodwinds Industrial Ct.
Cary, NC 27511

RE: **C113468**

Microseeps Workorder: 3193

Dear Chuck Smith:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, November 04, 2011. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Heather Hauser JS 11/17/11

Heather Hauser 11/16/2011
hhauser@microseeps.com

Enclosures

Total Number of Pages 8

CERTIFICATE OF ANALYSIS

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3004.1.0.0

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

LABORATORY ACCREDITATIONS & CERTIFICATIONS

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

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Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 3193 C113468

Lab ID	Sample ID	Matrix	Date Collected	Date Received
31930001	MW-5R	Bubble Strip	10/31/2011 15:30	11/4/2011 13:30
31930002	MW-8	Bubble Strip	10/31/2011 16:50	11/4/2011 13:30
31930003	MW-6	Bubble Strip	11/1/2011 08:45	11/4/2011 13:30

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Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 3193 C113468

Lab ID: **31930001** Date Received: 11/4/2011 13:30 Matrix: Bubble Strip

Sample ID: **MW-5R** Date Collected: 10/31/2011 15:30

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK - MICR											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	1.9	nM	0.60	0.25	1			11/11/2011 14:17	GT		

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

ANALYTICAL RESULTS

Workorder: 3193 C113468

Lab ID: **31930002** Date Received: 11/4/2011 13:30 Matrix: Bubble Strip
Sample ID: **MW-8** Date Collected: 10/31/2011 16:50

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK - MICR											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	1.7	nM	0.60	0.25	1			11/11/2011 14:30	GT		

CERTIFICATE OF ANALYSIS

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

ANALYTICAL RESULTS

Workorder: 3193 C113468

Lab ID: **31930003** Date Received: 11/4/2011 13:30 Matrix: Bubble Strip
Sample ID: **MW-6** Date Collected: 11/1/2011 08:45

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
RISK - MICR											
Analysis Desc: AM20GAX			Analytical Method: AM20GAX								
Hydrogen	1.9	nM	0.60	0.25	1			11/11/2011 14:43	GT		

CERTIFICATE OF ANALYSIS

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Pittsburgh, PA 15238
Phone: (412) 826-5245
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ANALYTICAL RESULTS QUALIFIERS

Workorder: 3193 C113468

PARAMETER QUALIFIERS

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

CERTIFICATE OF ANALYSIS

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3193

SUBCONTRACT ORDER

ENCO Cary

C113468

SENDING LABORATORY:

ENCO Cary
102-A Woodwinds Industrial Court
Cary, NC 27511
Phone: 919.467.3090
Fax: 919.467.3515
Project Manager: Chuck Smith

RECEIVING LABORATORY:

Microseeps, Inc
220 William Pitt Way
Pittsburg, PA 15238
Phone :(412) 826-5245
Fax: (999) 999-9999
Project State of Origin: North Carolina

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-5R	Ground Water	31-Oct-11 15:30	

Analysis	Due	Expires	Analysis Comments
Hydrogen	16-Nov-11 15:00	07-Nov-11 15:30	
Containers Supplied:			
Vial (A)			

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-8	Ground Water	31-Oct-11 16:50	

Analysis	Due	Expires	Analysis Comments
Hydrogen	16-Nov-11 15:00	07-Nov-11 16:50	
Containers Supplied:			
Vial (A)			

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-6	Ground Water	01-Nov-11 08:45	

Analysis	Due	Expires	Analysis Comments
Hydrogen	16-Nov-11 15:00	08-Nov-11 08:45	
Containers Supplied:			
Vial (A)			

Released By	Date	Received By	Date
MEStamper	11/2/11	[illegible]	11-4-11 1330

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

Tuesday, November 8, 2011

CDM (CD004)

Attn: Aaron Weispfenning

5400 GLENWOOD AVE SUITE 300

RALEIGH, NC 27612-

RE: Laboratory Results for
Project Number: [none], Project Name/Desc: N Wake Unlined Surface Waters
ENCO Workorder: C113287

Dear Aaron Weispfenning,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, November 1, 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 22.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 9209-SW2 **Lab ID: C113287-01** **Sampled: 11/01/11 10:30** **Received: 11/01/11 13:22**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/02/11 09:42	11/7/2011 13:13
EPA 6020A	04/29/12	11/03/11 09:57	11/8/2011 11:10
EPA 8260B	11/15/11	11/07/11 11:36	11/8/2011 04:59

Client ID: 9209-SW3 **Lab ID: C113287-02** **Sampled: 11/01/11 11:30** **Received: 11/01/11 13:22**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/02/11 09:42	11/7/2011 13:15
EPA 6020A	04/29/12	11/03/11 09:57	11/8/2011 11:12
EPA 8260B	11/15/11	11/07/11 11:36	11/8/2011 05:28

Client ID: 9209-SW7 **Lab ID: C113287-03** **Sampled: 11/01/11 09:20** **Received: 11/01/11 13:22**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/02/11 09:42	11/7/2011 13:17
EPA 6020A	04/29/12	11/03/11 09:57	11/8/2011 11:14
EPA 8260B	11/15/11	11/07/11 11:36	11/8/2011 05:56

Client ID: 9209-SW8 **Lab ID: C113287-04** **Sampled: 11/01/11 09:40** **Received: 11/01/11 13:22**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010C	04/29/12	11/02/11 09:42	11/7/2011 13:19
EPA 6020A	04/29/12	11/03/11 09:57	11/8/2011 10:58
EPA 8260B	11/15/11	11/07/11 11:36	11/8/2011 06:25

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NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 9209-SW2 **Lab ID: C113287-01**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	77.1	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	9.49	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	5.46	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total	14.1	B	1	1.60	10.0	10	ug/L	EPA 6010C	J-01
Lead - Total	4.12	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	5.20	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Silver - Total	2.35	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Vanadium - Total	22.0	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	25.7		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-SW3 **Lab ID: C113287-02**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	33.4	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	2.11	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	5.21	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Nickel - Total	2.22	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J
Vanadium - Total	4.06	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	6.46	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 9209-SW7 **Lab ID: C113287-03**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	26.3	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	1.19	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	3.78	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J
Nickel - Total	1.99	JB	1	1.80	10.0	50	ug/L	EPA 6010C	J

Client ID: 9209-SW8 **Lab ID: C113287-04**

Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	24.8	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	1.10	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	5.18	JB	1	1.60	10.0	10	ug/L	EPA 6010C	J

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ANALYTICAL RESULTS

Description: 9209-SW2 **Lab Sample ID:** C113287-01 **Received:** 11/01/11 13:22

Matrix: Surface Water **Sampled:** 11/01/11 10:30 **Work Order:** C113287

Project: N Wake Unlined Surface Waters **Sampled By:** Aaron Weispfenning

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

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Description: 9209-SW2
Matrix: Surface Water
Project: N Wake Unlined Surface Waters

Lab Sample ID: C113287-01
Sampled: 11/01/11 10:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113287

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	11/08/11 04:59	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/08/11 04:59	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/08/11 04:59	JKG	
Xylenes (Total) [1330-20-7] ^	2.1	U	ug/L	1	2.1	3.0	5	EPA 8260B	11/08/11 04:59	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*46*	*1*	*50.0*	*92 %*	*51-122*	*1K07016*	*EPA 8260B*	*11/08/11 04:59*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*99 %*	*68-117*	*1K07016*	*EPA 8260B*	*11/08/11 04:59*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*98 %*	*67-127*	*1K07016*	*EPA 8260B*	*11/08/11 04:59*	*JKG*	

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Description: 9209-SW2 | **Lab Sample ID:** C113287-01 | **Received:** 11/01/11 13:22

Matrix: Surface Water | **Sampled:** 11/01/11 10:30 | **Work Order:** C113287

Project: N Wake Unlined Surface Waters | **Sampled By:** Aaron Weispfenning

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	11/08/11 11:10	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 13:13	JDH	
Barium [7440-39-3] ^	**77.1**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 13:13	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 13:13	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 13:13	JDH	
Chromium [7440-47-3] ^	**9.49**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 13:13	JDH	
Cobalt [7440-48-4] ^	**5.46**	J	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 13:13	JDH	
Copper [7440-50-8] ^	**14.1**	B	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 13:13	JDH	J-01
Lead [7439-92-1] ^	**4.12**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 13:13	JDH	
Nickel [7440-02-0] ^	**5.20**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 13:13	JDH	J
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:10	VLO	
Silver [7440-22-4] ^	**2.35**	J	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 13:13	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:10	VLO	
Vanadium [7440-62-2] ^	**22.0**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 13:13	JDH	
Zinc [7440-66-6] ^	**25.7**		ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 13:13	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: 9209-SW3 | **Lab Sample ID:** C113287-02 | **Received:** 11/01/11 13:22

Matrix: Surface Water | **Sampled:** 11/01/11 11:30 | **Work Order:** C113287

Project: N Wake Unlined Surface Waters | **Sampled By:** Aaron Weispfenning

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	11/08/11 05:28	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.65	U	ug/L	1	0.65	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.75	U	ug/L	1	0.75	1.0	3	EPA 8260B	11/08/11 05:28	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
1,1-Dichloroethane [75-34-3] ^	0.080	U	ug/L	1	0.080	1.0	5	EPA 8260B	11/08/11 05:28	JKG	
1,1-Dichloroethene [75-35-4] ^	0.60	U	ug/L	1	0.60	1.0	5	EPA 8260B	11/08/11 05:28	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	11/08/11 05:28	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.11	U	ug/L	1	0.11	1.0	5	EPA 8260B	11/08/11 05:28	JKG	
1,2-Dichloroethane [107-06-2] ^	0.47	U	ug/L	1	0.47	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
1,2-Dichloropropane [78-87-5] ^	0.59	U	ug/L	1	0.59	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.79	U	ug/L	1	0.79	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	11/08/11 05:28	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	11/08/11 05:28	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	11/08/11 05:28	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	11/08/11 05:28	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	11/08/11 05:28	JKG	
Benzene [71-43-2] ^	0.68	U	ug/L	1	0.68	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Bromochloromethane [74-97-5] ^	0.87	U	ug/L	1	0.87	1.0	3	EPA 8260B	11/08/11 05:28	JKG	
Bromodichloromethane [75-27-4] ^	0.75	U	ug/L	1	0.75	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Bromoform [75-25-2] ^	0.68	U	ug/L	1	0.68	1.0	3	EPA 8260B	11/08/11 05:28	JKG	
Bromomethane [74-83-9] ^	0.58	U	ug/L	1	0.58	1.0	10	EPA 8260B	11/08/11 05:28	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	11/08/11 05:28	JKG	
Carbon tetrachloride [56-23-5] ^	0.69	U	ug/L	1	0.69	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Chlorobenzene [108-90-7] ^	0.74	U	ug/L	1	0.74	1.0	3	EPA 8260B	11/08/11 05:28	JKG	
Chloroethane [75-00-3] ^	0.75	U	ug/L	1	0.75	1.0	10	EPA 8260B	11/08/11 05:28	JKG	
Chloroform [67-66-3] ^	0.70	U	ug/L	1	0.70	1.0	5	EPA 8260B	11/08/11 05:28	JKG	
Chloromethane [74-87-3] ^	0.55	U	ug/L	1	0.55	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.72	U	ug/L	1	0.72	1.0	5	EPA 8260B	11/08/11 05:28	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.075	U	ug/L	1	0.075	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Dibromochloromethane [124-48-1] ^	0.63	U	ug/L	1	0.63	1.0	3	EPA 8260B	11/08/11 05:28	JKG	
Dibromomethane [74-95-3] ^	0.90	U	ug/L	1	0.90	1.0	10	EPA 8260B	11/08/11 05:28	JKG	
Ethylbenzene [100-41-4] ^	0.62	U	ug/L	1	0.62	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	11/08/11 05:28	JKG	
Methylene chloride [75-09-2] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Styrene [100-42-5] ^	0.053	U	ug/L	1	0.053	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Tetrachloroethene [127-18-4] ^	0.73	U	ug/L	1	0.73	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Toluene [108-88-3] ^	0.85	U	ug/L	1	0.85	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.12	U	ug/L	1	0.12	1.0	5	EPA 8260B	11/08/11 05:28	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.50	U	ug/L	1	0.50	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	11/08/11 05:28	JKG	
Trichloroethene [79-01-6] ^	0.72	U	ug/L	1	0.72	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Trichlorofluoromethane [75-69-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	11/08/11 05:28	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	11/08/11 05:28	JKG	
Vinyl chloride [75-01-4] ^	0.60	U	ug/L	1	0.60	1.0	1	EPA 8260B	11/08/11 05:28	JKG	

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Description: 9209-SW3
Matrix: Surface Water
Project: N Wake Unlined Surface Waters

Lab Sample ID: C113287-02
Sampled: 11/01/11 11:30
Sampled By: Aaron Weispfenning

Received: 11/01/11 13:22
Work Order: C113287

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	11/08/11 05:28	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*46*	*1*	*50.0*	*93 %*	*51-122*	*1K07016*	*EPA 8260B*	*11/08/11 05:28*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*99 %*	*68-117*	*1K07016*	*EPA 8260B*	*11/08/11 05:28*	*JKG*	
Toluene-d8	*49*	*1*	*50.0*	*98 %*	*67-127*	*1K07016*	*EPA 8260B*	*11/08/11 05:28*	*JKG*	

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Description: 9209-SW3 | **Lab Sample ID:** C113287-02 | **Received:** 11/01/11 13:22

Matrix: Surface Water | **Sampled:** 11/01/11 11:30 | **Work Order:** C113287

Project: N Wake Unlined Surface Waters | **Sampled By:** Aaron Weispfenning

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	11/08/11 11:12	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 13:15	JDH	
Barium [7440-39-3] ^	**33.4**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 13:15	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 13:15	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 13:15	JDH	
Chromium [7440-47-3] ^	**2.11**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 13:15	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 13:15	JDH	
Copper [7440-50-8] ^	**5.21**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 13:15	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 13:15	JDH	
Nickel [7440-02-0] ^	**2.22**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 13:15	JDH	J
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:12	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 13:15	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:12	VLO	
Vanadium [7440-62-2] ^	**4.06**	J	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 13:15	JDH	
Zinc [7440-66-6] ^	**6.46**	J	ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 13:15	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: 9209-SW7 | **Lab Sample ID:** C113287-03 | **Received:** 11/01/11 13:22

Matrix: Surface Water | **Sampled:** 11/01/11 09:20 | **Work Order:** C113287

Project: N Wake Unlined Surface Waters | **Sampled By:** Aaron Weispfenning

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

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Description:	9209-SW7	**Lab Sample ID:**	C113287-03	**Received:**	11/01/11 13:22
Matrix:	Surface Water	**Sampled:**	11/01/11 09:20	**Work Order:**	C113287
Project:	N Wake Unlined Surface Waters	**Sampled By:**	Aaron Weispfenning		

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	11/08/11 05:56	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*51-122*	*1K07016*	*EPA 8260B*	*11/08/11 05:56*	*JKG*	
Dibromofluoromethane	*49*	*1*	*50.0*	*99 %*	*68-117*	*1K07016*	*EPA 8260B*	*11/08/11 05:56*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*1K07016*	*EPA 8260B*	*11/08/11 05:56*	*JKG*	

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Description: 9209-SW7 | **Lab Sample ID:** C113287-03 | **Received:** 11/01/11 13:22

Matrix: Surface Water | **Sampled:** 11/01/11 09:20 | **Work Order:** C113287

Project: N Wake Unlined Surface Waters | **Sampled By:** Aaron Weispfenning

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	11/08/11 11:14	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 13:17	JDH	
Barium [7440-39-3] ^	**26.3**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 13:17	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 13:17	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 13:17	JDH	
Chromium [7440-47-3] ^	**1.19**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 13:17	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 13:17	JDH	
Copper [7440-50-8] ^	**3.78**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 13:17	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 13:17	JDH	
Nickel [7440-02-0] ^	**1.99**	JB	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 13:17	JDH	J
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 11:14	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 13:17	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 11:14	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 13:17	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 13:17	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: 9209-SW8 | **Lab Sample ID:** C113287-04 | **Received:** 11/01/11 13:22

Matrix: Surface Water | **Sampled:** 11/01/11 09:40 | **Work Order:** C113287

Project: N Wake Unlined Surface Waters | **Sampled By:** Aaron Weispfenning

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

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Description:	9209-SW8	**Lab Sample ID:**	C113287-04	**Received:**	11/01/11 13:22
Matrix:	Surface Water	**Sampled:**	11/01/11 09:40	**Work Order:**	C113287
Project:	N Wake Unlined Surface Waters	**Sampled By:**	Aaron Weispfenning		

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	11/08/11 06:25	JKG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*95 %*	*51-122*	*1K07016*	*EPA 8260B*	*11/08/11 06:25*	*JKG*	
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*68-117*	*1K07016*	*EPA 8260B*	*11/08/11 06:25*	*JKG*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*1K07016*	*EPA 8260B*	*11/08/11 06:25*	*JKG*	

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Description: 9209-SW8 | **Lab Sample ID:** C113287-04 | **Received:** 11/01/11 13:22

Matrix: Surface Water | **Sampled:** 11/01/11 09:40 | **Work Order:** C113287

Project: N Wake Unlined Surface Waters | **Sampled By:** Aaron Weispfenning

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	11/08/11 10:58	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	11/07/11 13:19	JDH	
Barium [7440-39-3] ^	**24.8**	J	ug/L	1	1.00	10.0	100	EPA 6010C	11/07/11 13:19	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	11/07/11 13:19	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	11/07/11 13:19	JDH	
Chromium [7440-47-3] ^	**1.10**	J	ug/L	1	1.00	10.0	10	EPA 6010C	11/07/11 13:19	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	11/07/11 13:19	JDH	
Copper [7440-50-8] ^	**5.18**	JB	ug/L	1	1.60	10.0	10	EPA 6010C	11/07/11 13:19	JDH	J
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 13:19	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	11/07/11 13:19	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	11/08/11 10:58	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	11/07/11 13:19	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	11/08/11 10:58	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	11/07/11 13:19	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	11/07/11 13:19	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 1K07016 - EPA 5030B_MS

Blank (1K07016-BLK1) Prepared: 11/07/2011 11:36 Analyzed: 11/07/2011 23:15

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 1K07016 - EPA 5030B_MS

Blank (1K07016-BLK1) Continued Prepared: 11/07/2011 11:36 Analyzed: 11/07/2011 23:15

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	*48*			*ug/L*	*50.0*		*96*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*97*	*67-127*			

LCS (1K07016-BS1) Prepared: 11/07/2011 11:36 Analyzed: 11/07/2011 23:43

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	16		1.0	ug/L	20.0		82	75-133			
Benzene	19		1.0	ug/L	20.0		93	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		101	83-117			
Toluene	20		1.0	ug/L	20.0		99	71-118			
Trichloroethene	21		1.0	ug/L	20.0		103	75-115			
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*68-117*			
Surrogate: Toluene-d8	*51*			*ug/L*	*50.0*		*101*	*67-127*			

Matrix Spike (1K07016-MS1) Prepared: 11/07/2011 11:36 Analyzed: 11/08/2011 00:12

Source: C113583-04

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	101	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	106	83-117			
Toluene	21		1.0	ug/L	20.0	0.85 U	107	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	111	75-115			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*97*	*51-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*93*	*68-117*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*100*	*67-127*			

Matrix Spike Dup (1K07016-MSD1) Prepared: 11/07/2011 11:36 Analyzed: 11/08/2011 00:40

Source: C113583-04

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	0.8	20	
Benzene	20		1.0	ug/L	20.0	0.68 U	98	81-134	3	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.74 U	103	83-117	3	16	
Toluene	20		1.0	ug/L	20.0	0.85 U	102	71-118	4	17	
Trichloroethene	22		1.0	ug/L	20.0	0.72 U	108	75-115	2	18	
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*92*	*68-117*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*99*	*67-127*			

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

Batch 1K02013 - EPA 3005A

Blank (1K02013-BLK1) Prepared: 11/02/2011 09:42 Analyzed: 11/07/2011 12:22

QUALITY CONTROL

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

Batch 1K02013 - EPA 3005A

Blank (1K02013-BLK1) Continued Prepared: 11/02/2011 09:42 Analyzed: 11/07/2011 12:22

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	**2.62**	**J**	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	**1.83**	**J**	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (1K02013-BS1) Prepared: 11/02/2011 09:42 Analyzed: 11/07/2011 12:25

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	221		10.0	ug/L	200		111	80-120			
Barium	212		10.0	ug/L	200		106	80-120			
Beryllium	21.4		1.00	ug/L	20.0		107	80-120			
Cadmium	22.4		1.00	ug/L	20.0		112	80-120			
Chromium	214		10.0	ug/L	200		107	80-120			
Cobalt	222		10.0	ug/L	200		111	80-120			
Copper	214	B	10.0	ug/L	200		107	80-120			
Lead	216		10.0	ug/L	200		108	80-120			
Nickel	220	B	10.0	ug/L	200		110	80-120			
Silver	223		10.0	ug/L	200		111	80-120			
Vanadium	213		10.0	ug/L	200		107	80-120			
Zinc	230		10.0	ug/L	200		115	80-120			

Matrix Spike (1K02013-MS1) Prepared: 11/02/2011 09:42 Analyzed: 11/07/2011 12:29

Source: C112851-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	219		10.0	ug/L	200	2.80 U	109	75-125			
Barium	244		10.0	ug/L	200	36.2	104	75-125			
Beryllium	21.1		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	211		10.0	ug/L	200	1.29	105	75-125			
Cobalt	219		10.0	ug/L	200	1.10 U	109	75-125			
Copper	214	B	10.0	ug/L	200	3.29	105	75-125			
Lead	211		10.0	ug/L	200	1.90 U	106	75-125			
Nickel	214	B	10.0	ug/L	200	2.49	106	75-125			
Silver	218		10.0	ug/L	200	1.90 U	109	75-125			
Vanadium	212		10.0	ug/L	200	1.40 U	106	75-125			
Zinc	240		10.0	ug/L	200	3.80 U	120	75-125			

Matrix Spike Dup (1K02013-MSD1) Prepared: 11/02/2011 09:42 Analyzed: 11/07/2011 12:36

QUALITY CONTROL

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

Batch 1K02013 - EPA 3005A

Matrix Spike Dup (1K02013-MSD1) Continued Prepared: 11/02/2011 09:42 Analyzed: 11/07/2011 12:36

Source: C112851-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	211		10.0	ug/L	200	2.80 U	105	75-125	4	20	
Barium	237		10.0	ug/L	200	36.2	100	75-125	3	20	
Beryllium	20.7		1.00	ug/L	20.0	0.100 U	103	75-125	2	20	
Cadmium	21.1		1.00	ug/L	20.0	0.360 U	106	75-125	3	20	
Chromium	205		10.0	ug/L	200	1.29	102	75-125	3	20	
Cobalt	210		10.0	ug/L	200	1.10 U	105	75-125	4	20	
Copper	207	B	10.0	ug/L	200	3.29	102	75-125	3	20	
Lead	204		10.0	ug/L	200	1.90 U	102	75-125	3	20	
Nickel	208	B	10.0	ug/L	200	2.49	103	75-125	3	20	
Silver	212		10.0	ug/L	200	1.90 U	106	75-125	3	20	
Vanadium	206		10.0	ug/L	200	1.40 U	103	75-125	3	20	
Zinc	221		10.0	ug/L	200	3.80 U	111	75-125	8	20	

Post Spike (1K02013-PS1) Prepared: 11/02/2011 09:42 Analyzed: 11/07/2011 12:38

Source: C112851-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.210		0.0100	mg/L	0.200	-0.000824	105	80-120			
Barium	0.239		0.0100	mg/L	0.200	0.0362	101	80-120			
Beryllium	0.0208		0.00100	mg/L	0.0200	-0.000322	106	80-120			
Cadmium	0.0215		0.00100	mg/L	0.0200	0.000122	107	80-120			
Chromium	0.208		0.0100	mg/L	0.200	0.00129	103	80-120			
Cobalt	0.210		0.0100	mg/L	0.200	0.000228	105	80-120			
Copper	0.210	B	0.0100	mg/L	0.200	0.00329	103	80-120			
Lead	0.205		0.0100	mg/L	0.200	-0.00357	105	80-120			
Nickel	0.211	B	0.0100	mg/L	0.200	0.00249	104	80-120			
Silver	0.214		0.0100	mg/L	0.200	0.00133	106	80-120			
Vanadium	0.208		0.0100	mg/L	0.200	-0.00103	104	80-120			
Zinc	0.224		0.0100	mg/L	0.200	0.00351	110	80-120			

Batch 1K03013 - EPA 3005A

Blank (1K03013-BLK1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 10:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (1K03013-BS1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 12:34

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	205		2.00	ug/L	200		102	80-120			
Selenium	214		1.00	ug/L	200		107	80-120			
Thallium	203		1.00	ug/L	200		102	80-120			

QUALITY CONTROL

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

Batch 1K03013 - EPA 3005A

Matrix Spike (1K03013-MS1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 12:12

Source: C113287-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	193		2.00	ug/L	200	0.220 U	97	75-125			
Selenium	219		1.00	ug/L	200	0.830 U	109	75-125			
Thallium	185		1.00	ug/L	200	0.110 U	93	75-125			

Matrix Spike Dup (1K03013-MSD1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 12:14

Source: C113287-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	190		2.00	ug/L	200	0.220 U	95	75-125	2	20	
Selenium	224		1.00	ug/L	200	0.830 U	112	75-125	2	20	
Thallium	188		1.00	ug/L	200	0.110 U	94	75-125	2	20	

Post Spike (1K03013-PS1) Prepared: 11/03/2011 09:57 Analyzed: 11/08/2011 11:03

Source: C113287-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	200		2.00	ug/L	200	-0.0158	100	80-120			
Selenium	228		1.00	ug/L	200	0.119	114	80-120			
Thallium	197		1.00	ug/L	200	-0.0602	99	80-120			

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
J-01	Result is estimated due to positive results in the associated method blank.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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Orlando, FL 32824
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102-A Woodwinds Industrial Ct.
Cary, NC 27511
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Page 1 of 1

Client Name: CDM (CD004)	Project Number: [none]
Address: 5400 GLENWOOD AVE SUITE 300	Project Name/Desc: N Wake Unlined Surface Waters
City/ST/Zip: RALEIGH, NC 27612-	PO # / Billing Info:
Tel: 325-3500 Fax: ()-	Reporting Contact: Aaron Weispfenning
Sampler(s) Name, Affiliation (Print): Aaron Weispfenning CDM	Billing Contact: Anarosa Jones
Sampler(s) Signature: [signature]	Site Location / Time Zone:

Requested Analyses: 8260B Appendix 1; Ag,As,Ba,Be,Cd,Co,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: C113287

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,Tl,V,Zn									Sample Comments
	9209-SW2	11/1/11	1030	G	SW	4	X	X									- report results
	9209-SW3	11/1/11	1130	G	SW	4	X	X									according to SWS
	9209-SW7	11/1/11	920	G	SW	4	X	X									guidelines
	9209-SW8	11/1/11	940	G	SW	4	X	X									- report "J" values
																	- provide EDD

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By: [signature]	Date/Time: 11/1/11 1225	Received By: [signature]	Date/Time: 11/1/11 1225
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By: [signature]	Date/Time: 11/1/11 122
		Cooler #'s & Temps on Receipt: C-614 0.9°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **DW**-Drinking Water **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments) **Preservation:** **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

Appendix B

MW-11
November 2011 Sampling Event

Natural Attenuation Screening Protocol	Interpretation	Score	Score: 3
	Inadequate evidence for anaerobic biodegradation* of chlorinated organics	0 to 5	
	Limited evidence for anaerobic biodegradation* of chlorinated organics	6 to 14	
	Adequate evidence for anaerobic biodegradation* of chlorinated organics	15 to 20	
	Strong evidence for anaerobic biodegradation* of chlorinated organics	>20	*Scroll to End of Table*

Analysis	Concentration in Most Contam. Zone	Interpretation	Yes	No	Points Awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	○	◉	0
	> 5mg/L	Not tolerated; however, VC may be oxidized aerobically	◉	○	-3
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	○	◉	0
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Sulfide*	>1 mg/L	Reductive pathway possible	○	◉	0
Methane*	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	○	◉	0
Oxidation Reduction Potential* (ORP)	<50 millivolts (mV)	Reductive pathway possible	○	◉	0
	<-100mV	Reductive pathway likely	○	◉	0
pH*	5 < pH < 9	Optimal range for reductive pathway	◉	○	0
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	○	◉	0
Temperature*	>20°C	At T >20°C biochemical process is accelerated	○	◉	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	○	◉	0
Alkalinity	>2x background	Results from interaction of carbon dioxide with aquifer minerals	○	◉	0
Chloride*	>2x background	Daughter product of organic chlorine	○	◉	0
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	○	◉	0
Volatile Fatty Acids	>0.1 mg/L	Intermediates resulting from biodegradation of aromatic compounds; carbon and energy source	◉	○	2
BTEX*	>0.1 mg/L	Carbon and energy source; drives dechlorination	○	◉	0
PCE*		Material released	○	◉	0
TCE*		Daughter product of PCE a/	○	◉	0
DCE*		Daughter product of TCE. If cis is greater than 80% of total DCE it is likely a daughter product of TCE a/; 1,1-DCE can be a chem. reaction product of TCA	○	◉	0
VC*		Daughter product of DCE a/	○	◉	0
1,1,1-Trichloroethane*		Material released	○	◉	0
DCA		Daughter product of TCA under reducing conditions	○	◉	0
Carbon Tetrachloride		Material released	○	◉	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	○	◉	0
Ethene/Ethane	>0.01 mg/L	Daughter product of VC/ethene	○	◉	0
	>0.1 mg/L	Daughter product of VC/ethene	○	◉	0
Chloroform		Daughter product of Carbon Tetrachloride	○	◉	0
Dichloromethane		Daughter product of Chloroform	○	◉	0

* required analysis.
a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

SCORE Reset

MW-5R
November 2011 Sampling Event

Natural Attenuation Screening Protocol	Interpretation	Score	Score: 9
	Inadequate evidence for anaerobic biodegradation* of chlorinated organics	0 to 5	
	Limited evidence for anaerobic biodegradation* of chlorinated organics	6 to 14	
	Adequate evidence for anaerobic biodegradation* of chlorinated organics	15 to 20	
	Strong evidence for anaerobic biodegradation* of chlorinated organics	>20	*Scroll to End of Table*

Analysis	Concentration in Most Contam. Zone	Interpretation	Yes	No	Points Awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	○	◉	0
	> 5mg/L	Not tolerated; however, VC may be oxidized aerobically	○	◉	0
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	○	◉	0
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	○	◉	0
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Sulfide*	>1 mg/L	Reductive pathway possible	○	◉	0
Methane*	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	○	◉	0
Oxidation Reduction Potential* (ORP)	<50 millivolts (mV)	Reductive pathway possible	○	◉	0
	<-100mV	Reductive pathway likely	○	◉	0
pH*	5 < pH < 9	Optimal range for reductive pathway	◉	○	0
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	○	◉	0
Temperature*	>20°C	At T >20°C biochemical process is accelerated	○	◉	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	◉	○	1
Alkalinity	>2x background	Results from interaction of carbon dioxide with aquifer minerals	◉	○	1
Chloride*	>2x background	Daughter product of organic chlorine	○	◉	0
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	◉	○	3
Volatile Fatty Acids	>0.1 mg/L	Intermediates resulting from biodegradation of aromatic compounds; carbon and energy source	◉	○	2
BTEX*	>0.1 mg/L	Carbon and energy source; drives dechlorination	○	◉	0
PCE*		Material released	○	◉	0
TCE*		Daughter product of PCE [a/]	○	◉	0
DCE*		Daughter product of TCE. If cis is greater than 80% of total DCE it is likely a daughter product of TCE[a/]; 1,1-DCE can be a chem. reaction product of TCA	○	◉	0
VC*		Daughter product of DCE[a/]	○	◉	0
1,1,1-Trichloroethane*		Material released	○	◉	0
DCA		Daughter product of TCA under reducing conditions	○	◉	0
Carbon Tetrachloride		Material released	○	◉	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	○	◉	0
Ethene/Ethane	>0.01 mg/L	Daughter product of VC/ethene	○	◉	0
	>0.1 mg/L	Daughter product of VC/ethene	○	◉	0
Chloroform		Daughter product of Carbon Tetrachloride	○	◉	0
Dichloromethane		Daughter product of Chloroform	○	◉	0

* required analysis.
a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

SCORE Reset

MW-6
November 2011 Sampling Event

Natural Attenuation Screening Protocol	Interpretation	Score	Score: 25
	Inadequate evidence for anaerobic biodegradation* of chlorinated organics	0 to 5	
	Limited evidence for anaerobic biodegradation* of chlorinated organics	6 to 14	
	Adequate evidence for anaerobic biodegradation* of chlorinated organics	15 to 20	
	Strong evidence for anaerobic biodegradation* of chlorinated organics	>20	*Scroll to End of Table*

Analysis	Concentration in Most Contam. Zone	Interpretation	Yes	No	Points Awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	○	◉	0
	> 5mg/L	Not tolerated; however, VC may be oxidized aerobically	○	◉	0
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	◉	○	3
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Sulfide*	>1 mg/L	Reductive pathway possible	○	◉	0
Methane*	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	◉	○	3
Oxidation Reduction Potential* (ORP)	<50 millivolts (mV)	Reductive pathway possible	○	◉	0
	<-100mV	Reductive pathway likely	○	◉	0
pH*	5 < pH < 9	Optimal range for reductive pathway	◉	○	0
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	◉	○	2
Temperature*	>20°C	At T >20°C biochemical process is accelerated	○	◉	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	◉	○	1
Alkalinity	>2x background	Results from interaction of carbon dioxide with aquifer minerals	◉	○	1
Chloride*	>2x background	Daughter product of organic chlorine	◉	○	2
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	◉	○	3
Volatile Fatty Acids	>0.1 mg/L	Intermediates resulting from biodegradation of aromatic compounds; carbon and energy source	◉	○	2
BTEX*	>0.1 mg/L	Carbon and energy source; drives dechlorination	○	◉	0
PCE*		Material released	○	◉	0
TCE*		Daughter product of PCE a/	○	◉	0
DCE*		Daughter product of TCE. If cis is greater than 80% of total DCE it is likely a daughter product of TCE a/; 1,1-DCE can be a chem. reaction product of TCA	◉	○	2
VC*		Daughter product of DCE a/	○	◉	0
1,1,1-Trichloroethane*		Material released	○	◉	0
DCA		Daughter product of TCA under reducing conditions	◉	○	2
Carbon Tetrachloride		Material released	○	◉	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	○	◉	0
Ethene/Ethane	>0.01 mg/L	Daughter product of VC/ethene	○	◉	0
	>0.1 mg/L	Daughter product of VC/ethene	○	◉	0
Chloroform		Daughter product of Carbon Tetrachloride	○	◉	0
Dichloromethane		Daughter product of Chloroform	○	◉	0

* required analysis.

a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

SCORE Reset

MW-8
November 2011 Sampling Event

Natural Attenuation Screening Protocol	Interpretation	Score	Score: 17
	Inadequate evidence for anaerobic biodegradation* of chlorinated organics	0 to 5	
	Limited evidence for anaerobic biodegradation* of chlorinated organics	6 to 14	
	Adequate evidence for anaerobic biodegradation* of chlorinated organics	15 to 20	
	Strong evidence for anaerobic biodegradation* of chlorinated organics	>20	*Scroll to End of Table*

Analysis	Concentration in Most Contam. Zone	Interpretation	Yes	No	Points Awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	○	◉	0
	> 5mg/L	Not tolerated; however, VC may be oxidized aerobically	○	◉	0
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	○	◉	0
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Sulfide*	>1 mg/L	Reductive pathway possible	○	◉	0
Methane*	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	◉	○	3
Oxidation Reduction Potential* (ORP)	<50 millivolts (mV)	Reductive pathway possible	○	◉	0
	<-100mV	Reductive pathway likely	○	◉	0
pH*	5 < pH < 9	Optimal range for reductive pathway	◉	○	0
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	○	◉	0
Temperature*	>20°C	At T >20°C biochemical process is accelerated	○	◉	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	○	◉	0
Alkalinity	>2x background	Results from interaction of carbon dioxide with aquifer minerals	◉	○	1
Chloride*	>2x background	Daughter product of organic chlorine	○	◉	0
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	◉	○	3
Volatile Fatty Acids	>0.1 mg/L	Intermediates resulting from biodegradation of aromatic compounds; carbon and energy source	◉	○	2
BTEX*	>0.1 mg/L	Carbon and energy source; drives dechlorination	○	◉	0
PCE*		Material released	○	◉	0
TCE*		Daughter product of PCE [a/]	○	◉	0
DCE*		Daughter product of TCE. If cis is greater than 80% of total DCE it is likely a daughter product of TCE[a/]; 1,1-DCE can be a chem. reaction product of TCA	◉	○	2
VC*		Daughter product of DCE[a/]	○	◉	0
1,1,1-Trichloroethane*		Material released	○	◉	0
DCA		Daughter product of TCA under reducing conditions	◉	○	2
Carbon Tetrachloride		Material released	○	◉	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	○	◉	0
Ethene/Ethane	>0.01 mg/L	Daughter product of VC/ethene	○	◉	0
	>0.1 mg/L	Daughter product of VC/ethene	○	◉	0
Chloroform		Daughter product of Carbon Tetrachloride	○	◉	0
Dichloromethane		Daughter product of Chloroform	○	◉	0

* required analysis.

a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

SCORE Reset

MW-9
November 2011 Sampling Event

Natural Attenuation Screening Protocol	Interpretation	Score	Score: 25
	Inadequate evidence for anaerobic biodegradation* of chlorinated organics	0 to 5	
	Limited evidence for anaerobic biodegradation* of chlorinated organics	6 to 14	
	Adequate evidence for anaerobic biodegradation* of chlorinated organics	15 to 20	
	Strong evidence for anaerobic biodegradation* of chlorinated organics	>20	*Scroll to End of Table*

Analysis	Concentration in Most Contam. Zone	Interpretation	Yes	No	Points Awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	○	◉	0
	> 5mg/L	Not tolerated; however, VC may be oxidized aerobically	○	◉	0
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	◉	○	3
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Sulfide*	>1 mg/L	Reductive pathway possible	○	◉	0
Methane*	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	◉	○	3
Oxidation Reduction Potential* (ORP)	<50 millivolts (mV)	Reductive pathway possible	◉	○	1
	<-100mV	Reductive pathway likely	○	◉	0
pH*	5 < pH < 9	Optimal range for reductive pathway	◉	○	0
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	○	◉	0
Temperature*	>20°C	At T >20°C biochemical process is accelerated	○	◉	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	◉	○	1
Alkalinity	>2x background	Results from interaction of carbon dioxide with aquifer minerals	◉	○	1
Chloride*	>2x background	Daughter product of organic chlorine	◉	○	2
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	○	◉	0
Volatile Fatty Acids	>0.1 mg/L	Intermediates resulting from biodegradation of aromatic compounds; carbon and energy source	◉	○	2
BTEX*	>0.1 mg/L	Carbon and energy source; drives dechlorination	○	◉	0
PCE*		Material released	○	◉	0
TCE*		Daughter product of PCE [a/]	○	◉	0
DCE*		Daughter product of TCE. If cis is greater than 80% of total DCE it is likely a daughter product of TCE[a/]; 1,1-DCE can be a chem. reaction product of TCA	◉	○	2
VC*		Daughter product of DCE[a/]	◉	○	2
1,1,1-Trichloroethane*		Material released	○	◉	0
DCA		Daughter product of TCA under reducing conditions	◉	○	2
Carbon Tetrachloride		Material released	○	◉	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	◉	○	2
Ethene/Ethane	>0.01 mg/L	Daughter product of VC/ethene	○	◉	0
	>0.1 mg/L	Daughter product of VC/ethene	○	◉	0
Chloroform		Daughter product of Carbon Tetrachloride	○	◉	0
Dichloromethane		Daughter product of Chloroform	○	◉	0

* required analysis.

a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

SCORE Reset

MW-10
November 2011 Sampling Event

Natural Attenuation Screening Protocol	Interpretation	Score	Score: 21
	Inadequate evidence for anaerobic biodegradation* of chlorinated organics	0 to 5	
	Limited evidence for anaerobic biodegradation* of chlorinated organics	6 to 14	
	Adequate evidence for anaerobic biodegradation* of chlorinated organics	15 to 20	
	Strong evidence for anaerobic biodegradation* of chlorinated organics	>20	*Scroll to End of Table*

Analysis	Concentration in Most Contam. Zone	Interpretation	Yes	No	Points Awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	○	◉	0
	> 5mg/L	Not tolerated; however, VC may be oxidized aerobically	○	◉	0
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	○	◉	0
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Sulfide*	>1 mg/L	Reductive pathway possible	○	◉	0
Methane*	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	◉	○	3
Oxidation Reduction Potential* (ORP)	<50 millivolts (mV)	Reductive pathway possible	○	◉	0
	<-100mV	Reductive pathway likely	○	◉	0
pH*	5 < pH < 9	Optimal range for reductive pathway	◉	○	0
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	○	◉	0
Temperature*	>20°C	At T >20°C biochemical process is accelerated	○	◉	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	◉	○	1
Alkalinity	>2x background	Results from interaction of carbon dioxide with aquifer minerals	◉	○	1
Chloride*	>2x background	Daughter product of organic chlorine	○	◉	0
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	○	◉	0
Volatile Fatty Acids	>0.1 mg/L	Intermediates resulting from biodegradation of aromatic compounds; carbon and energy source	◉	○	2
BTEX*	>0.1 mg/L	Carbon and energy source; drives dechlorination	○	◉	0
PCE*		Material released	◉	○	0
TCE*		Daughter product of PCE [a/]	◉	○	2
DCE*		Daughter product of TCE. If cis is greater than 80% of total DCE it is likely a daughter product of TCE[a/]; 1,1-DCE can be a chem. reaction product of TCA	◉	○	2
VC*		Daughter product of DCE[a/]	◉	○	2
1,1,1-Trichloroethane*		Material released	○	◉	0
DCA		Daughter product of TCA under reducing conditions	◉	○	2
Carbon Tetrachloride		Material released	○	◉	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	◉	○	2
Ethene/Ethane	>0.01 mg/L	Daughter product of VC/ethene	○	◉	0
	>0.1 mg/L	Daughter product of VC/ethene	○	◉	0
Chloroform		Daughter product of Carbon Tetrachloride	○	◉	0
Dichloromethane		Daughter product of Chloroform	○	◉	0

* required analysis.
a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

SCORE Reset

MW-36
November 2011 Sampling Event

Natural Attenuation Screening Protocol	Interpretation	Score
	Inadequate evidence for anaerobic biodegradation* of chlorinated organics	0 to 5
	Limited evidence for anaerobic biodegradation* of chlorinated organics	6 to 14
	Adequate evidence for anaerobic biodegradation* of chlorinated organics	15 to 20
	Strong evidence for anaerobic biodegradation* of chlorinated organics	>20

Score: 16

Scroll to End of Table

Analysis	Concentration in Most Contam. Zone	Interpretation	Yes	No	Points Awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	○	◉	0
	> 5mg/L	Not tolerated; however, VC may be oxidized aerobically	○	◉	0
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	○	◉	0
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Sulfide*	>1 mg/L	Reductive pathway possible	○	◉	0
Methane*	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	◉	○	3
Oxidation Reduction Potential* (ORP)	<50 millivolts (mV)	Reductive pathway possible	○	◉	0
	<-100mV	Reductive pathway likely	○	◉	0
pH*	5 < pH < 9	Optimal range for reductive pathway	◉	○	0
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	○	◉	0
Temperature*	>20°C	At T >20°C biochemical process is accelerated	○	◉	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	○	◉	0
Alkalinity	>2x background	Results from interaction of carbon dioxide with aquifer minerals	◉	○	1
Chloride*	>2x background	Daughter product of organic chlorine	○	◉	0
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	○	◉	0
Volatile Fatty Acids	>0.1 mg/L	Intermediates resulting from biodegradation of aromatic compounds; carbon and energy source	◉	○	2
BTEX*	>0.1 mg/L	Carbon and energy source; drives dechlorination	○	◉	0
PCE*		Material released	○	◉	0
TCE*		Daughter product of PCE a/	◉	○	2
DCE*		Daughter product of TCE. If cis is greater than 80% of total DCE it is likely a daughter product of TCE a/; 1,1-DCE can be a chem. reaction product of TCA	◉	○	2
VC*		Daughter product of DCE a/	○	◉	0
1,1,1-Trichloroethane*		Material released	○	◉	0
DCA		Daughter product of TCA under reducing conditions	◉	○	2
Carbon Tetrachloride		Material released	○	◉	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	○	◉	0
Ethene/Ethane	>0.01 mg/L	Daughter product of VC/ethene	○	◉	0
	>0.1 mg/L	Daughter product of VC/ethene	○	◉	0
Chloroform		Daughter product of Carbon Tetrachloride	○	◉	0
Dichloromethane		Daughter product of Chloroform	○	◉	0

* required analysis.

a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

SCORE

Reset