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

(April 2014 Sampling Event)

Wake County

Report

June 2014

WAKE COUNTY
NORTH CAROLINA

CDM Smith

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 - CDM Smith Inc.

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@cdmsmith.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 Subtitle D Landfill	9004 Deponie Drive Raleigh, NC 27615	92-09	.1600	April 3-4, 2014

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

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

Notification attached?

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

Certification

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

Mathew F. Colone — Facility Representative Name (Print)
Consultant — Title
(919) 787-5620 — (Area Code) Telephone Number

Signature — Date: 6/25/2014

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 1851 GEOLOGIST MATHEW F. COLONE

6/25/2014

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 Smith
5400 Glenwood Avenue, Suite 300
Raleigh, North Carolina 27612
tel: 919 787-5620
fax: 919 781-5730

June 25, 2014

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

Subject: April 2014 Semi-Annual Monitoring Sampling Report
North Wake Subtitle D Landfill
Facility Permit No. 92-09

Dear Ms. Drummond:

CDM Smith Inc., on behalf of Wake County (County), is submitting an electronic copy of the April 2014 semi-annual sampling event report. This letter report presents the results of the most recent semi-annual sampling event that was completed at the North Wake Subtitle D Landfill and constitutes the first semi-annual sampling event for 2014. The approved groundwater monitoring network consists of the background wells (i.e. MW-11 and -11D), sixteen down-gradient compliance wells (i.e. MW-12, -12D, -13, -14, -15, -15d, -16, -17, -17D, -18, -19, -20, -21, -25, -25d, and -26) and three surface water sampling locations (i.e. SW-4, -5, and -6). Field activities and sampling results for all wells and surface water sampling locations are discussed below.

Field Activities

Groundwater samples from the North Wake Subtitle D Landfill were collected on April 3-4, 2014, by use of disposable, laboratory decontaminated bailers. Note that samples from the background wells were collected on April 16-17, 2014. Monitoring well and surface water sampling locations are presented on **Figure 1**. 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 presented on **Figure 1**. The groundwater elevations and potentiometric contours were used to estimate the groundwater velocity at each well. Groundwater velocity values are provided 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 was measured in the field for pH, conductivity, temperature, turbidity, dissolved oxygen, and oxidation-reduction potential using a YSI-556 multi-parameter probe and a HANNA HI 98703 turbidity meter. Wells that had elevated turbidity were allowed to stabilize prior to sample collection. The water quality parameters at the time of sampling are presented in **Table 1**.

Sampling Results

ALS Environmental, Inc. located in Jacksonville, Florida analyzed groundwater samples for the North Carolina Appendix I volatile organic compounds (VOCs) and metals. 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 SWS Limits (SWSLs). All monitoring wells and surface water sample locations for the Subtitle D 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.

The following list indicates the analytes detected above the MDL at each sampling location. No "J" flag detections are provided. Underlined analytes exceeded the North Carolina 2L Standard (NC 2L), Groundwater Protection Standard, or the North Carolina Surface Water Standards for Class C Waters. A complete summary of all detected and estimated concentrations for the April 2014 and previous sampling events is provided in **Table 3**. Copies of the laboratory reports are provided in **Appendix A**.

MW-11 (Background)

Metals:	Barium, Copper, <u>Vanadium</u>
Volatile Organic Compounds:	None Detected

MW-11D (Background, Deep)

Metals:	Barium, <u>Beryllium</u>, <u>Chromium</u>, Cobalt, Copper, Lead, <u>Vanadium</u>, Zinc
Volatile Organic Compounds:	None Detected

MW-12

Metals:	Barium, Copper, <u>Vanadium</u>, Zinc
Volatile Organic Compounds:	None Detected

MW-12D

Metals:	None Detected
Volatile Organic Compounds:	None Detected

MW-13
Metals: None Detected
Volatile Organic Compounds: None Detected

MW-14
Metals: Vanadium, Zinc
Volatile Organic Compounds: None Detected

MW-15
Metals: Barium
Volatile Organic Compounds: None Detected

MW-15D
Metals: None Detected
Volatile Organic Compounds: None Detected

MW-16
Metals: Barium, Copper, Zinc
Volatile Organic Compounds: None Detected

MW-17
Metals: Beryllium, Chromium, Copper, Vanadium
Volatile Organic Compounds: None Detected

MW-17D
Metals: Copper
Volatile Organic Compounds: None Detected

MW-18
Metals: Barium, Chromium, Cobalt, Copper, Vanadium, Zinc
Volatile Organic Compounds: None Detected

MW-19
Metals: None Detected
Volatile Organic Compounds: None Detected

MW-20
Metals: Copper, Vanadium, Zinc
Volatile Organic Compounds: None Detected

MW-21
Metals: Copper
Volatile Organic Compounds: None Detected

MW-25
Metals: None Detected
Volatile Organic Compounds: None Detected

MW-25D
Metals: Copper
Volatile Organic Compounds: None Detected

MW-26
Metals: Cobalt, Copper
Volatile Organic Compounds: None Detected

SW-4
Metals: None Detected
Volatile Organic Compounds: None Detected

SW-5
Metals: None Detected
Volatile Organic Compounds: None Detected

SW-6
Metals: None Detected
Volatile Organic Compounds: None Detected

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

Antimony:	MW-17D
Cobalt:	MW-11, -14, -15, -16, -17, -20, -21, -25, and -25D
Thallium:	MW-11D, -12, and -18
Vanadium:	MW-12D, -13, -15, -15D, -16, -17D, -19, -21, -25, -25D, and -26

The equipment blank had "J" flag detections of 2-butanone, o-xylene, beryllium, and zinc below NC 2L Standards. No VOCs were detected in the trip blank. A blind duplicate sample, identified as Dup, was

collected from MW-19 and had similar concentrations to the MW-19 sample. **Table 4** presents a summary of all parameters detected during the April 2014 sampling event that exceeded the NC 2L or Groundwater Protection Standards.

The County will continue with the semi-annual groundwater monitoring program. The next sampling event will take place during the fall of 2014. If you have any questions or require further explanation, do not hesitate to call me at (919) 787-5620.

Very truly yours,

Mathew F. Colone, P.G.
CDM Smith Inc.

cc: John Roberson, WCSWM
Elliott Cornell, WCSWM

Table 1
Water Quality Parameters
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Water Quality Parameters						Groundwater Elevations - Measured 4/2/2014		
	pH	Conductivity	Temperature	Turbidity	DO	ORP	TOC Elevation	Depth to Groundwater	Groundwater Elevation
	(S.U.)	(µS/cm)	(deg. C)	(NTUs)	(mg/L)	(mVs)	(feet AMSL)	(feet)	(feet AMSL)
MW-11	5.62	88	16.9	194	5.63	198.8	343.63	43.22	300.41
MW-11D	5.96	100	16.7	21	5.63	155.7	343.27	43.41	299.86
MW-12	5.98	211	15.5	538	2.97	203.5	262.10	14.67	247.43
MW-12D	6.21	167	17.3	5	1.97	54.8	261.28	15.75	245.53
MW-13	6.05	130	19.4	248	4.58	189.7	270.32	25.94	244.38
MW-14	6.08	148	17.9	19	2.34	73.5	270.56	41.58	228.98
MW-15	6.48	309	15.8	61	1.77	82.3	239.31	17.35	221.96
MW-15D	5.99	181	17.2	6	1.43	114.1	239.32	17.86	221.46
MW-16	6.56	433	17.3	181	2.29	130.4	266.43	32.31	234.12
MW-17	4.84	110	16.6	224	7.03	257.4	274.29	31.46	242.83
MW-17D	4.38	147	17.4	28	3.82	289.9	273.94	32.07	241.87
MW-18	5.43	106	15.4	402	7.48	191.3	283.01	18.47	264.54
MW-19	5.92	129	18.3	39	6.08	169.3	283.61	37.22	246.39
MW-20	6.37	219	19.4	403	3.41	199.8	290.77	29.81	260.96
MW-21	6.31	109	18.3	47	4.13	97.8	308.67	31.54	277.13
MW-25	6.11	150	13.8	24	2.42	237.3	293.73	9.32	284.41
MW-25d	5.02	97	16.0	24	5.41	244.2	294.34	9.55	284.79
MW-26	6.14	169	13.3	219	1.79	90.3	275.22	8.84	266.38
Surface Water Sample Location Code									
SW-4	6.61	205	15.4	4	8.13	228.1			
SW-5	6.78	157	12.8	12	8.41	253.6			
SW-6	5.81	100	13.1	31	8.54	158.1			

Notes:
1. AMSL - Above Mean Sea Level
2. TOC - Top of Casing
3. uS/cm - Microsiemens per centimeter
4. mg/L - Milligrams per liter
5. ORP - Oxidation-Reduction Potential
6. NTUs - Nephelometric Turbidity Units
7. mVs - Millivolts
8. S.U. - Standard Units
9. DO - Dissolved Oxygen
10. Monitoring wells with high turbidity were allowed to settle prior to sampling; turbidity shown in table was recorded at the time of sampling

Table 2
Summary of Calculated Groundwater Flow Velocities
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Designation	Hydraulic Conductivity - feet/day (cm/s)	Gradient	Effective Porosity	Average Linear Velocity (feet/day)
MW-11	5.66 (2.00E-03)	0.0244	0.13	1.06E+00
MW-11D	0.509 (1.80E-04)	0.0242	0.05	2.46E-01
MW-12	0.486 (1.71E-04)	0.0268	0.13	1.00E-01
MW-12D	5.24 (1.85E-03)	0.0274	0.05	2.88E+00
MW-13	1.02 (3.60E-04)	0.0258	0.13	2.02E-01
MW-14	2.05 (7.23E-04)	0.0299	0.13	4.72E-01
MW-15	2.54 (8.96E-04)	0.0275	0.25	2.80E-01
MW-15D	1.33 (4.69E-04)	0.0275	0.05	7.32E-01
MW-16	0.00967 (3.41E-06)	0.0248	0.05	4.80E-03
MW-17	1.18 (4.16E-04)	0.0256	0.18	1.68E-01
MW-17D	0.367 (1.29E-04)	0.0258	0.05	1.89E-01
MW-18	6.86 (2.42E-03)	0.0201	0.13	1.06E+00
MW-19	1.40 (4.92E-04)	0.0294	0.08	5.14E-01
MW-20	0.58 (2.06E-04)	0.0244	0.13	1.09E-01
MW-21	1.34 (4.73E-04)	0.0202	0.13	2.08E-01
MW-25	1.40 (4.96E-04)	0.0169	0.15	1.58E-01
MW-25D	0.02 (8.04E-06)	0.0159	0.15	2.13E-03
MW-26	0.72 (2.54E-04)	0.0212	0.13	1.17E-01

Notes:

1. cm/s - centimeters per second
2. Hydraulic conductivity and effective porosity values are estimated from previously performed slug tests and grain size analyses.
3. The gradient and linear velocity values shown for MW-11 are based on the average of the regolith monitoring wells.
4. The gradient and linear velocity values shown for MW-11d are based on the average of the bedrock monitoring wells.

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-11	31-Oct-95		**0.011**	**0.842**	**0.008**		**0.024**	**0.071**	0.331	**0.026**		0.087				**0.117**	0.314
MW-11	19-Dec-95																
MW-11	26-Feb-96						**0.011**	**0.022**									0.106
MW-11	29-Apr-96																0.106
MW-11	27-Nov-96			0.035													
MW-11	22-Apr-97																0.13
MW-11	31-Oct-97																0.066
MW-11	11-May-98																
MW-11	8-Dec-98					**0.0021**											
MW-11	14-Apr-99																
MW-11	30-Nov-99																
MW-11	5-Apr-00					0.0012											
MW-11	18-Dec-00																
MW-11	18-Apr-01																
MW-11	27-Nov-01			0.311					0.0165								0.0297
MW-11	5-Apr-02																
MW-11	5-Nov-02																
MW-11	15-Apr-03																
MW-11	29-Oct-03																
MW-11	21-Apr-04																
MW-11	18-Nov-04																
MW-11	21-Apr-05																
MW-11	11-Nov-05																0.083
MW-11	13-Apr-06																
MW-11	8-Nov-06																0.082
MW-11	20-Apr-07																0.021
MW-11	7-Nov-07			0.332	0.0021					0.012						**0.058**	0.113
MW-11	15-May-08			0.0778J			0.0054J		0.0105	0.00392J				0.00448J	**0.00563**	0.00290J	0.0161
MW-11	10-Nov-08			0.0531J	0.00303	0.00035JB	0.00273JB		0.00594JB	0.00978JB				0.00402JB		0.00114J	0.00818J
MW-11	11-Mar-09			0.0991JB	**0.00629**	0.00024J	0.00439JB	**0.00651JB**	0.0136B	0.00584JB				0.00634JB		**0.0203JB**	0.0207
MW-11	3-Dec-09			0.412	0.00236	0.00022J	**0.0149**	**0.0254**	0.102B	**0.0192**		0.0145J	0.0107			**0.099B**	0.12B
MW-11	12-May-10			0.0621J			0.00145J		0.00192J							0.00267J	0.0126
MW-11	26-Oct-10			0.143			0.00350J	**0.00547J**	0.0258	0.00569J						**0.023J**	0.0427
MW-11	17-Mar-11			0.0767J			0.0016J		0.00388J						**0.000265J**	**0.00351J**	0.0243
MW-11	1-Nov-11			0.0807J			0.0019J		0.00633JB			0.00214JB				**0.00361J**	0.0196
MW-11	25-Apr-12			0.0653J					0.00237J							**0.00323J**	0.0121
MW-11	23-Oct-12			0.0806J				**0.00142J**	0.00366J							**0.00532J**	0.0197
MW-11	17-Apr-13			0.09J	0.0002J		0.002J	**0.002J**	0.008J	0.001J		0.001J				**0.009J**	0.02B
MW-11	16-Oct-13			0.1	0.0001J	0.0002J	0.002J	**0.001J**	0.004J	0.0005J		0.0009J				**0.005J**	0.015JB
MW-11	17-Apr-14			0.170	0.0005J	0.0002J	0.004J	**0.006J**	0.018	0.003J		0.003J			0.00008J	**0.040**	0.050B

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-11D	31-Oct-95					**0.002**											
MW-11D	19-Dec-95																
MW-11D	26-Feb-96					0.001											
MW-11D	29-Apr-96																
MW-11D (dup)	29-Apr-96																
MW-11 D	27-Nov-96			0.026													
MW-11D	22-Apr-97																0.054
MW-11D	31-Oct-97																0.026
MW-11D	11-May-98													0.012			0.069
MW-11D	8-Dec-98					**0.0019**											
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																
MW-11D	5-Nov-02																
MW-11D	15-Apr-03																
MW-11D	29-Oct-03																
MW-11D	21-Apr-04																
MW-11D	18-Nov-04																
MW-11D	21-Apr-05																
MW-11D	11-Nov-05																
MW-11D	13-Apr-06																
MW-11D	8-Nov-06																
MW-11D	20-Apr-07																
MW-11D	7-Nov-07																0.016
MW-11D	15-May-08			0.0597J	0.00307		0.00641J		0.00821J	0.00459J				0.00398J	**0.00691**	0.000970J	0.00982J
MW-11D	10-Nov-08			0.0376J		0.000036JB	0.00194JB		0.0058JB	0.0085JB				0.00437JB		**0.00409J**	0.00414J
MW-11D	16-Mar-09		0.00411J	0.0877JB	**0.00611B**	0.00041J	0.00714JB		0.0153B	0.00694JB				0.00122JB		**0.0201JB**	0.0219
MW-11D	4-Dec-09			0.0614JB			0.00541JB		0.0082JB					0.00316JB		**0.00728JB**	0.00885JB
MW-11D	13-May-10	**0.00101J**		0.0478J			0.00510J		0.0031J							**0.00550J**	0.0123
MW-11D	27-Oct-10	**0.00173J**		0.0413J			0.00356J		0.00279J							**0.00382J**	0.0973J
MW-11D	18-Mar-11	0.000852J		0.0512J			0.00343J		0.00441J							**0.00373J**	0.00804J
MW-11D	2-Nov-11			0.0455J			0.00218J		0.00414JB							**0.00245J**	0.00586J
MW-11D	26-Apr-12	0.000247J		0.0442J			0.00304J		0.00968JB	0.00331J						**0.00205J**	0.00462J
MW-11D	24-Oct-12			0.0437J		0.000375J	0.00240J									**0.00253J**	0.00510J
MW-11D	18-Apr-13	0.0004J		0.050J		0.0001J	0.002JB	0.0002J	0.001J			0.0006J					0.004JB
MW-11D	17-Oct-13	0.0006J	0.0006J	0.050J		0.0003J	0.001J	0.0002J	0.001J		0.00002J	0.0006J				**0.002J**	0.002JB
MW-11D	17-Apr-14			0.300	**0.0021**	0.0002J	**0.015**	0.013	0.056	0.011		0.009J			**0.0002J**	**0.099**	0.088

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-12	31-Oct-95																
MW-12	19-Dec-95																
MW-12 (dup)	19-Dec-95																
MW-12	26-Feb-96																
MW-12	29-Apr-96																
MW-12	27-Nov-96			0.2				**0.005**	0.01	0.006						**0.014**	0.028
MW-12	24-Apr-97						**0.012**										0.11
MW-12	3-Nov-97			0.55	0.0029	0.0013	**0.021**	**0.023**		**0.018**						**0.12**	0.31
MW-12	23-Nov-98																
MW-12	14-Apr-99																
MW-12	1-Dec-99																
MW-12	5-Apr-00																
MW-12	18-Dec-00																
MW-12	17-Apr-01																
MW-12	28-Nov-01																
MW-12	3-Apr-02																
MW-12	5-Nov-02					0.0013											
MW-12	15-Apr-03																
MW-12	30-Oct-03																
MW-12	7-Apr-04																
MW-12	18-Nov-04						**0.019**	**0.018**								**0.065**	0.05
MW-12	21-Apr-05																
MW-12	11-Nov-05																
MW-12	13-Apr-06																
MW-12	8-Nov-06																
MW-12	20-Apr-07			0.26	0.001				0.037							**0.05**	0.061
MW-12	7-Nov-07			0.266	0.0014				0.031							**0.038**	0.068
MW-12	14-May-08			0.287		0.00068J	**0.0181**	**0.00992J**	0.0656	**0.0206**			0.0101			**0.0578**	0.0592
MW-12	5-Nov-08			0.0567J	0.00244	0.00017J	0.00353J		0.00684J					0.0015JB		**0.00585J**	0.0105
MW-12	18-Mar-09			0.0563J		0.00014J	0.00265J		0.0151B					0.00149JB		**0.0201JB**	0.00909J
MW-12	20-Oct-09			0.0573JB		0.00034J	0.0051JB		0.0141B			0.00379J				**0.0101J**	0.00912JB
MW-12	7-May-10			0.19		0.000549J	0.00835J	**0.00831J**	0.0392	0.00493J		0.00272J	0.000929J		0.000176J	**0.0396**	0.0505
MW-12	19-Oct-10		0.00928J	**0.837**			**0.0342**	**0.0353**	0.18	**0.0214**		0.0164J	0.00234J		**0.00113J**	**0.181**	0.163
MW-12	15-Mar-11			0.311	0.00119	0.000625J	**0.0152**	**0.0102**	0.0682	**0.0177**		0.00695J			**0.000389J**	**0.0824**	0.0708
MW-12	20-Oct-11			0.167			0.00764J	**0.00479J**	0.0314	0.00662J		0.00357J				**0.0344**	0.0574
MW-12	11-Apr-12	0.000535J		0.185	0.000271J		0.00792J	**0.00619J**	0.0374	0.00798J		0.00372J	0.002J		0.000195J	**0.0364**	0.0383
MW-12	26-Oct-12			0.226			0.00941J	**0.00562J**	0.0422	0.00779J		0.00424J	0.00109J		0.000160J	**0.0474**	0.0498
MW-12	11-Apr-13			0.44	0.0019	0.0002J	**0.02**	**0.013**	0.067	0.011		0.01J			**0.0005J**	**0.077**	0.077
MW-12	2-Oct-13			0.210	0.0008J	0.0003J	0.006J	**0.005J**	0.025	0.004J		0.004J			**0.0002J**	**0.030**	0.037B
MW-12	4-Apr-14			0.280	0.0008J	0.0002J	0.008J	0.009J	0.036	0.005J		0.005J			**0.0002J**	**0.059**	0.058B

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-12D	31-Oct-95																
MW-12D	19-Dec-95																
MW-12D	26-Feb-96																
MW-12D	29-Apr-96																
MW-12 D	27-Nov-96			0.013													
MW-12D	24-Apr-97																
MW-12D	3-Nov-97																
MW-12D	23-Nov-98																
MW-12D	14-Apr-99																
MW-12D	1-Dec-99																
MW-12D	5-Apr-00																
MW-12D	18-Dec-00																
MW-12D (dup)	18-Dec-00					0.0011											
MW-12D	17-Apr-01																
MW-12D	28-Nov-01																
MW-12D	3-Apr-02																
MW-12D	5-Nov-02																
MW-12D	15-Apr-03																
MW-12D	30-Oct-03																
MW-12D	7-Apr-04																
MW-12D	18-Nov-04																
MW-12D	21-Apr-05																
MW-12D	11-Nov-05																
MW-12D	13-Apr-06																
MW-12D	8-Nov-06																
MW-12D	20-Apr-07																
MW-12D	7-Nov-07																
MW-12D	14-May-08			0.0228J			0.00345J		0.0131	0.00947J							
MW-12D	5-Nov-08			0.0164J	**0.00474**	0.00014J			0.0102	0.00409J				0.00124JB			
MW-12D	18-Mar-09			0.00731J		0.00027J		**0.0132B**						0.00134JB	**0.00773**	**0.0101JB**	
MW-12D	20-Oct-09			0.0256JB		0.00022J	0.00416JB		0.021B							**0.00527J**	0.00272JB
MW-12D	6-May-10			0.0197J					0.00862J							**0.00258J**	
MW-12D	29-Oct-10			0.0212J					0.0104						**0.000502J**	**0.00253J**	
MW-12D	15-Mar-11			0.0254J					0.0117						0.000156J	**0.00201J**	
MW-12D	20-Oct-11			0.0264J					0.00945J							**0.00179J**	
MW-12D	11-Apr-12	0.00072J		0.0249J					0.0149							**0.00146J**	
MW-12D	26-Oct-12	**0.00126J**		0.0274J			0.00273J		0.00979J							**0.00245J**	0.00914J
MW-12D	11-Apr-13	0.0005J		0.03J			0.0005JB	0.0002JB	0.017			0.0009JB					
MW-12D (dup)	11-Apr-13	0.0007J		0.03J		0.0002J	0.0006JB	0.0002JB	0.014	0.0002J		0.0009JB					0.005J
MW-12D	2-Oct-13			0.03JB	0.00006JB			**0.001J**	0.012			0.0009J					
MW-12D	4-Apr-14	0.0004J		0.020J		0.0003J		0.0001J	0.006J							**0.002J**	0.007JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-13	31-Oct-95				0.002		**0.022**					0.063				**0.044**	0.069
MW-13	19-Dec-95																
MW-13	26-Feb-96																
MW-13	29-Apr-96																
MW-13	27-Nov-96			0.018													
MW-13	24-Apr-97																
MW-13	7-May-98						**0.021**										
MW-13	23-Nov-98					**0.0068**	**0.059**	**0.019**								**0.081**	0.12
MW-13	14-Apr-99																
MW-13	1-Dec-99																
MW-13	6-Apr-00																
MW-13	18-Dec-00					0.0011	**0.0102**										
MW-13	17-Apr-01																
MW-13	28-Nov-01	NS	NS	NS	NS	NS	NS	NS	NS	NS		NS	NS	NS	NS	NS	NS
MW-13	3-Apr-02																
MW-13	6-Nov-02																
MW-13	15-Apr-03																
MW-13 (dup)	15-Apr-03																
MW-13	30-Oct-03																
MW-13	8-Apr-04						**0.0222**										
MW-13 (dup)	8-Apr-04																
MW-13	18-Nov-04						**0.086**	**0.033**								**0.099**	0.1
MW-13	21-Apr-05																
MW-13	11-Nov-05			0.578			**0.0158**					**0.109**				**0.217**	0.272
MW-13	13-Apr-06						**0.012**										
MW-13	8-Nov-06						**0.017**										
MW-13	20-Apr-07																0.012
MW-13	7-Nov-07			0.157			**0.024**									**0.03**	0.062
MW-13	13-May-08			0.0446J			0.00748J		0.00466J	0.00881J						**0.00589J**	0.00845J
MW-13	4-Nov-08			0.0686J			**0.0144**		0.00169J	0.0041J				0.0014JB		**0.0165J**	0.0199
MW-13	18-Mar-09			0.0566J			**0.0111**		0.00486JB					0.00156JB	**0.0061**	**0.0231JB**	0.0131
MW-13	21-Oct-09			0.0791JB			**0.0178B**	**0.0041J**	0.00915JB			0.00728J				**0.0269**	0.0228B
MW-13	7-May-10		0.0041J	**0.838**		0.00126	**0.21**	**0.0814**	0.0164	**0.0227**		**0.107**			**0.000707J**	**0.274**	0.339
MW-13	29-Oct-10			0.127			**0.0287**	**0.00924J**	0.00286J	0.00444J		0.0143J			**0.000487J**	**0.0404**	0.0457
MW-13	15-Mar-11			0.0793J	0.000159J		**0.0147**	**0.00388J**	0.00233J	0.00343J		0.00566J			0.000135J	**0.0185J**	0.0293
MW-13	20-Oct-11			0.153			**0.0305**	**0.00995J**	0.00226J	0.00533J		0.0156J		0.00209J		**0.0403**	0.0617
MW-13	11-Apr-12	0.000929J		0.196			**0.0458**	**0.0136**	0.00234J	0.00862J		0.0223J		0.00234J	**0.000336J**	**0.0564**	0.0702
MW-13	26-Oct-12		0.00540J	0.297			**0.0731**	**0.0223**	0.00462J	0.0146		0.0388J			**0.000212J**	**0.0949**	0.126
MW-13	11-Apr-13			0.11	0.0005J		**0.024**	**0.007J**	0.002J	0.003J		0.012J			**0.0002J**	**0.027**	0.031
MW-13	2-Oct-13			0.070J	0.0003JB		**0.014**	**0.004J**	0.001J	0.001J		0.007J			0.0001J	**0.019J**	0.015JB
MW-13	4-Apr-14			0.070J	0.0002J		0.010J	0.003J	0.0009J	0.001J		0.005J			0.00007J	**0.016J**	0.018JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-14	31-Oct-95											0.052					
MW-14	19-Dec-95																
MW-14	26-Feb-96									**0.021**							
MW-14	29-Apr-96						0.013	**0.012**									
MW-14	27-Nov-96			0.011													
MW-14	24-Apr-97																0.098
MW-14	1-Nov-97																0.098
MW-14	7-May-98						0.034					0.088					0.064
MW-14	23-Nov-98																
MW-14 (dup)	23-Nov-98																
MW-14	14-Apr-99																
MW-14	1-Dec-99					0.001											
MW-14	6-Apr-00																
MW-14 (dup)	6-Apr-00																
MW-14	18-Dec-00																
MW-14	17-Apr-01																
MW-14	28-Nov-01																
MW-14	3-Apr-02																
MW-14	5-Nov-02																
MW-14	15-Apr-03					0.0017											
MW-14	29-Oct-03																
MW-14	8-Apr-04																
MW-14	18-Nov-04																
MW-14	21-Apr-05																
MW-14	11-Nov-05																
MW-14	13-Apr-06																
MW-14	8-Nov-06																
MW-14	20-Apr-07																
MW-14	7-Nov-07								0.013								0.025
MW-14	13-May-08			0.0338J			0.00554J		0.00642J	0.00787J							
MW-14	4-Nov-08			0.0258J		0.00037J	0.00328J		0.00333J	0.00375J				0.00116JB		**0.00083J**	0.00508J
MW-14	18-Mar-09			0.0257J			0.00265J		0.00825JB					0.0013JB		**0.0124JB**	
MW-14	21-Oct-09		0.00532J	0.0325JB			0.00623JB		0.00961JB							**0.00875J**	0.00574JB
MW-14	7-May-10			0.0248J			0.0021J									**0.00486J**	0.00484J
MW-14	28-Oct-10			0.0406J			0.00673J	**0.0017J**	0.00632J			0.00305J			**0.000289J**	**0.0126J**	0.0136
MW-14	15-Mar-11			0.0261J			0.00256J									**0.00484J**	0.00465J
MW-14	20-Oct-11			0.0402J			0.00423J	**0.00271J**	0.00449J			0.00323J				**0.0103J**	0.0142
MW-14	11-Apr-12			0.0715J	0.000146J		0.00813J	**0.00584J**	0.0156	0.00483J		0.00682J				**0.0217J**	0.0186
MW-14	26-Oct-12		0.00338J	0.109			**0.0175**	**0.00874J**	0.0216	0.00644J		0.0137J				**0.0281**	0.0356
MW-14	11-Apr-13			0.110	0.0005J		**0.014**	**0.009J**	0.023	0.005J		0.015J			0.0001J	**0.036**	0.029
MW-14	2-Oct-13			0.110	0.0006J	0.0001J	**0.012**	**0.007J**	0.022	0.004J		0.012J			0.0001J	**0.034**	0.033B
MW-14	4-Apr-14			0.080J	0.0002J		0.006J	**0.004J**	0.010J	0.002J		0.005J				**0.026**	0.023B

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-15	31-Oct-95						**0.012**					0.064					
MW-15	19-Dec-95																
MW-15	26-Feb-96						**0.036**	**0.012**								**0.143**	
MW-15	29-Apr-96				**0.005**		**0.196**	**0.052**	0.503	**0.034**		0.094				**0.410**	0.240
MW-15	27-Nov-96			0.15			0.003	**0.007**	0.017							**0.051**	0.046
MW-15 (dup)	27-Nov-96			0.2			0.004	**0.007**	0.021							**0.072**	0.046
MW-15	24-Apr-97																0.078
MW-15 (dup)	24-Apr-97																
MW-15	31-Oct-97																0.078
MW-15	7-May-98														**0.012**		
MW-15	23-Nov-98					**0.0025**	0.01									**0.040**	0.12
MW-15	14-Apr-99					0.0011											0.0159
MW-15	1-Dec-99																
MW-15	6-Apr-00					0.0015											
MW-15	18-Dec-00					0.0014		**0.0102**								**0.0941**	0.475
MW-15	17-Apr-01																
MW-15 (dup)	17-Apr-01																
MW-15	28-Nov-01					0.0011										**0.0669**	0.165
MW-15	3-Apr-02																
MW-15	6-Nov-02																
MW-15	15-Apr-03					0.0019	**0.0195**	**0.0169**								**0.0617**	
MW-15	29-Oct-03																
MW-15	8-Apr-04																
MW-15	18-Nov-04						**0.06**	**0.025**				0.052				**0.142**	0.09
MW-15	21-Apr-05																
MW-15	11-Nov-05																
MW-15	13-Apr-06																
MW-15	8-Nov-06						**0.011**										0.061
MW-15	20-Apr-07																
MW-15	7-Nov-07								0.015							**0.027**	0.077
MW-15	13-May-08			0.0896J			**0.0121**	**0.00526J**	0.0197	0.00515J			0.0139			**0.0191J**	0.0134
MW-15	3-Nov-08			0.0665J		0.0003J	0.00449J		0.00662J			0.0096J		0.00201JB		**0.00504J**	0.00882J
MW-15	18-Mar-09			0.0774J		0.00018J	0.00692J	**0.00347J**	0.0162B					0.00193JB	**0.0064**	**0.0277B**	0.00954J
MW-15	21-Oct-09			0.0513J			0.00308J		0.00669JB			0.00806J	0.00286J			**0.0213JB**	0.00773JB
MW-15	7-May-10			0.141			0.00787J	**0.00791J**	0.0138	0.00302J		0.00315J				**0.0239J**	0.0228
MW-15	28-Oct-10			0.0623J			0.00489J	**0.00217J**	0.00881J			0.00822J			**0.000251J**	**0.0201J**	0.0251
MW-15	14-Mar-11			0.0795J			0.00478J	**0.00304J**	0.00931J	0.00203J		0.0104J				**0.0318**	0.0223
MW-15	20-Oct-11			0.249		0.00066J	**0.0577**	**0.0194**	0.0908	0.00867J		0.033J	0.00127J	0.00416J	**0.000489J**	**0.144**	0.0716
MW-15	11-Apr-12			0.200			**0.0389**	**0.0132**	0.0623	0.00796J		0.0219J	0.00187J		**0.000251J**	**0.0938**	0.0512
MW-15	26-Oct-12		0.00305J	0.269			**0.0507**	**0.0194**	0.0938	0.00968J		0.0346J	0.00167J	0.00298J	**0.000276J**	**0.153**	0.0834
MW-15	11-Apr-13			0.180	0.0003J	0.0004J	**0.031**	**0.01J**	0.046	0.003J		0.018J			**0.0002J**	**0.069**	0.032
MW-15	2-Oct-13			0.220	0.0003JB	0.0006J	**0.031**	**0.01J**	0.055	0.003J		0.017J			**0.0002J**	**0.093**	0.035B
MW-15	4-Apr-14			0.120	0.00007J	0.0001J	0.003J	**0.004J**	0.007J	0.0007J		0.002J				**0.018J**	0.011JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-15D	31-Oct-95																
MW-15D	19-Dec-95																
MW-15D	26-Feb-96																
MW-15D	29-Apr-96																
MW-15D	27-Nov-96			0.05			0.003									**0.005**	
MW-15D	24-Apr-97																0.05
MW-15D	31-Oct-97									0.013							0.05
MW-15D	7-May-98						**0.013**								**0.011**		
MW-15D	23-Nov-98																
MW-15D	14-Apr-99																
MW-15D	1-Dec-99																
MW-15D	6-Apr-00																
MW-15D	18-Dec-00																
MW-15D	17-Apr-01																
MW-15D	28-Nov-01																
MW-15D	3-Apr-02																
MW-15D	6-Nov-02																
MW-15D	15-Apr-03																
MW-15D	29-Oct-03																
MW-15D	8-Apr-04																
MW-15D	18-Nov-04																
MW-15D	21-Apr-05																
MW-15D	11-Nov-05																
MW-15D	13-Apr-06																
MW-15D	8-Nov-06																
MW-15D	20-Apr-07																
MW-15D	7-Nov-07																
MW-15D	13-May-08			0.0601J			0.00506J		0.00522J	0.00788J							0.00536J
MW-15D	5-Nov-08			0.0636J			0.00282J			0.00394J				0.00111JB			
MW-15D (dup)	5-Nov-08			0.0636J			0.00377J							0.00088JB			0.00708J
MW-15D	17-Mar-09			0.0412J		0.00031J	0.00452J		0.00234J	0.00560J				0.00187JB		**0.0108JB**	0.00755J
MW-15D	20-Oct-09	**0.00137J**	0.00534J	0.0685JB		0.00142	0.0097JB		0.014B	0.00947J						**0.00596J**	0.0157B
MW-15D (dup)	20-Oct-09	**0.00158J**		0.0698JB		0.00153	0.00895JB		0.0138B							**0.0108J**	0.0144B
MW-15D	6-May-10	0.000526J		0.0613J		0.000364J	0.00403J									**0.00430J**	0.00436J
MW-15D	27-Oct-10	0.000563J		0.0531J		0.000827J	0.00367J								**0.000363J**	**0.00409J**	0.00585J
MW-15D	14-Mar-11	0.000361J		0.0635J		0.000539J	0.00445J		0.00196J	0.00228J						**0.00432J**	0.00414J
MW-15D	19-Oct-11	0.000713J		0.0715J		0.000423J	0.005J									**0.00377J**	0.00632J
MW-15D	10-Apr-12	**0.00103J**		0.081J		0.000677J	0.00577J		0.0697	0.00286J						**0.00415J**	0.0156
MW-15D	25-Oct-12			0.0796J		0.000727J	0.00364J		0.0186							**0.00345J**	0.0105
MW-15D	10-Apr-13	**0.0021J**		0.080J		0.0004J	0.003J	0.00009JB	0.01J	0.0003J		0.001J					0.006J
MW-15D	2-Oct-13	0.0003J		0.080J	0.00005JB		0.001J	0.0001J	0.002J			0.0009J				**0.002J**	
MW-15D	4-Apr-14	0.0005J		0.070J		0.0003J	0.001J	0.00006J	0.003J			0.0010J				**0.005J**	0.005JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-16	31-Oct-95						**0.590**					0.073					
MW-16	19-Dec-95						**0.204**										
MW-16	26-Feb-96						**0.086**										
MW-16 (dup)	26-Feb-96						**0.020**										
MW-16	29-Apr-96				0.003		**0.040**	**0.017**		**0.037**						**0.065**	0.051
MW-16	27-Nov-96			0.15				**0.002**									
MW-16	24-Apr-97						**0.012**			0.011							0.14
MW-16	31-Oct-97							**0.01**									0.045
MW-16 (dup)	31-Oct-97						**0.012**	**0.013**		0.012							0.031
MW-16	7-May-98						**0.012**								**0.015**		
MW-16	23-Nov-98					0.0015											
MW-16	14-Apr-99					0.0013											
MW-16	1-Dec-99					0.0013											
MW-16	6-Apr-00							**0.0133**									
MW-16	18-Dec-00																
MW-16	17-Apr-01																
MW-16	28-Nov-01		**0.0133**														
MW-16	3-Apr-02																
MW-16	6-Nov-02																
MW-16	15-Apr-03																
MW-16	29-Oct-03																
MW-16 (dup)	29-Oct-03																
MW-16	8-Apr-04		**0.0151**					**0.0124**									
MW-16	18-Nov-04	dry	dry	dry	dry	dry	dry	dry	dry	dry		dry	dry	dry	dry	dry	dry
MW-16	21-Apr-05																
MW-16	11-Nov-05																
MW-16	13-Apr-06																
MW-16	8-Nov-06		**0.012**				**0.012**	**0.012**									
MW-16	20-Apr-07			0.112					0.011								0.029
MW-16	7-Nov-07			0.167					0.012								0.023
MW-16	13-May-08			0.144		0.00027J	**0.0152**	**0.00752J**	0.0295	0.012			0.012	0.00094J		**0.0307J**	0.129
MW-16	5-Nov-08		0.00216J	0.202		0.00045J	**0.0105**	**0.0133**	0.0179	0.0106		0.00586J		0.00159JB		**0.0294**	0.136
MW-16	17-Mar-09			0.080J		0.00057J	0.00223J		0.0103	0.00418J				0.00172JB		**0.0203JB**	0.0226
MW-16	20-Oct-09	**0.00141J**	0.0051J	0.169B			0.00425JB	**0.00283J**	0.0129B			0.00271J				**0.0113J**	0.0261B
MW-16	7-May-10	0.000329J		0.124			0.00177J	**0.0031J**	0.00841J			0.00268J				**0.0049J**	0.0304
MW-16	28-Oct-10	0.000726J		0.111					0.00517J			0.0021J			**0.000625J**	**0.00453J**	0.0105
MW-16	15-Mar-11	0.000551J		0.134			0.00105J	**0.0025J**	0.00613J			0.00307J				**0.00391J**	0.0147
MW-16	20-Oct-11	0.000262J		0.154			0.00135J	**0.00248J**	0.00678J			0.00339J				**0.00449J**	0.016
MW-16	11-Apr-12	0.000729J		0.142			0.00235J	**0.00409J**	0.0103			0.00273J				**0.00695J**	0.0184
MW-16	26-Oct-12			0.176			0.00641J	**0.00652J**	0.0229	0.00363J		0.00662J			0.000143J	**0.013J**	0.0481
MW-16	11-Apr-13	0.0003J	0.0008J	0.130		0.0003J	0.001J	**0.003J**	0.007J	0.0006J		0.004J			0.00007J		0.011J
MW-16	2-Oct-13	0.0008J	0.0006J	0.140	0.00008JB	0.0002J	0.0007J	**0.002J**	0.009J	0.0007J		0.003J			0.0001J	**0.004J**	0.015JB
MW-16	4-Apr-14	0.0003J	0.001J	0.120	0.0001J	0.0003J	0.002J	**0.004J**	0.020	0.003J		0.004J			0.00009J	**0.012J**	0.029B

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-17	31-Oct-95																
MW-17	19-Dec-95						**0.012**										
MW-17	26-Feb-96				0.003		**0.036**	**0.011**		**0.016**						**0.104**	0.052
MW-17	29-Apr-96						**0.014**										
MW-17	27-Nov-96			0.023			**0.003**										
MW-17	24-Apr-97						**0.02**										0.056
MW-17	31-Oct-97						**0.013**			0.01							0.035
MW-17	11-May-98						**0.011**										0.13
MW-17	23-Nov-98																
MW-17	14-Apr-99																
MW-17	1-Dec-99																
MW-17	6-Apr-00																
MW-17	18-Dec-00																
MW-17	17-Apr-01																
MW-17	29-Nov-01																
MW-17	3-Apr-02																
MW-17 (dup)	3-Apr-02																
MW-17	6-Nov-02																
MW-17	15-Apr-03																
MW-17	29-Oct-03																
MW-17	8-Apr-04																
MW-17	18-Nov-04																
MW-17	21-Apr-05																
MW-17	11-Nov-05						**0.014**										
MW-17	13-Apr-06																
MW-17	8-Nov-06				0.003		**0.02**			**0.017**						**0.042**	
MW-17	20-Apr-07																
MW-17	7-Nov-07			0.107	0.003		**0.019**		0.011	**0.015**						**0.041**	0.029
MW-17	13-May-08			0.0417J			**0.0112**		0.00808J	0.00844J				0.0015J		**0.0113J**	0.00722J
MW-17	3-Nov-08			0.0215J	**0.00613**	0.00016J	0.00557J		0.0025J					0.00144J			
MW-17	18-Mar-09			0.00843J					0.00356JB					0.00115JB		**0.00763JB**	
MW-17	21-Oct-09		0.00577J	0.0245JB			0.00453JB		0.00775JB							**0.00344**	0.00259JB
MW-17	7-May-10			0.0381J	0.00022J		**0.0106**	**0.00243J**	0.00493J	0.00453J						**0.0202J**	0.028
MW-17	29-Oct-10			0.0352J			0.00728J	**0.00195J**	0.00344J	0.00389J		0.00206J			**0.00111J**	**0.0145J**	0.0147
MW-17	15-Mar-11			0.0226J			0.00157J									**0.00226J**	0.00551J
MW-17	20-Oct-11			0.0343J	0.000305J		0.00743J	**0.00149J**	0.00252J			0.00208J				**0.0118J**	0.00988J
MW-17	11-Apr-12			0.0795J	0.0014		**0.0266**	**0.00659J**	0.013	0.012		0.00635J			0.000115J	**0.0489**	0.0243
MW-17	26-Oct-12			0.0817J	0.000616J		**0.0366**	**0.00610J**	0.0204	0.0133		0.00734J				**0.0671**	0.0293
MW-17	11-Apr-13			0.05J	0.0011J	0.0001J	**0.017**	**0.003J**	0.009J	0.006J		0.004J				**0.032**	0.01J
MW-17	2-Oct-13			0.030J	0.0005J	0.0003J	0.006J	**0.002J**	0.003J	0.002J		0.002J				**0.012J**	0.004JB
MW-17	4-Apr-14			0.050J	0.0012	0.0002J	0.019	**0.003J**	0.011	0.008J		0.004J			0.00007J	**0.035**	0.018JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-17D	31-Oct-95																
MW-17D	19-Dec-95																
MW-17D	26-Feb-96																
MW-17D	29-Apr-96																
MW-17D	27-Nov-96			0.026			0.005										
MW-17D	24-Apr-97																
MW-17D	31-Oct-97																
MW-17D	11-May-98																0.058
MW-17D	23-Nov-98																
MW-17D	14-Apr-99																
MW-17D	1-Dec-99																
MW-17D	6-Apr-00																
MW-17D	18-Dec-00																
MW-17D	17-Apr-01																
MW-17D	29-Nov-01																
MW-17D	3-Apr-02																
MW-17D	6-Nov-02																0.539
MW-17D	15-Apr-03																
MW-17D	29-Oct-03																
MW-17D	8-Apr-04																
MW-17D	18-Nov-04																
MW-17D	21-Apr-05					**0.002**											
MW-17D	11-Nov-05																
MW-17D	13-Apr-06																
MW-17D	8-Nov-06																
MW-17D	20-Apr-07						**0.021**										
MW-17D	7-Nov-07																
MW-17D	13-May-08			0.0382J			0.00345J		0.00446J	0.00853J				0.0013J			0.0063J
MW-17D	5-Nov-08			0.0438J	0.00161		0.00557J		0.00216J					0.00132JB			
MW-17D	17-Mar-09			0.0130J		0.000530J				0.00640J				0.00168JB		**0.0115JB**	0.0177
MW-17D (dup)	17-Mar-09			0.0115J		0.00040J								0.00178JB		**0.00884JB**	0.00717J
MW-17D	20-Oct-09	0.00056J		0.0383JB		0.00029J	0.0051JB		0.0125B							**0.00662J**	0.0121B
MW-17D	6-May-10	**0.00217J**		0.0313J		0.000946J	0.00225J		0.00369J							**0.00495J**	0.0175
MW-17D (dup)	6-May-10	**0.00188J**		0.032J		0.000825J	0.00251J		0.00357J							**0.00452J**	0.0118
MW-17D	28-Oct-10	**0.00105J**		0.035J		0.000753J	0.00222J		0.0657						**0.000431J**	**0.00483J**	0.00818J
MW-17D	14-Mar-11	0.000871J		0.0381J		0.00118	0.00193J		0.0196							**0.00452J**	0.00717J
MW-17D	19-Oct-11	0.000692J		0.0408J		0.000773J	0.00219J		0.00633J							**0.0042J**	0.00787J
MW-17D (dup)	19-Oct-11	0.000773J		0.0405J		0.000846J	0.00214J		0.00654J							**0.00439J**	0.00819J
MW-17D	10-Apr-12	0.000669J	0.00351JB	0.0455J		0.000609J	0.00228J		0.014	0.00304J						**0.00423J**	0.00644J
MW-17D	25-Oct-12			0.0466J		0.000465J	0.00273J		0.00198J							**0.00436J**	0.00568J
MW-17D	10-Apr-13	**0.0031J**		0.040J		0.0006J	0.002J	0.0003JB	0.004J	0.0005J		0.001J					0.008J
MW-17D	1-Oct-13	**0.0017J**		0.040J	0.0001JB	0.0002J	0.002J	0.0003JB	0.004J	0.0008J		0.001J				**0.003J**	0.004JB
MW-17D	4-Apr-14	**0.0003J**		0.050J	0.0001J		0.002J	0.0005J	0.011	0.002J		0.001J				**0.007J**	0.009JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-18	31-Oct-95			0.857	0.004		0.271	0.092		0.018		0.264				0.207	0.428
MW-18 (dup)	31-Oct-95			1.347	0.009		0.505	0.145		0.027		0.458				0.307	0.875
MW-18	19-Dec-95																
MW-18	26-Feb-96						0.067	0.038		0.012						0.107	0.150
MW-18	29-Apr-96				0.005		0.299	0.127	0.620	0.023		0.218				0.165	0.606
MW-18	27-Nov-96			0.018													
MW-18	24-Apr-97					0.001		0.045				0.066				0.11	0.26
MW-18	31-Oct-97						0.064	0.026								0.062	0.11
MW-18	7-May-98						0.014										
MW-18	23-Nov-98					0.0012	0.013										
MW-18	14-Apr-99					0.0018											
MW-18	1-Dec-99						0.0123										
MW-18	6-Apr-00																
MW-18	18-Dec-00																
MW-18	17-Apr-01																
MW-18	29-Nov-01						0.0231	0.0165									0.0676
MW-18	5-Apr-02																
MW-18	6-Nov-02						0.0146	0.0106									
MW-18	15-Apr-03					0.0010	0.0235	0.0133									
MW-18	29-Oct-03						0.0275	0.0134									
MW-18	8-Apr-04						0.0251	0.0119									
MW-18	18-Nov-04																
MW-18	21-Apr-05																
MW-18	11-Nov-05																
MW-18	13-Apr-06						0.023										0.051
MW-18	8-Nov-06			0.598	0.003		0.047	0.019		0.017						0.056	0.244
MW-18	20-Apr-07			0.106					0.026							0.025	0.043
MW-18	7-Nov-07			0.281	0.001		0.035	0.013	0.043							0.044	0.107
MW-18	13-May-08			0.0726J			0.022	0.00544J	0.0286	0.0128		0.00608J	0.0091J			0.0178J	0.0223
MW-18	3-Nov-08			0.0207J	0.00376	0.00016J	0.00498J		0.00565J					0.00115J		0.0014J	0.00495J
MW-18	18-Mar-09			0.0343J	0.00045J		0.0117		0.0216B					0.00143JB		0.0218JB	0.00942J
MW-18	21-Oct-09			0.0496JB			0.0164B	0.00321J	0.0226B			0.00509J				0.0138J	0.0132B
MW-18	7-May-10			0.253		0.000624J	0.0901	0.0369	0.117	0.00627J		0.0388J			0.000128J	0.0814	0.103
MW-18	28-Oct-10			0.0141J			0.00192J								0.000356J	0.00329J	0.00527J
MW-18	15-Mar-11			0.0362J			0.00959J	0.00306J	0.0104			0.00349J				0.00828J	0.01
MW-18	20-Oct-11			0.0967J			0.0326	0.0116	0.0376	0.00234J		0.0141J				0.0282	0.0341
MW-18	11-Apr-12	0.000399J		0.352	0.000451J		0.126	0.0484	0.148	0.013		0.058		0.00373J	0.000194J	0.116	0.135
MW-18	26-Oct-12		0.00576J	0.311			0.0855	0.0361	0.114	0.00818J		0.0507				0.0732	0.134
MW-18	11-Apr-13			0.120	0.0004J		0.040	0.015	0.046	0.002J		0.020J			0.0009J	0.033	0.038
MW-18	2-Oct-13			0.140	0.0005J		0.043	0.015	0.059	0.003J		0.021J			0.0001J	0.037	0.039B
MW-18	4-Apr-14			0.240	0.0006J	0.0001J	0.070	0.026	0.081	0.004J		0.035J			0.0002J	0.067	0.084

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-19	8-Mar-99					**0.003**	**0.124**	**0.0285**		0.0124		0.056				**0.0826**	0.0573
MW-19	15-Apr-99																
MW-19	27-May-99																
MW-19	20-Jul-99																
MW-19	4-Aug-99																
MW-19 (dup)	4-Aug-99																
MW-19	1-Dec-99																
MW-19	5-Apr-00																
MW-19	18-Dec-00																
MW-19	18-Apr-01																
MW-19	28-Nov-01																
MW-19	4-Apr-02																
MW-19	5-Nov-02						**0.0178**										
MW-19	16-Apr-03						**0.0294**										
MW-19	30-Oct-03																
MW-19	7-Apr-04																
MW-19	18-Nov-04						**0.018**										
MW-19	21-Apr-05																
MW-19	11-Nov-05																
MW-19	13-Apr-06																
MW-19	8-Nov-06																
MW-19	20-Apr-07																
MW-19	7-Nov-07						**0.017**		0.029								0.012
MW-19	14-May-08			0.033J			**0.0106**		0.012								0.00437J
MW-19	5-Nov-08			0.0124J	0.00154B	0.00014J	0.00389J		0.00294J					0.00155JB			
MW-19	18-Mar-09					0.00023J	0.00285J		0.00551JB					0.00146JB		**0.00773JB**	
MW-19	21-Oct-09			0.02JB			0.00557JB		0.00867JB							**0.00462J**	0.00349JB
MW-19	7-May-10			0.0222J		0.000446J	0.00781J	**0.00130J**	0.00785J			0.00247J				**0.00474J**	0.022
MW-19	29-Oct-10			0.0133J			0.00326J		0.00246J						**0.00026J**	**0.00262J**	0.00548J
MW-19	15-Mar-11			0.0155J			0.00291J		0.00168J	0.00195J						**0.00269J**	0.0191
MW-19 (dup)	15-Mar-11			0.0151J			0.00288J								0.000115J	**0.00259J**	0.00756
MW-19	20-Oct-11			0.0145J			0.00276J									**0.00232J**	0.00958J
MW-19	10-Apr-12			0.0198J			0.00607J		0.00567J			0.00194J				**0.00379J**	
MW-19	26-Oct-12			0.0153J			0.00318J		0.00212J							**0.00252J**	0.00594J
MW-19	11-Apr-13			0.02J		0.0001J	0.003J	0.0001JB	0.002J			0.001J					0.003J
MW-19	2-Oct-13			0.020JB	0.00008JB		0.002J	0.0001JB	0.002J			0.001J					0.003JB
MW-19	4-Apr-14			0.020J		0.0002J	0.004J	0.0004J	0.003J			0.002J				**0.004J**	0.007JB
MW-19 (dup)	4-Apr-14			0.020J		0.0001J	0.004J	0.0006J	0.004J			0.002J				**0.004J**	0.006JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-20	15-Apr-99					0.00012	**0.0118**	**0.036**									0.098
MW-20	27-May-99																
MW-20 (dup)	27-May-99																
MW-20	20-Jul-99																
MW-20	4-Aug-99																
MW-20	1-Dec-99																
MW-20	5-Apr-00																
MW-20	18-Dec-00																
MW-20	18-Apr-01																
MW-20	27-Nov-01			0.179				**0.0279**	0.122								0.0827
MW-20	4-Apr-02							**0.011**									
MW-20	6-Nov-02																
MW-20	16-Apr-03					0.0013	**0.0101**	**0.0191**									0.0601
MW-20	30-Oct-03																
MW-20	7-Apr-04																
MW-20	18-Nov-04							**0.01**									
MW-20	21-Apr-05																
MW-20	11-Nov-05																
MW-20	13-Apr-06																
MW-20	8-Nov-06																
MW-20	20-Apr-07								0.019								0.015
MW-20	7-Nov-07			0.147				**0.012**	0.075	**0.019**						**0.029**	0.079
MW-20	14-May-08		0.00231J	0.0364J			0.00474J		0.0272	0.0113						**0.0107J**	0.0126
MW-20	5-Nov-08			0.0258J	0.00063J	0.00014J	0.00317J		0.0176					0.00105J		**0.00654J**	0.00757J
MW-20	18-Mar-09			0.0274J			0.00284J		0.0373B			0.00491J		0.00126JB	**0.0115**	**0.0290B**	0.011
MW-20	21-Oct-09			0.0293JB			0.00509JB		0.0145B	0.00788J						**0.0122J**	0.00577JB
MW-20	7-May-10			0.165		0.000656J	**0.0172**	**0.0278**	0.19	0.0122		0.0259J			0.000129J	**0.0538**	0.0925
MW-20	29-Oct-10			0.0184J			0.00165J		0.0081J			0.00218J			**0.0002J**	**0.00981J**	0.00687J
MW-20	15-Mar-11			0.0229J			0.00152J		0.00698J	0.00273J						**0.00998J**	0.0101
MW-20	20-Oct-11			0.0311J			0.00282J	**0.00264J**	0.0167			0.0034J				**0.0126J**	0.0158
MW-20	11-Apr-12			0.105			**0.0103**	**0.0157**	0.107	0.00831J		0.0171J				**0.0341**	0.066
MW-20 (dup)	11-Apr-12			0.044J			0.00368J	**0.00458J**	0.0276	0.00495J		0.00506J				**0.0154J**	0.0198
MW-20	26-Oct-12		0.00314J	0.12			**0.0138**	**0.0175**	0.120	0.0117		0.023J				**0.0426**	0.0746
MW-20	11-Apr-13			0.13	0.0004J		**0.012**	**0.019**	0.129	0.009J		0.023J			**0.0002J**	**0.042**	0.064
MW-20	2-Oct-13			0.310	0.0009J	0.0001J	**0.026**	**0.032**	0.329	**0.026**		0.041J			**0.0003J**	**0.110**	0.168
MW-20	4-Apr-14			0.080J	0.0002J		0.007J	**0.010J**	0.068	0.005J		0.013J			0.00008J	**0.034**	0.041B

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-21	15-Apr-99					**0.004**		**0.0632**	0.362	0.0147		0.0527				**0.0565**	0.347
MW-21	27-May-99																
MW-21	20-Jul-99																
MW-21	4-Aug-99																
MW-21	30-Nov-99																
MW-21	5-Apr-00																
MW-21	18-Dec-00																
MW-21	18-Apr-01																
MW-21	27-Nov-01																
MW-21	4-Apr-02																
MW-21	5-Nov-02																
MW-21	16-Apr-03																
MW-21	30-Oct-03																
MW-21	7-Apr-04																
MW-21	18-Nov-04							**0.016**								**0.049**	
MW-21	21-Apr-05																
MW-21	11-Nov-05																
MW-21	13-Apr-06																
MW-21	8-Nov-06																
MW-21	20-Apr-07																
MW-21	7-Nov-07																0.011
MW-21	14-May-08			0.085J			0.00425J		0.0192	0.00645J						**0.00538J**	0.0109
MW-21 (dup)	14-May-08			0.0914J			0.00476J		0.0205	0.00542J				0.00446J	**0.00692**	**0.012J**	0.0168
MW-21	5-Nov-08		0.00185J	0.0581J	0.00112		0.00197J		0.00928J					0.00126JB			0.00504J
MW-21	18-Mar-09			0.0584J			0.00136J		0.0170B					0.00137JB	**0.00816**	**0.0195JB**	0.00654J
MW-21	21-Oct-09			0.0508J			0.00528JB		0.0123B							**0.00725J**	0.00438JB
MW-21	7-May-10			0.124			0.00323J	**0.00461J**	0.0249							**0.0192J**	0.0249
MW-21	29-Oct-10			0.0511J			0.00146J		0.00624J						0.000148J	**0.00693J**	0.0177
MW-21	15-Mar-11			0.0452J			0.00166J		0.00273J	0.00201J						**0.00483J**	0.00619J
MW-21	20-Oct-11			0.0616J			0.00206J	**0.00125J**	0.00664J							**0.00675J**	0.0111
MW-21	10-Apr-12			0.208	0.000171J		0.00642J	**0.00804J**	0.0469	0.00349J		0.00246J			0.000122J	**0.0315**	0.0353
MW-21	26-Oct-12			0.209			0.00731J	**0.00725J**	0.0562	0.00464J		0.00343J				**0.0357**	0.0407
MW-21	11-Apr-13			0.1	0.0002J	0.0001J	0.004J	**0.003J**	0.019	0.001J		0.002J				**0.011J**	0.012J
MW-21	2-Oct-13			0.110	0.0003JB	0.0002J	0.003J	**0.003J**	0.022	0.001J		0.002J			0.00005J	**0.015J**	0.012JB
MW-21 (dup)	2-Oct-13			0.130	0.0003JB		0.004J	**0.004J**	0.029	0.001J		0.002J			0.00007J	**0.018J**	0.015JB
MW-21	4-Apr-14			0.090J	0.0001J		0.003J	**0.002J**	0.014	0.0008J		0.002J				**0.012J**	0.013JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		**0.001***	**0.010**	**0.7**	**0.004***	**0.002**	**0.01**	**0.001***	**1**	**0.015**	**0.001**	**0.1**	**0.02**	**0.02**	**0.0002***	**0.0003***	**1**
Solid Waste Section Limit		**0.006**	**0.010**	**0.1**	**0.001**	**0.001**	**0.01**	**0.01**	**0.01**	**0.01**	**0.0002**	**0.05**	**0.01**	**0.01**	**0.0055**	**0.025**	**0.01**
MW-25	15-Apr-99																
MW-25	27-May-99																
MW-25	20-Jul-99																
MW-25 (dup)	20-Jul-99																
MW-25	4-Aug-99																
MW-25	1-Dec-99																
MW-25	5-Apr-00																
MW-25	18-Dec-00					0.0011											
MW-25	18-Apr-01																
MW-25	27-Nov-01																
MW-25	4-Apr-02																
MW-25	5-Nov-02																
MW-25	16-Apr-03																
MW-25	30-Oct-03																
MW-25	7-Apr-04																
MW-25	18-Nov-04																
MW-25	21-Apr-05																
MW-25	11-Nov-05																
MW-25	13-Apr-06																
MW-25	8-Nov-06																
MW-25	20-Apr-07																0.01
MW-25	7-Nov-07			0.126			**0.015**										0.028
MW-25	14-May-08			0.0528J			0.00441J		0.00472J	0.00397J							
MW-25	5-Nov-08			0.0704J			0.00702J		0.00403J					0.00148JB			0.00516J
MW-25	17-Mar-09			0.0421J	0.00115	0.00017J				0.00457J				0.00177JB		**0.00813JB**	
MW-25	21-Oct-09			0.0555JB			0.00351JB		0.00776JB							**0.00151J**	0.00288JB
MW-25	6-May-10			0.118			**0.0154**	**0.00527J**	0.00637J	0.00293J		0.00724J				**0.0150J**	0.0213
MW-25	28-Oct-10			0.0905J			0.00678J	**0.00212J**	0.00289J			0.00385J			**0.000262J**	**0.00565J**	0.0136
MW-25	14-Mar-11			0.0782J			0.00253J	**0.00187J**		0.00237J		0.00497J			**0.000224J**	**0.00344J**	0.0062J
MW-25	19-Oct-11			0.096J			0.00734J	**0.00282J**	0.00213J			0.00384J				**0.00554J**	0.0139
MW-25	11-Apr-12			0.0916J			0.00134J									**0.00159J**	0.00408J
MW-25	26-Oct-12			0.0805J			0.00553J	**0.00141J**	0.00192J			0.00503J				**0.00393J**	0.0135
MW-25	10-Apr-13			0.080J	0.0001J		0.003J	**0.002J**	0.001J	0.0004J		0.006J					0.004J
MW-25	2-Oct-13			0.080J	0.0001JB		0.003J	**0.003J**	0.002J	0.0003J		0.003J				**0.004J**	0.012JB
MW-25	4-Apr-14			0.070J			0.002J	**0.003J**	0.0010J	0.0002J		0.005J				**0.004J**	0.009JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-25D	15-Apr-99																
MW-25D	27-May-99																
MW-25D	20-Jul-99																
MW-25D	4-Aug-99																
MW-25D	1-Dec-99																
MW-25D	5-Apr-00																
MW-25D	18-Dec-00																
MW-25D	18-Apr-01					**0.0039**											
MW-25D	27-Nov-01								0.0109								
MW-25D	4-Apr-02																
MW-25D	5-Nov-02																
MW-25D	16-Apr-03					**0.0033**	**0.0172**	**0.0212**									
MW-25D	30-Oct-03																
MW-25D	7-Apr-04																
MW-25D	18-Nov-04																
MW-25D	21-Apr-05																
MW-25D	11-Nov-05																
MW-25D	13-Apr-06																
MW-25D	8-Nov-06						**0.01**										
MW-25D	20-Apr-07																
MW-25D	7-Nov-07						**0.01**		0.029								0.029
MW-25D	14-May-08			0.0766J			**0.0121**	**0.00418J**	0.0356			0.00844J				**0.013J**	0.0204
MW-25D	5-Nov-08			0.0699J		0.00063J	**0.054**	**0.00315J**	0.0191	0.00668J		0.0302J		0.00167JB		**0.00444J**	0.02
MW-25D	17-Mar-09			0.176		0.00156	**0.0192**	**0.0117**	0.0262	0.00399J		0.0423J		0.00284JB		**0.017JB**	0.0555
MW-25D	21-Oct-09		0.00491J	0.0446JB			0.00716JB		0.0121B							**0.00621J**	0.00547JB
MW-25D	7-May-10			0.112		0.00043J	**0.0164**	**0.0109**	0.0613	0.00290J		0.0144J				**0.0327**	0.0443
MW-25D	28-Oct-10		0.00301J	0.187			**0.033**	**0.0239**	0.146	0.00554J		0.0326			**0.000322J**	**0.0746**	0.0931
MW-25D	14-Mar-11			0.0623J	0.000106J		0.00693J	**0.00315J**	0.0176			0.00587J			0.000134J	**0.0109J**	0.0133
MW-25D	19-Oct-11			0.07J			0.00859J	**0.00506J**	0.0228			0.00725J				**0.0138J**	0.0173
MW-25D	11-Apr-12			0.0485J			0.00427J	**0.00144J**	0.00905J							**0.00575J**	0.00449J
MW-25D	26-Oct-12			0.0485J			0.00506J	**0.00164J**	0.00974J			0.0300J				**0.00711J**	0.011
MW-25D	11-Apr-13			0.06J	0.0001J		0.006J	**0.003J**	0.015	0.0006J		0.005J				**0.007J**	0.007J
MW-25D	2-Oct-13			0.050J	0.0001JB		0.005J	**0.002J**	0.011	0.0004J		0.003J				**0.008J**	0.004JB
MW-25D	4-Apr-14			0.050J	0.0001J		0.006J	**0.003J**	0.018	0.0006J		0.005J				**0.010J**	0.011JB

Table 3A
Detected Groundwater Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard		0.001*	0.010	0.7	0.004*	0.002	0.01	0.001*	1	0.015	0.001	0.1	0.02	0.02	0.0002*	0.0003*	1
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.0002	0.05	0.01	0.01	0.0055	0.025	0.01
MW-26	27-May-99					0.0014		0.0306									
MW-26	20-Jul-99							0.0102									
MW-26	4-Aug-99							0.01									
MW-26 (dup)	4-Aug-99							0.0102									
MW-26	30-Nov-99																
MW-26 (dup)	30-Nov-99																
MW-26	5-Apr-00					0.0017		0.0146									
MW-26	15-Dec-00					0.0018		0.02									
MW-26	18-Apr-01							0.0109									
MW-26	27-Nov-01							0.0126									
MW-26	4-Apr-02							0.0111									
MW-26	5-Nov-02					0.0016		0.0152									
MW-26 (dup)	5-Nov-02					0.0018		0.0154									
MW-26	16-Apr-03					0.0012		0.0165									
MW-26	30-Oct-03					0.0011		0.0278								0.0405	
MW-26	7-Apr-04							0.0117									
MW-26	18-Nov-04						0.011	0.023									
MW-26	21-Apr-05																
MW-26	11-Nov-05																
MW-26	13-Apr-06																
MW-26	8-Nov-06																
MW-26	20-Apr-07			0.387	0.001	0.002	0.016	0.026	0.356							0.059	0.165
MW-26	7-Nov-07								0.012								
MW-26	14-May-08			0.0633J			0.0102	0.0129	0.0573	0.0137		0.0118J	0.0203			0.0155J	0.0141
MW-26	5-Nov-08			0.0193J	0.00432		0.00136J	0.0046J	0.00679J					0.00121JB			
MW-26	18-Mar-08			0.00753J				0.00772J	0.00571JB					0.00175JB		0.00581JB	
MW-26	21-Oct-09			0.0253JB			0.00332JB	0.00721J	0.00976JB			0.0045J				0.00232J	0.00131JB
MW-26	7-May-10			0.0397J			0.00258J	0.0114	0.0247			0.00711J				0.00992J	0.0215
MW-26	29-Oct-10			0.0695J			0.00729J	0.0145	0.0767	0.00224J		0.0161J				0.0197J	0.0345
MW-26 (dup)	29-Oct-10			0.0964J			0.0116	0.0197	0.115	0.00230J		0.0223J			0.000266J	0.0303	0.0554
MW-26	15-Mar-11			0.0533J	0.000116J		0.00519J	0.0145	0.0465	0.00526J		0.0113J			0.000123J	0.013J	0.0176
MW-26	20-Oct-11			0.067J			0.00621J	0.0148	0.0439			0.0121J				0.0152J	0.0295
MW-26	11-Apr-12			0.0423J			0.00283J	0.0117	0.02	0.00391J		0.00723J				0.00675J	0.00682J
MW-26	25-Oct-12			0.123		0.000626J	0.0148	0.024	0.119	0.00193J		0.0293J		0.00208J		0.0365	0.0368
MW-26 (dup)	25-Oct-12			0.154		0.000933J	0.021	0.0302	0.157	0.00545J		0.0393J		0.00208J		0.0504	0.0555
MW-26	11-Apr-13			0.11	0.0003J	0.0006J	0.013	0.022	0.09	0.002J		0.025J			0.00006J	0.029	0.026
MW-26	2-Oct-13			0.130	0.0005J	0.0005J	0.015	0.024	0.106	0.001J		0.030J			0.00007J	0.039	0.030B
MW-26	4-Apr-14			0.060J	0.0001J	0.0001J	0.004J	0.014	0.028	0.0005J		0.011J				0.014J	0.014JB

Notes:

1. All units are in milligrams per liter (parts per million).
2. * - Groundwater Protection Standard
3. NS - Not Sampled; dry - Well not sampled; dup - Duplicate Sample
4. Mercury is an Appendix II constituent that is only reported for background monitoring wells MW-11 and -11D.
5. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
6. B - The analyte concentration detected in the method blank was greater than the method detection limit.

- Concentration exceeds the North Carolina 2L or Groundwater Protection Standard
- Indicates the result is below the detection limit

Table 3B
Detected Groundwater Constituents - Volatile Organic Compounds
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone (MEK)	Carbon Disulfide	Chloroform	Chloromethane	cis-1,2-Dichloroethene	1, 1-Dichloroethane	Methylene Chloride	Tetrachloroethene	Toluene	Trichlorofluoromethane
North Carolina 2L Standard		6,000	1	4,000	700	70	3	70	6	5	0.7	600	2,000
Solid Waste Section Limit		100	1	100	100	5	1	5	5	1	1	1	1
MW-11	7-Nov-07						0.4J						
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												
MW-11	25-Apr-12												
MW-11	23-Oct-12												
MW-11	17-Apr-13												
MW-11	16-Oct-13												
MW-11	17-Apr-14												
MW-11D	7-Nov-07					0.3J	0.2J						
MW-11D	15-May-08					0.31J							
MW-11D	10-Nov-08					0.22J							
MW-11D	16-Mar-09					0.28J							
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												
MW-11D	26-Apr-12												
MW-11D	24-Oct-12												
MW-11D	18-Apr-13												
MW-11D	17-Apr-14												
MW-12	7-Nov-07	2.5J		2.9J			0.3J						
MW-12	14-May-08												
MW-12	4-Nov-08									0.31J			
MW-12	18-Mar-09												
MW-12	20-Oct-09												
MW-12	7-May-10												
MW-12	19-Oct-10												
MW-12	15-Mar-11	6.0J											
MW-12	20-Oct-11												
MW-12	11-Apr-12												
MW-12	26-Oct-12												
MW-12	11-Apr-13	16J											
MW-12	2-Oct-13												
MW-12	4-Apr-14	6.0J											
MW-12D	7-Nov-07												
MW-12D	14-May-08					0.12J							
MW-12D	5-Nov-08									0.34J			
MW-12D	18-Mar-09												
MW-12D	20-Oct-09												
MW-12D	6-May-10												
MW-12D	26-Oct-10												
MW-12D	15-Mar-11												
MW-12D	20-Oct-11												
MW-12D	11-Apr-12												
MW-12D	26-Oct-12												
MW-12D	11-Apr-13												
MW-12D (dup)	11-Apr-13												
MW-12D	2-Oct-13												
MW-12D	4-Apr-14												
MW-13	7-Nov-07			1.6J		0.2J							
MW-13	13-May-08					0.24J							
MW-13	4-Nov-08					0.15J				0.40J			
MW-13	18-Mar-09					0.11J							
MW-13	21-Oct-09					0.21J							
MW-13	7-May-10												
MW-13	29-Oct-10												
MW-13	15-Mar-11												
MW-13	20-Oct-11												
MW-13	11-Apr-12												
MW-13	26-Oct-12												
MW-13	11-Apr-13												
MW-13	2-Oct-13												
MW-13	4-Apr-14												

Table 3B
Detected Groundwater Constituents - Volatile Organic Compounds
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone (MEK)	Carbon Disulfide	Chloroform	Chloromethane	cis-1,2-Dichloroethene	1, 1-Dichloroethane	Methylene Chloride	Tetrachloroethene	Toluene	Trichlorofluoromethane
North Carolina 2L Standard		6,000	1	4,000	700	70	3	70	6	5	0.7	600	2,000
Solid Waste Section Limit		100	1	100	100	5	1	5	5	1	1	1	1
MW-14	7-Nov-07			1.4J		0.2J					0.2J		
MW-14	13-May-08					0.25J			0.09J		0.13J		
MW-14	4-Nov-08					0.18J					0.13J		
MW-14	18-Mar-09					0.14J							
MW-14	21-Oct-09					0.14J					0.14J		
MW-14	7-May-10												
MW-14	28-Oct-10												
MW-14	15-Mar-11												
MW-14	20-Oct-11												
MW-14	11-Apr-12												
MW-14	26-Oct-12												
MW-14	11-Apr-13												
MW-14	2-Oct-13												
MW-14	4-Apr-14												
MW-15	7-Nov-07			1.8J			0.3J						
MW-15	13-May-08												
MW-15	3-Nov-08									0.25J			
MW-15	18-Mar-09												
MW-15	21-Oct-09												
MW-15	7-May-10												
MW-15	28-Oct-10						0.43J						
MW-15	14-Mar-11												
MW-15	20-Oct-11	4.7J											
MW-15	11-Apr-12												
MW-15	26-Oct-12												
MW-15	11-Apr-13												
MW-15	2-Oct-13												
MW-15	4-Apr-14												
MW-15D	7-Nov-07			2.4J			0.3J						
MW-15D	13-May-08				0.11J								
MW-15D	5-Nov-08									0.42J			
MW-15D (dup)	5-Nov-08												
MW-15D	17-Mar-09												
MW-15D	20-Oct-09											0.14J	
MW-15D (dup)	20-Oct-09											0.15J	
MW-15D	6-May-10												
MW-15D	17-Oct-10						0.66J						
MW-15D	14-Mar-11												
MW-15D	19-Oct-11												
MW-15D	10-Apr-12												
MW-15D	25-Oct-12												
MW-15D	10-Apr-13												
MW-15D	2-Oct-13												
MW-15D	4-Apr-14												
MW-16	7-Nov-07			1.3J									
MW-16	13-May-08	4.91J										0.22J	
MW-16	4-Nov-08	3.33J								0.31J			
MW-16	17-Mar-09												
MW-16	20-Oct-09												
MW-16	7-May-10												
MW-16	28-Oct-10						0.56J						
MW-16	15-Mar-11												
MW-16	20-Oct-11												
MW-16	11-Apr-12												
MW-16	26-Oct-12												
MW-16	11-Apr-13												
MW-16	2-Oct-13												
MW-16	4-Apr-14												
MW-17	7-Nov-07			4.8J			0.4J						
MW-17	13-May-08												
MW-17	3-Nov-08												
MW-17	18-Mar-09												
MW-17	21-Oct-09												
MW-17	7-May-10												
MW-17	29-Oct-10												
MW-17	15-Mar-11												
MW-17	20-Oct-11												
MW-17	11-Apr-12												
MW-17	26-Oct-12												
MW-17	11-Apr-13												
MW-17	2-Oct-13												
MW-17	4-Apr-14												

Table 3B
Detected Groundwater Constituents - Volatile Organic Compounds
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone (MEK)	Carbon Disulfide	Chloroform	Chloromethane	cis-1,2-Dichloroethene	1, 1-Dichloroethane	Methylene Chloride	Tetrachloroethene	Toluene	Trichlorofluoromethane
North Carolina 2L Standard		6,000	1	4,000	700	70	3	70	6	5	0.7	600	2,000
Solid Waste Section Limit		100	1	100	100	5	1	5	5	1	1	1	1
MW-17D	7-Nov-07						1.5J						
MW-17D	13-May-08												
MW-17D	5-Nov-08									1.35			
MW-17D	17-Mar-09												
MW-17D (dup)	17-Mar-09												
MW-17D	20-Oct-09		0.15J									0.42J	
MW-17D	6-May-10												
MW-17D (dup)	6-May-10												
MW-17D	28-Oct-10						0.49J						
MW-17D	14-Mar-11												
MW-17D	19-Oct-11												
MW-17D (dup)	19-Oct-11												
MW-17D	10-Apr-12												
MW-17D	25-Oct-12												
MW-17D	10-Apr-13												
MW-17D	2-Oct-13												
MW-17D	4-Apr-14												
MW-18	7-Nov-07			1.8J		0.2J							
MW-18	13-May-08					0.21J							
MW-18	3-Nov-08					0.22J							
MW-18	18-Mar-09												
MW-18	21-Oct-09					0.13J							
MW-18	7-May-10												
MW-18	28-Oct-10						0.48J						
MW-18	15-Mar-11												
MW-18	20-Oct-11												
MW-18	11-Apr-12												
MW-18	26-Oct-12												
MW-18	11-Apr-13												
MW-18	2-Oct-13												
MW-18	4-Apr-14												
MW-19	7-Nov-07			2.2J			0.3J						
MW-19	14-May-08					0.16J					0.12J		
MW-19	5-Nov-08					0.14J				0.33J			
MW-19	18-Mar-09					0.13J							
MW-19	21-Oct-09					0.14J							
MW-19	7-May-10												
MW-19	29-Oct-10												
MW-19	15-Mar-11												
MW-19 (dup)	15-Mar-11												
MW-19	20-Oct-11												
MW-19	10-Apr-12												
MW-19	26-Oct-12												
MW-19	11-Apr-13												
MW-19	2-Oct-13												
MW-19	4-Apr-14												
MW-20	7-Nov-07	1.7J		1.7J					0.4J	0.2J	0.5J		0.2J
MW-20	14-May-08					0.17J		0.11J	0.45J		0.58J		
MW-20	5-Nov-08					0.14J			0.31J	0.29J	0.38J		
MW-20	18-Mar-09					0.13J			0.29J		0.46J		
MW-20	21-Oct-09					0.13J			0.29J	0.18J	0.45J		0.14J
MW-20	7-May-10										0.64J		
MW-20	29-Oct-10										0.42J		
MW-20	15-Mar-11												
MW-20	20-Oct-11												
MW-20	11-Apr-12										0.42J		
MW-20 (dup)	11-Apr-12										0.45J		
MW-20	26-Oct-12	4.3J											
MW-20	11-Apr-13										0.35J		
MW-20	2-Oct-13										0.30J		
MW-20	4-Apr-14										0.35J		

Table 3B
Detected Groundwater Constituents - Volatile Organic Compounds
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone (MEK)	Carbon Disulfide	Chloroform	Chloromethane	cis-1,2-Dichloroethene	1, 1-Dichloroethane	Methylene Chloride	Tetrachloroethene	Toluene	Trichlorofluoromethane
North Carolina 2L Standard		6,000	1	4,000	700	70	3	70	6	5	0.7	600	2,000
Solid Waste Section Limit		100	1	100	100	5	1	5	5	1	1	1	1
MW-21	7-Nov-07	1.5J		1.4J									
MW-21	14-May-08					0.14J							
MW-21 (dup)	14-May-08												
MW-21	5-Nov-08									0.25J			
MW-21	18-Mar-09												
MW-21	21-Oct-09					0.12J							
MW-21	7-May-10												
MW-21	29-Oct-10												
MW-21	15-Mar-11												
MW-21	20-Oct-11												
MW-21	10-Apr-12												
MW-21	26-Oct-12												
MW-21	11-Apr-13												
MW-21	2-Oct-13												
MW-21 (dup)	2-Oct-13												
MW-21	4-Apr-14												
MW-25	7-Nov-07	1.6J		1.4J									
MW-25	14-May-08												
MW-25	5-Nov-08												
MW-25	17-Mar-09												
MW-25	21-Oct-09												
MW-25	6-May-10												
MW-25	28-Oct-10						0.57J						
MW-25	14-Mar-11												
MW-25	19-Oct-11												
MW-25	11-Apr-12												
MW-25	26-Oct-12												
MW-25	10-Apr-13												
MW-25	2-Oct-13												
MW-25	4-Apr-14												
MW-25D	7-Nov-07	2.1J		2.2J			0.2J						
MW-25D	14-May-08					0.16J							
MW-25D	5-Nov-08									0.23J			
MW-25D	17-Mar-09					0.14J							
MW-25D	21-Oct-09					0.18J							
MW-25D	7-May-10												
MW-25D	28-Oct-10												
MW-25D	14-Mar-11												
MW-25D	19-Oct-11												
MW-25D	11-Apr-12												
MW-25D	26-Oct-12												
MW-25D	11-Apr-13												
MW-25D	2-Oct-13												
MW-25D	4-Apr-14												
MW-26	7-Nov-07	4.9J		3.6J			0.3J						
MW-26	14-May-08												
MW-26	5-Nov-08									1.06			
MW-26	18-Mar-09												
MW-26	21-Oct-09												
MW-26	7-May-10												
MW-26	29-Oct-10						0.53J						
MW-26 (dup)	29-Oct-10	3.7J					0.76J						
MW-26	15-Mar-11												
MW-26	20-Oct-11												
MW-26	11-Apr-12												
MW-26	25-Oct-12												
MW-26 (dup)	25-Oct-12												
MW-26	11-Apr-13												
MW-26	2-Oct-13												
MW-26	4-Apr-14												

Notes:

1. All units are in micrograms per liter (parts per billion).
2. dup - Duplicate Sample
3. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
4. B - The analyte concentration detected in the method blank was greater than the method detection limit.

- Concentration exceeds the North Carolina 2L Groundwater Standard
- Indicates the result is below the detection limit

Table 3C
Detected Surface Water Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Surface Water Location	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2B, Human Health, or Action Level Standard		0.64*	0.01*	200*	0.0065	0.002	0.05	0.004*	0.007**	0.025	0.088	0.005	0.00006**	0.00047*	NS	0.05**
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.0055	0.025	0.01
SW-4	31-Oct-95						0.013	**0.012**		0.018						
SW-4	28-Dec-96			0.013				0.002								
SW-4	21-Apr-97															
SW-4	3-Nov-97															
SW-4	11-May-98															
SW-4	23-Nov-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SW-4	14-Apr-99															
SW-4	30-Nov-99															
SW-4	5-Apr-00															
SW-4	15-Dec-00															
SW-4	17-Apr-01															
SW-4	29-Nov-01															
SW-4	3-Apr-02															
SW-4	6-Nov-02															
SW-4	15-Apr-03															
SW-4	30-Oct-03															
SW-4	7-Apr-04															
SW-4	18-Nov-04					0.001	0.011	**0.015**								
SW-4	21-Apr-05															
SW-4	11-Nov-05					0.001										
SW-4	13-Apr-06															
SW-4	8-Nov-06															
SW-4	20-Apr-07															0.025
SW-4	7-Nov-07															
SW-4	14-May-08			0.0218J			0.00328J		0.00481J	0.00551J						0.00512J
SW-4	4-Nov-08			0.0237J		0.00015J	0.0022J		0.00611J				**0.00141JB**			0.00636J
SW-4	18-Mar-09			0.0192J					0.00461JB				**0.00132JB**		0.00709JB	
SW-4	21-Oct-09			0.034JB			0.0036JB		**0.00798JB**						0.00247J	0.00672JB
SW-4	7-May-10			0.0325J											0.00230J	
SW-4	29-Oct-10			0.0329J				0.00226J								
SW-4	15-Mar-11			0.0352J				0.00201J	0.00264J					0.000337J		0.00482J
SW-4	19-Oct-11			0.0276J					0.00273J						0.00475J	0.00458J
SW-4	11-Apr-12			0.0535J			0.00154J	**0.0176**								
SW-4	26-Oct-12		0.00853J	0.0545J				**0.0159**		0.00405J	0.00191J					0.0117
SW-4	11-Apr-13			0.030J			0.0005JB	0.0001JB	0.0007J							0.002J
SW-4	2-Oct-13			0.030J	0.00005JB		0.0003JB	0.00008J	0.0007J					0.00005J		
SW-4	4-Apr-14			0.020J				0.0006J	0.001J					0.00005J	0.003J	0.005JB

Table 3C
Detected Surface Water Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Surface Water Location	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2B, Human Health, or Action Level Standard		0.64*	0.01*	200*	0.0065	0.002	0.05	0.004*	0.007**	0.025	0.088	0.005	0.00006**	0.00047*	NS	0.05**
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.0055	0.025	0.01
SW-5	31-Oct-95						0.012									
SW-5	27-Nov-96			0.044				0.002								0.012
SW-5	21-Apr-97															
SW-5	1-Nov-97															0.042
SW-5	11-May-98															
SW-5	23-Nov-98															
SW-5	14-Apr-99															
SW-5	30-Nov-99															
SW-5	6-Apr-00															
SW-5	15-Dec-00															
SW-5	17-Apr-01															
SW-5	29-Nov-01															
SW-5	3-Apr-02					0.001										
SW-5	6-Nov-02					0.001										
SW-5	15-Apr-03					0.001										
SW-5	29-Oct-03					0.001										
SW-5	8-Apr-04															
SW-5	18-Nov-04															
SW-5	21-Apr-05	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
SW-5	11-Nov-05	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
SW-5	13-Apr-06	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
SW-5	8-Nov-06															
SW-5	20-Apr-07	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
SW-5	7-Nov-07	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry
SW-5	13-May-08		0.00279J	0.203		0.00021J	0.0452	**0.0127**	**0.0487**	**0.0382**	0.0137J	**0.0237**			0.116	0.0803
SW-5	3-Nov-08			0.0458J			0.0016J		0.00203J				**0.00096JB**			
SW-5	18-Mar-09			0.0448J			0.00493J		**0.0102B**				**0.00086JB**		0.0235JB	0.0265
SW-5	21-Oct-09		0.00579J	0.046JB			0.00378JB		**0.00808JB**						0.00493J	0.0046JB
SW-5	7-May-10			0.0368J											0.00275J	0.0132
SW-5	29-Oct-10			0.0338J											0.00191J	0.00571J
SW-5	15-Mar-11			0.0408J					0.00167J					0.000245J	0.0016J	0.00645J
SW-5	19-Oct-11			0.0333J			0.00125J		0.00367J		0.00198J				0.00507J	0.0109
SW-5	11-Apr-12			0.0363J											0.00165J	0.00522J
SW-5	25-Oct-12			0.0365J						0.00385J					0.00144J	
SW-5	11-Apr-13			0.030J			0.0005JB	0.0004JB	0.001J		0.0009JB					0.003J
SW-5	1-Oct-13			0.040J	0.00009JB	0.0001J	0.001JB	0.001J	0.003J	0.0008J	0.001J				0.004J	0.011JB
SW-5	4-Apr-14			0.030J			0.0004J	0.0004J	0.001J	0.0002J	0.0007J				0.004J	0.005JB

Table 3C
Detected Surface Water Constituents - Metals
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Surface Water Location	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2B, Human Health, or Action Level Standard		0.64*	0.01*	200*	0.0065	0.002	0.05	0.004*	0.007**	0.025	0.088	0.005	0.00006**	0.00047*	NS	0.05**
Solid Waste Section Limit		0.006	0.010	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.0055	0.025	0.01
SW-6	30-Nov-99															
SW-6	5-Apr-00															
SW-6	15-Dec-00															
SW-6	18-Apr-01															
SW-6	29-Nov-01															
SW-6	4-Apr-02															
SW-6	5-Nov-02															
SW-6	16-Apr-03															
SW-6	30-Oct-03															
SW-6	7-Apr-04													**0.011**		
SW-6	18-Nov-04															
SW-6	21-Apr-05															
SW-6	11-Nov-05															
SW-6	13-Apr-06															
SW-6	8-Nov-06															
SW-6	20-Apr-07															
SW-6	7-Nov-07															
SW-6	14-May-08			0.0488J			0.00441J		**0.00721J**	0.00671J						0.00576J
SW-6	5-Nov-08			0.0203J					0.00330J				**0.00118JB**			
SW-6	18-Mar-09			0.0221J					0.00601JB				**0.00137JB**	**0.00593**	0.00469JB	
SW-6	21-Oct-09			0.0356JB			0.00397JB		**0.00763JB**						0.00568J	0.00441JB
SW-6	7-May-10			0.0336J											0.00184J	
SW-6	29-Oct-10			0.0232J											0.00187J	0.00397J
SW-6	15-Mar-11			0.0391J											0.00188J	0.00447J
SW-6	19-Oct-11		0.00441J	0.0231J			0.00167J		0.00378J						0.00589J	0.00798J
SW-6	11-Apr-12			0.0404J												
SW-6	25-Oct-12		0.00474J	0.0425J						0.00253J					0.00144J	0.00508J
SW-6	11-Apr-13			0.04J			0.0004JB	0.0004JB	0.0005J							0.002J
SW-6	2-Oct-13			0.050J	0.00009JB		0.001JB	0.002J	0.002J	0.0004J	0.001J				0.006J	0.004JB
SW-6	4-Apr-14			0.030J			0.0003J	0.0004J	0.001J						0.003J	0.006JB

Notes:

1. All units are in milligrams per liter (parts per million)
2. * - Human Health Standard
3. ** - Action Level Standard
4. NS - not sampled or no standard; dry - sampling location dry, no sample collectec
5. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit
6. B - The analyte concentration detected in the method blank was greater than the method detection limit.

- Concentration exceeds the North Carolina 2B Surface Water Standard, Human Health Standard, or Action Level Standard for Class C Waters
- Indicates the result is below the detection limit

Table 3D
Detected Surface Water Constituents - Volatile Organic Compounds
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Surface Water Location	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
North Carolina 2B, Human Health, or Freshwater Aquatic Life Standard		2,000**	17*	140*	160,000**	NS	170*	96*	13*	4,900*	20,000**	590*	3.3*	11	NS
Solid Waste Section Limit		100	1	3	100	100	5	1	1	5	5	1	1	1	1
SW-4	7-Nov-07				1.3J										
SW-4	14-May-08														
SW-4	4-Nov-08														
SW-4	18-Mar-09														
SW-4	21-Oct-09														
SW-4	7-May-10														
SW-4	29-Oct-10														
SW-4	15-Mar-11														
SW-4	19-Oct-11														
SW-4	11-Apr-12														
SW-4	26-Oct-12														
SW-4	11-Apr-13														
SW-4	2-Oct-13														
SW-4	4-Apr-14														
SW-5	7-Nov-07														
SW-5	13-May-08	7.75J													
SW-5	3-Nov-08														
SW-5	18-Mar-09														
SW-5	21-Oct-09														
SW-5	7-May-10														
SW-5	29-Oct-10														
SW-5	15-Mar-11														
SW-5	19-Oct-11														
SW-5	11-Apr-12														
SW-5	25-Oct-12														
SW-5	11-Apr-13														
SW-5	1-Oct-13														
SW-5	4-Apr-14														

Table 3D
Detected Surface Water Constituents - Volatile Organic Compounds
April 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

Surface Water Location	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
North Carolina 2B, Human Health, or Freshwater Aquatic Life Standard		2,000**	17*	140*	160,000**	NS	170*	96*	13*	4,900*	20,000**	590*	3.3*	11	NS
Solid Waste Section Limit		100	1	3	100	100	5	1	1	5	5	1	1	1	1
SW-6	7-Nov-07	2.7J			3.1J			0.3J							
SW-6	14-May-08	3.36J	0.27J	0.38J					0.31J					0.12J	
SW-6	5-Nov-08											0.38J			
SW-6	18-Mar-09														
SW-6	21-Oct-09														
SW-6	7-May-10														
SW-6	29-Oct-10														
SW-6	15-Mar-11														
SW-6	19-Oct-11														
SW-6	11-Apr-12														
SW-6	25-Oct-12														
SW-6	11-Apr-13														
SW-6	2-Oct-13														
SW-6	4-Apr-14														

Notes:

1. All units are in micrograms per liter (parts per billion)
2. * - Human Health Standard
3. ** Freshwater Aquatic Life Standard
4. NS - No Standard
5. The Human Health Standard is also the North Carolina 2B Surface Water Standard for tetrachloroethene.
6. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.

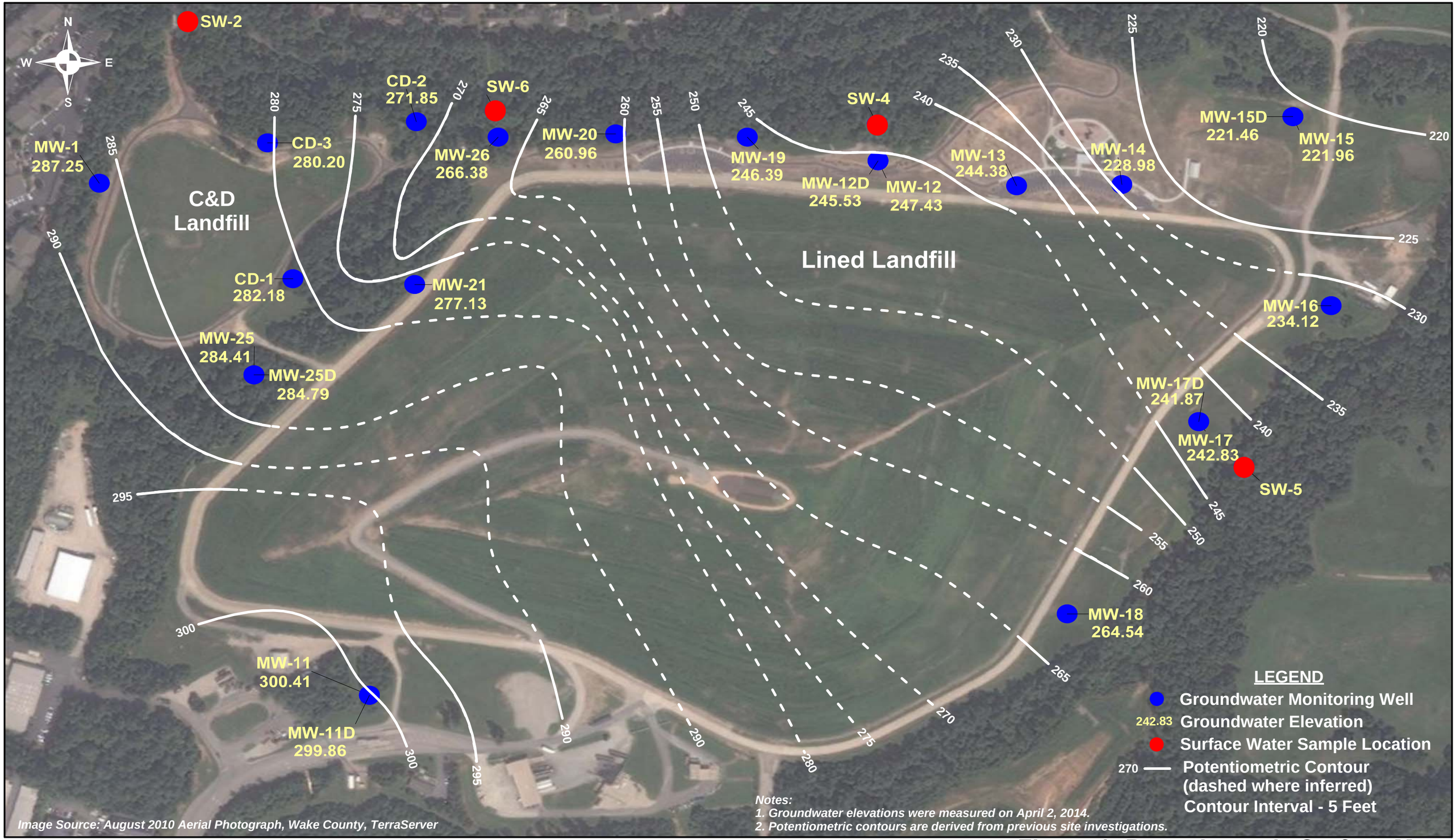
- Concentration exceeds the North Carolina 2B Surface Water Standard, Human Health Standard, or Freshwater Aquatic Life Standard for Class C Waters
- Indicates the result is below the detection limit

Table 4
Constituents Detected Above Standards
October 2014 Semi-Annual Sampling Event
North Wake Lined Landfill

WELL CODE	OCTOBER 2014 CONSTITUENTS EXCEEDING THE NORTH CAROLINA 2L or GROUNDWATER PROTECTION STANDARDS
MW-11 (background well)	**Cobalt*,** Vanadium*
MW-11D (background well)	Beryllium*, Chromium, **Thallium*,** Vanadium*
MW-12	**Thallium***, Vanadium*
MW-12D	**Vanadium***
MW-13	**Vanadium***
MW-14	**Cobalt*,** Vanadium*
MW-15	**Cobalt*, Vanadium***
MW-15D	**Vanadium***
MW-16	**Cobalt*, Vanadium***
MW-17	**Cobalt*,** Vanadium*
MW-17D	**Antimony*, Vanadium***
MW-18	Chromium, Cobalt*, **Thallium***, Vanadium*
MW-19	**Vanadium***
MW-20	**Cobalt*,** Vanadium*
MW-21	**Cobalt*, Vanadium***
MW-25	**Cobalt*, Vanadium***
MW-25D	**Cobalt*, Vanadium***
MW-26	Cobalt*, **Vanadium***

Notes:

1. * - Groundwater Protection Standard
2. **Bold** - Indicates a "J" flag detection in which the analytical result is an estimated concentration between the laboratory method detection limit and the Solid Waste Section Limit.



Scale in Feet

0 175 350 525 700

CDM Smith

Figure 1: Potentiometric Surface Map

April 2014 Semi-Annual Sampling Event
North Wake Lined and C&D Landfills
Raleigh, North Carolina

Appendix A

Client:	Wake County Solid Waste Management	**Service Request:**	J1402761
Project:	North Wake Unlined Landfill	**Date Collected:**	04/16/14 10:45
Sample Matrix:	Ground Water	**Date Received:**	04/17/14 09:10
Sample Name:	MW11	**Units:**	ug/L
Lab Code:	J1402761-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/25/14 05:19	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/25/14 05:19	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/25/14 05:19	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/25/14 05:19	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/25/14 05:19	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/25/14 05:19	
1,1-Dichloropropene	0.32 U	5.0	0.32	1	04/25/14 05:19	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/25/14 05:19	
1,2,4-Trichlorobenzene	0.34 U	10	0.34	1	04/25/14 05:19	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/25/14 05:19	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/25/14 05:19	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/25/14 05:19	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/25/14 05:19	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/25/14 05:19	
1,3-Dichlorobenzene	0.22 U	5.0	0.22	1	04/25/14 05:19	
1,3-Dichloropropane	0.18 U	1.0	0.18	1	04/25/14 05:19	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/25/14 05:19	
2,2-Dichloropropane	0.46 U	15	0.46	1	04/25/14 05:19	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/25/14 05:19	
2-Hexanone	2.2 U	50	2.2	1	04/25/14 05:19	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/25/14 05:19	
Acetone	5.6 U	100	5.6	1	04/25/14 05:19	
Acetonitrile	18 U	55	18	1	04/25/14 05:19	
Acrolein	28 U	53	28	1	04/25/14 05:19	
Acrylonitrile	1.5 U	200	1.5	1	04/25/14 05:19	
Allyl Chloride	0.39 U	10	0.39	1	04/25/14 05:19	
Benzene	0.21 U	1.0	0.21	1	04/25/14 05:19	
Bromochloromethane	0.27 U	5.0	0.27	1	04/25/14 05:19	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/25/14 05:19	
Bromoform	0.42 U	3.0	0.42	1	04/25/14 05:19	
Bromomethane	0.23 U	10	0.23	1	04/25/14 05:19	
Carbon Disulfide	2.4 U	100	2.4	1	04/25/14 05:19	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/25/14 05:19	
Chlorobenzene	0.16 U	3.0	0.16	1	04/25/14 05:19	
Chloroethane	0.52 U	10	0.52	1	04/25/14 05:19	
Chloroform	0.35 U	5.0	0.35	1	04/25/14 05:19	
Chloromethane	0.36 U	1.0	0.36	1	04/25/14 05:19	
Chloroprene	0.12 U	20	0.12	1	04/25/14 05:19	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/25/14 05:19	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/25/14 05:19	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/25/14 05:19	
Dibromomethane	0.36 U	10	0.36	1	04/25/14 05:19	
Dichlorodifluoromethane	0.23 U	20	0.23	1	04/25/14 05:19	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402761
Project:	North Wake Unlined Landfill	**Date Collected:**	04/16/14 10:45
Sample Matrix:	Ground Water	**Date Received:**	04/17/14 09:10
Sample Name:	MW11	**Units:**	ug/L
Lab Code:	J1402761-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	0.35 U	10	0.35	1	04/25/14 05:19	
Ethylbenzene	0.21 U	1.0	0.21	1	04/25/14 05:19	
Hexachlorobutadiene	0.60 U	10	0.60	1	04/25/14 05:19	
Iodomethane	2.7 U	10	2.7	1	04/25/14 05:19	
Isobutyl Alcohol	43 U	100	43	1	04/25/14 05:19	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/25/14 05:19	
Methacrylonitrile	1.6 U	100	1.6	1	04/25/14 05:19	
Methyl Methacrylate	0.49 U	30	0.49	1	04/25/14 05:19	
Methylene Chloride	0.21 U	5.0	0.21	1	04/25/14 05:19	
Naphthalene	0.38 U	10	0.38	1	04/25/14 05:19	
o-Xylene	0.14 U	1.0	0.14	1	04/25/14 05:19	
Propionitrile	3.9 U	150	3.9	1	04/25/14 05:19	
Styrene	0.29 U	1.0	0.29	1	04/25/14 05:19	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/25/14 05:19	
Toluene	0.19 U	1.0	0.19	1	04/25/14 05:19	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/25/14 05:19	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/25/14 05:19	
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/25/14 05:19	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/25/14 05:19	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/25/14 05:19	
Vinyl Acetate	1.9 U	50	1.9	1	04/25/14 05:19	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/25/14 05:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	98	72 - 121	04/25/14 05:19	
4-Bromofluorobenzene	92	86 - 113	04/25/14 05:19	
Dibromofluoromethane	101	86 - 112	04/25/14 05:19	
Toluene-d8	99	88 - 115	04/25/14 05:19	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402761
Project:	North Wake Unlined Landfill	**Date Collected:**	04/16/14 10:45
Sample Matrix:	Ground Water	**Date Received:**	04/17/14 09:10
Sample Name:	MW11	**Units:**	mg/L
Lab Code:	J1402761-007	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analysis Method: Organic Acids

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
Pyruvic Acid	0.25 U	0.50	0.25	1	04/29/14 03:25	
Acetic Acid	0.50 U	1.0	0.50	1	04/29/14 03:25	
Butanoic Acid (Butyric Acid)	1.0 U	2.0	1.0	1	04/29/14 03:25	
Lactic Acid	0.50 U	1.0	0.50	1	04/29/14 03:25	
Propionic Acid	0.50 U	1.0	0.50	1	04/29/14 03:25	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402761
Project:	North Wake Unlined Landfill	**Date Collected:**	04/16/14 10:45
Sample Matrix:	Ground Water	**Date Received:**	04/17/14 09:10
Sample Name:	MW11	**Basis:**	NA
Lab Code:	J1402761-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/23/14 22:33	04/22/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/23/14 22:33	04/22/14	
Barium, Total Recoverable	6010C	**170**		ug/L	100	0.3	1	04/26/14 00:23	04/25/14	
Beryllium, Total Recoverable	6020A	**0.5**	**J**	ug/L	1.0	0.04	1	04/23/14 22:33	04/22/14	
Cadmium, Total Recoverable	6020A	**0.2**	**J**	ug/L	1.0	0.10	1	04/23/14 22:33	04/22/14	
Chromium, Total Recoverable	6020A	**4**	**J**	ug/L	10	0.2	1	04/23/14 22:33	04/22/14	
Cobalt, Total Recoverable	6020A	**6**	**J**	ug/L	10	0.03	1	04/23/14 22:33	04/22/14	
Copper, Total Recoverable	6020A	**18**		ug/L	10	0.3	1	04/23/14 22:33	04/22/14	
Lead, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.2	1	04/23/14 22:33	04/22/14	
Mercury, Total	7470A	0.02	U	ug/L	0.20	0.02	1	04/28/14 15:44	04/25/14	
Nickel, Total Recoverable	6020A	**3**	**J**	ug/L	50	0.5	1	04/23/14 22:33	04/22/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/23/14 22:33	04/22/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/26/14 00:23	04/25/14	
Thallium, Total Recoverable	6020A	**0.08**	**J**	ug/L	5.5	0.05	1	04/23/14 22:33	04/22/14	
Vanadium, Total Recoverable	6010C	**40**		ug/L	25	2	1	04/26/14 00:23	04/25/14	
Zinc, Total Recoverable	6010C	**50**	**B**	ug/L	20	2	1	04/26/14 00:24	04/25/14	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402761
Project:	North Wake Unlined Landfill	**Date Collected:**	04/16/14 10:45
Sample Matrix:	Ground Water	**Date Received:**	04/17/14 09:10
Sample Name:	MW11	**Basis:**	NA
Lab Code:	J1402761-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result		Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity as CaCO3, Total	SM 2320 B	**38.9**		mg/L	5.0	5.0	1	04/28/14	NA	
Bicarbonate Alkalinity as CaCO3	SM 2320 B	**38.9**		mg/L	5.0	5.0	1	04/28/14	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B	**700**	**UX**	mg/L	700	700	350	04/18/14 07:00	NA	
Carbon, Total Organic (TOC)	SM 5310 B	**0.5**	**J**	mg/L	1.0	0.09	1	04/19/14	NA	
Carbonate Alkalinity as CaCO3	SM 2320 B	5.0	U	mg/L	5.0	5.0	1	04/28/14	NA	
Chemical Oxygen Demand, Total	SM21 5220 D	**34**		mg/L	20	16	1	04/28/14	04/24/14	
Chloride	300.0	**3.4**		mg/L	1.0	0.2	1	04/18/14	NA	
Nitrate as Nitrogen	300.0	**0.36**		mg/L	0.20	0.03	1	04/18/14	NA	
Sulfate	300.0	**0.7**	**J**	mg/L	1.0	0.2	1	04/18/14	NA	
Sulfide, Total	SM 4500-S2- F	0.4	U	mg/L	2.0	0.4	1	04/18/14	NA	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402799
Project:	North Wake Unlined Landfill	**Date Collected:**	04/17/14 09:30
Sample Matrix:	Ground Water	**Date Received:**	04/18/14 10:00
Sample Name:	MW11d	**Units:**	ug/L
Lab Code:	J1402799-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/24/14 19:26	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/24/14 19:26	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/24/14 19:26	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/24/14 19:26	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/24/14 19:26	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/24/14 19:26	
1,1-Dichloropropene	0.32 U	5.0	0.32	1	04/24/14 19:26	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/24/14 19:26	
1,2,4-Trichlorobenzene	0.34 U	10	0.34	1	04/24/14 19:26	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/24/14 19:26	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/24/14 19:26	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/24/14 19:26	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/24/14 19:26	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/24/14 19:26	
1,3-Dichlorobenzene	0.22 U	5.0	0.22	1	04/24/14 19:26	
1,3-Dichloropropane	0.18 U	1.0	0.18	1	04/24/14 19:26	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/24/14 19:26	
2,2-Dichloropropane	0.46 U	15	0.46	1	04/24/14 19:26	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/24/14 19:26	
2-Hexanone	2.2 U	50	2.2	1	04/24/14 19:26	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/24/14 19:26	
Acetone	5.6 U	100	5.6	1	04/24/14 19:26	
Acetonitrile	18 U	55	18	1	04/24/14 19:26	
Acrolein	28 U	53	28	1	04/24/14 19:26	
Acrylonitrile	1.5 U	200	1.5	1	04/24/14 19:26	
Allyl Chloride	0.39 U	10	0.39	1	04/24/14 19:26	
Benzene	0.21 U	1.0	0.21	1	04/24/14 19:26	
Bromochloromethane	0.27 U	5.0	0.27	1	04/24/14 19:26	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/24/14 19:26	
Bromoform	0.42 U	3.0	0.42	1	04/24/14 19:26	
Bromomethane	0.23 U	10	0.23	1	04/24/14 19:26	
Carbon Disulfide	2.4 U	100	2.4	1	04/24/14 19:26	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/24/14 19:26	
Chlorobenzene	0.16 U	3.0	0.16	1	04/24/14 19:26	
Chloroethane	0.52 U	10	0.52	1	04/24/14 19:26	
Chloroform	0.35 U	5.0	0.35	1	04/24/14 19:26	
Chloromethane	0.36 U	1.0	0.36	1	04/24/14 19:26	
Chloroprene	0.12 U	20	0.12	1	04/24/14 19:26	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/24/14 19:26	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/24/14 19:26	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/24/14 19:26	
Dibromomethane	0.36 U	10	0.36	1	04/24/14 19:26	
Dichlorodifluoromethane	0.23 U	20	0.23	1	04/24/14 19:26	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402799
Project:	North Wake Unlined Landfill	**Date Collected:**	04/17/14 09:30
Sample Matrix:	Ground Water	**Date Received:**	04/18/14 10:00
Sample Name:	MW11d	**Units:**	ug/L
Lab Code:	J1402799-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	0.35 U	10	0.35	1	04/24/14 19:26	
Ethylbenzene	0.21 U	1.0	0.21	1	04/24/14 19:26	
Hexachlorobutadiene	0.60 U	10	0.60	1	04/24/14 19:26	
Iodomethane	2.7 U	10	2.7	1	04/24/14 19:26	
Isobutyl Alcohol	43 U	100	43	1	04/24/14 19:26	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/24/14 19:26	
Methacrylonitrile	1.6 U	100	1.6	1	04/24/14 19:26	
Methyl Methacrylate	0.49 U	30	0.49	1	04/24/14 19:26	
Methylene Chloride	0.21 U	5.0	0.21	1	04/24/14 19:26	
Naphthalene	0.38 U	10	0.38	1	04/24/14 19:26	
o-Xylene	0.14 U	1.0	0.14	1	04/24/14 19:26	
Propionitrile	3.9 U	150	3.9	1	04/24/14 19:26	
Styrene	0.29 U	1.0	0.29	1	04/24/14 19:26	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/24/14 19:26	
Toluene	0.19 U	1.0	0.19	1	04/24/14 19:26	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/24/14 19:26	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/24/14 19:26	
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/24/14 19:26	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/24/14 19:26	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/24/14 19:26	
Vinyl Acetate	1.9 U	50	1.9	1	04/24/14 19:26	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/24/14 19:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	99	72 - 121	04/24/14 19:26	
4-Bromofluorobenzene	92	86 - 113	04/24/14 19:26	
Dibromofluoromethane	103	86 - 112	04/24/14 19:26	
Toluene-d8	99	88 - 115	04/24/14 19:26	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402799
Project:	North Wake Unlined Landfill	**Date Collected:**	04/17/14 09:30
Sample Matrix:	Ground Water	**Date Received:**	04/18/14 10:00
Sample Name:	MW11d	**Basis:**	NA
Lab Code:	J1402799-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/30/14 17:57	04/28/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	05/01/14 19:09	04/28/14	
Barium, Total Recoverable	6010C	**300**		ug/L	100	0.3	1	04/28/14 22:29	04/28/14	
Beryllium, Total Recoverable	6020A	**2.1**		ug/L	1.0	0.04	1	04/30/14 17:57	04/28/14	
Cadmium, Total Recoverable	6020A	**0.2**	**J**	ug/L	1.0	0.10	1	04/30/14 17:57	04/28/14	
Chromium, Total Recoverable	6020A	**15**		ug/L	10	0.2	1	04/30/14 17:57	04/28/14	
Cobalt, Total Recoverable	6020A	**13**		ug/L	10	0.03	1	04/30/14 17:57	04/28/14	
Copper, Total Recoverable	6020A	**56**		ug/L	10	0.3	1	04/30/14 17:57	04/28/14	
Lead, Total Recoverable	6020A	**11**		ug/L	10	0.2	1	04/30/14 17:57	04/28/14	
Mercury, Total	7470A	0.02	U	ug/L	0.20	0.02	1	04/30/14 13:29	04/29/14	
Nickel, Total Recoverable	6020A	**9**	**J**	ug/L	50	0.5	1	04/30/14 17:57	04/28/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/30/14 17:57	04/28/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/28/14 22:29	04/28/14	
Thallium, Total Recoverable	6020A	**0.2**	**J**	ug/L	5.5	0.05	1	04/30/14 17:57	04/28/14	
Vanadium, Total Recoverable	6010C	**99**		ug/L	25	2	1	04/28/14 22:29	04/28/14	
Zinc, Total Recoverable	6010C	**88**		ug/L	20	2	1	04/28/14 22:29	04/28/14	

April 21, 2014 Service Request No:J1402451

Aaron Weispfenning
CDM Smith, Inc.
5400 Glenwood Ave
Suite 300
Raleigh, NC 27612

Laboratory Results for: North Wake Lined Landfill

Dear Aaron,

Enclosed are the results of the sample(s) submitted to our laboratory April 04, 2014
For your reference, these analyses have been assigned our service request number **J1402451.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 4409. You may also contact me via email at Craig.Myers@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Craig Myers
Project Manager

ADDRESS 9143 Philips Highway, Suite 200, Jacksonville, FL 32256
PHONE +1 904 739 2277 | FAX +1 904 739 2011
ALS Group USA, Corp.
dba ALS Environmental

SAMPLE DETECTION SUMMARY

CLIENT ID: SW4	Lab ID: J1402451-001					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	20	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	3	J	2	25	ug/L	6010C
Zinc, Total Recoverable	5	BJ	2	20	ug/L	6010C
Cobalt, Total Recoverable	0.6	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	1	J	0.3	10	ug/L	6020A
Thallium, Total Recoverable	0.05	J	0.05	5.5	ug/L	6020A

CLIENT ID: SW5	Lab ID: J1402451-002					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	30	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	4	J	2	25	ug/L	6010C
Zinc, Total Recoverable	5	BJ	2	20	ug/L	6010C
Chromium, Total Recoverable	0.4	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	0.4	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	1	J	0.3	10	ug/L	6020A
Lead, Total Recoverable	0.2	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	0.7	J	0.5	50	ug/L	6020A

CLIENT ID: SW6	Lab ID: J1402451-003					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	30	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	3	J	2	25	ug/L	6010C
Zinc, Total Recoverable	6	BJ	2	20	ug/L	6010C
Chromium, Total Recoverable	0.3	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	0.4	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	1	J	0.3	10	ug/L	6020A

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Florida Department of Health	E82502	6/30/2014
North Carolina Department of Environment and Natural Resources	527	12/31/2014
Virginia Environmental Accreditation Program	460191	12/14/2014
Louisiana Department of Environmental Quality	02086	6/30/2014
Georgia Department of Natural Resources	958	6/30/2014
Kentucky Division of Waste Management	63	6/30/2014
South Carolina Department of Health and Environmental Control	96021001	6/30/2014
Texas Commision on Environmental Quality	T104704197-13-5	5/31/2014
Maine Department of Health and Human Services	2011006	2/3/2015
Department of Defense	66206	5/31/2014
Pennsylvania Department of Environmental Protection	68-04835	8/31/2014

Data Qualifiers

CAS Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.

Data Qualifiers

CAS Standard

S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Wake County Solid Waste Management **Service Request:**J1402451
Project: North Wake Lined Landfill

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J1402451-001	SW4	4/3/2014	1025
J1402451-002	SW5	4/3/2014	1130
J1402451-003	SW6	4/3/2014	1030
J1402451-004	Trip Blnk	4/3/2014	0000

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:25
Sample Matrix:	Surface Water	**Date Received:**	04/04/14 10:05
Sample Name:	SW4	**Units:**	ug/L
Lab Code:	J1402451-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/11/14 16:17	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/11/14 16:17	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/11/14 16:17	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/11/14 16:17	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/11/14 16:17	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/11/14 16:17	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/11/14 16:17	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/11/14 16:17	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/11/14 16:17	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/11/14 16:17	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/11/14 16:17	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/11/14 16:17	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/11/14 16:17	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/11/14 16:17	
2-Hexanone	2.2 U	50	2.2	1	04/11/14 16:17	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/11/14 16:17	
Acetone	5.6 U	100	5.6	1	04/11/14 16:17	
Acrylonitrile	1.5 U	200	1.5	1	04/11/14 16:17	
Benzene	0.21 U	1.0	0.21	1	04/11/14 16:17	
Bromochloromethane	0.27 U	5.0	0.27	1	04/11/14 16:17	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/11/14 16:17	
Bromoform	0.42 U	3.0	0.42	1	04/11/14 16:17	
Bromomethane	0.23 U	10	0.23	1	04/11/14 16:17	
Carbon Disulfide	2.4 U	100	2.4	1	04/11/14 16:17	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/11/14 16:17	
Chlorobenzene	0.16 U	3.0	0.16	1	04/11/14 16:17	
Chloroethane	0.52 U	10	0.52	1	04/11/14 16:17	
Chloroform	0.35 U	5.0	0.35	1	04/11/14 16:17	
Chloromethane	0.36 U	1.0	0.36	1	04/11/14 16:17	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/11/14 16:17	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/11/14 16:17	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/11/14 16:17	
Dibromomethane	0.36 U	10	0.36	1	04/11/14 16:17	
Ethylbenzene	0.21 U	1.0	0.21	1	04/11/14 16:17	
Iodomethane	2.7 U	10	2.7	1	04/11/14 16:17	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/11/14 16:17	
Methylene Chloride	0.21 U	5.0	0.21	1	04/11/14 16:17	
o-Xylene	0.14 U	1.0	0.14	1	04/11/14 16:17	
Styrene	0.29 U	1.0	0.29	1	04/11/14 16:17	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/11/14 16:17	
Toluene	0.19 U	1.0	0.19	1	04/11/14 16:17	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/11/14 16:17	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/11/14 16:17	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:25
Sample Matrix:	Surface Water	**Date Received:**	04/04/14 10:05
Sample Name:	SW4	**Units:**	ug/L
Lab Code:	J1402451-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/11/14 16:17	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/11/14 16:17	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/11/14 16:17	
Vinyl Acetate	1.9 U	50	1.9	1	04/11/14 16:17	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/11/14 16:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	72 - 121	04/11/14 16:17	
4-Bromofluorobenzene	92	86 - 113	04/11/14 16:17	
Dibromofluoromethane	101	86 - 112	04/11/14 16:17	
Toluene-d8	96	88 - 115	04/11/14 16:17	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:25
Sample Matrix:	Surface Water	**Date Received:**	04/04/14 10:05
Sample Name:	SW4	**Basis:**	NA
Lab Code:	J1402451-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/08/14 03:12	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/08/14 03:12	04/07/14	
Barium, Total Recoverable	6010C	**20**	**J**	ug/L	100	0.3	1	04/12/14 09:14	04/11/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/08/14 03:12	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/08/14 03:12	04/07/14	
Chromium, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/08/14 03:12	04/07/14	
Cobalt, Total Recoverable	6020A	**0.6**	**J**	ug/L	10	0.03	1	04/08/14 03:12	04/07/14	
Copper, Total Recoverable	6020A	**1**	**J**	ug/L	10	0.3	1	04/08/14 03:12	04/07/14	
Lead, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/08/14 03:12	04/07/14	
Nickel, Total Recoverable	6020A	0.5	U	ug/L	50	0.5	1	04/08/14 03:12	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/08/14 03:12	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/12/14 09:13	04/11/14	
Thallium, Total Recoverable	6020A	**0.05**	**J**	ug/L	5.5	0.05	1	04/08/14 03:12	04/07/14	
Vanadium, Total Recoverable	6010C	**3**	**J**	ug/L	25	2	1	04/12/14 09:14	04/11/14	
Zinc, Total Recoverable	6010C	**5**	**BJ**	ug/L	20	2	1	04/12/14 09:14	04/11/14	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:30
Sample Matrix:	Surface Water	**Date Received:**	04/04/14 10:05
Sample Name:	SW5	**Units:**	ug/L
Lab Code:	J1402451-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/11/14 16:43	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/11/14 16:43	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/11/14 16:43	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/11/14 16:43	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/11/14 16:43	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/11/14 16:43	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/11/14 16:43	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/11/14 16:43	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/11/14 16:43	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/11/14 16:43	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/11/14 16:43	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/11/14 16:43	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/11/14 16:43	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/11/14 16:43	
2-Hexanone	2.2 U	50	2.2	1	04/11/14 16:43	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/11/14 16:43	
Acetone	5.6 U	100	5.6	1	04/11/14 16:43	
Acrylonitrile	1.5 U	200	1.5	1	04/11/14 16:43	
Benzene	0.21 U	1.0	0.21	1	04/11/14 16:43	
Bromochloromethane	0.27 U	5.0	0.27	1	04/11/14 16:43	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/11/14 16:43	
Bromoform	0.42 U	3.0	0.42	1	04/11/14 16:43	
Bromomethane	0.23 U	10	0.23	1	04/11/14 16:43	
Carbon Disulfide	2.4 U	100	2.4	1	04/11/14 16:43	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/11/14 16:43	
Chlorobenzene	0.16 U	3.0	0.16	1	04/11/14 16:43	
Chloroethane	0.52 U	10	0.52	1	04/11/14 16:43	
Chloroform	0.35 U	5.0	0.35	1	04/11/14 16:43	
Chloromethane	0.36 U	1.0	0.36	1	04/11/14 16:43	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/11/14 16:43	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/11/14 16:43	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/11/14 16:43	
Dibromomethane	0.36 U	10	0.36	1	04/11/14 16:43	
Ethylbenzene	0.21 U	1.0	0.21	1	04/11/14 16:43	
Iodomethane	2.7 U	10	2.7	1	04/11/14 16:43	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/11/14 16:43	
Methylene Chloride	0.21 U	5.0	0.21	1	04/11/14 16:43	
o-Xylene	0.14 U	1.0	0.14	1	04/11/14 16:43	
Styrene	0.29 U	1.0	0.29	1	04/11/14 16:43	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/11/14 16:43	
Toluene	0.19 U	1.0	0.19	1	04/11/14 16:43	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/11/14 16:43	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/11/14 16:43	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:30
Sample Matrix:	Surface Water	**Date Received:**	04/04/14 10:05
Sample Name:	SW5	**Units:**	ug/L
Lab Code:	J1402451-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/11/14 16:43	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/11/14 16:43	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/11/14 16:43	
Vinyl Acetate	1.9 U	50	1.9	1	04/11/14 16:43	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/11/14 16:43	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	98	72 - 121	04/11/14 16:43	
4-Bromofluorobenzene	93	86 - 113	04/11/14 16:43	
Dibromofluoromethane	102	86 - 112	04/11/14 16:43	
Toluene-d8	97	88 - 115	04/11/14 16:43	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:30
Sample Matrix:	Surface Water	**Date Received:**	04/04/14 10:05
Sample Name:	SW5	**Basis:**	NA
Lab Code:	J1402451-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/08/14 03:17	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/08/14 03:17	04/07/14	
Barium, Total Recoverable	6010C	**30**	**J**	ug/L	100	0.3	1	04/12/14 09:33	04/11/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/08/14 03:17	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/08/14 03:17	04/07/14	
Chromium, Total Recoverable	6020A	**0.4**	**J**	ug/L	10	0.2	1	04/08/14 03:17	04/07/14	
Cobalt, Total Recoverable	6020A	**0.4**	**J**	ug/L	10	0.03	1	04/08/14 03:17	04/07/14	
Copper, Total Recoverable	6020A	**1**	**J**	ug/L	10	0.3	1	04/08/14 03:17	04/07/14	
Lead, Total Recoverable	6020A	**0.2**	**J**	ug/L	10	0.2	1	04/08/14 03:17	04/07/14	
Nickel, Total Recoverable	6020A	**0.7**	**J**	ug/L	50	0.5	1	04/08/14 03:17	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/08/14 03:17	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/12/14 09:33	04/11/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/08/14 03:17	04/07/14	
Vanadium, Total Recoverable	6010C	**4**	**J**	ug/L	25	2	1	04/12/14 09:33	04/11/14	
Zinc, Total Recoverable	6010C	**5**	**BJ**	ug/L	20	2	1	04/12/14 09:33	04/11/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:30
Sample Matrix:	Surface Water	**Date Received:**	04/04/14 10:05
Sample Name:	SW6	**Units:**	ug/L
Lab Code:	J1402451-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/11/14 17:08	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/11/14 17:08	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/11/14 17:08	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/11/14 17:08	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/11/14 17:08	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/11/14 17:08	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/11/14 17:08	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/11/14 17:08	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/11/14 17:08	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/11/14 17:08	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/11/14 17:08	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/11/14 17:08	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/11/14 17:08	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/11/14 17:08	
2-Hexanone	2.2 U	50	2.2	1	04/11/14 17:08	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/11/14 17:08	
Acetone	5.6 U	100	5.6	1	04/11/14 17:08	
Acrylonitrile	1.5 U	200	1.5	1	04/11/14 17:08	
Benzene	0.21 U	1.0	0.21	1	04/11/14 17:08	
Bromochloromethane	0.27 U	5.0	0.27	1	04/11/14 17:08	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/11/14 17:08	
Bromoform	0.42 U	3.0	0.42	1	04/11/14 17:08	
Bromomethane	0.23 U	10	0.23	1	04/11/14 17:08	
Carbon Disulfide	2.4 U	100	2.4	1	04/11/14 17:08	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/11/14 17:08	
Chlorobenzene	0.16 U	3.0	0.16	1	04/11/14 17:08	
Chloroethane	0.52 U	10	0.52	1	04/11/14 17:08	
Chloroform	0.35 U	5.0	0.35	1	04/11/14 17:08	
Chloromethane	0.36 U	1.0	0.36	1	04/11/14 17:08	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/11/14 17:08	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/11/14 17:08	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/11/14 17:08	
Dibromomethane	0.36 U	10	0.36	1	04/11/14 17:08	
Ethylbenzene	0.21 U	1.0	0.21	1	04/11/14 17:08	
Iodomethane	2.7 U	10	2.7	1	04/11/14 17:08	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/11/14 17:08	
Methylene Chloride	0.21 U	5.0	0.21	1	04/11/14 17:08	
o-Xylene	0.14 U	1.0	0.14	1	04/11/14 17:08	
Styrene	0.29 U	1.0	0.29	1	04/11/14 17:08	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/11/14 17:08	
Toluene	0.19 U	1.0	0.19	1	04/11/14 17:08	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/11/14 17:08	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/11/14 17:08	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:30
Sample Matrix:	Surface Water	**Date Received:**	04/04/14 10:05
Sample Name:	SW6	**Units:**	ug/L
Lab Code:	J1402451-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/11/14 17:08	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/11/14 17:08	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/11/14 17:08	
Vinyl Acetate	1.9 U	50	1.9	1	04/11/14 17:08	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/11/14 17:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	98	72 - 121	04/11/14 17:08	
4-Bromofluorobenzene	92	86 - 113	04/11/14 17:08	
Dibromofluoromethane	101	86 - 112	04/11/14 17:08	
Toluene-d8	98	88 - 115	04/11/14 17:08	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:30
Sample Matrix:	Surface Water	**Date Received:**	04/04/14 10:05
Sample Name:	SW6	**Basis:**	NA
Lab Code:	J1402451-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/08/14 03:22	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/08/14 03:22	04/07/14	
Barium, Total Recoverable	6010C	**30**	**J**	ug/L	100	0.3	1	04/12/14 09:38	04/11/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/08/14 03:22	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/08/14 03:22	04/07/14	
Chromium, Total Recoverable	6020A	**0.3**	**J**	ug/L	10	0.2	1	04/08/14 03:22	04/07/14	
Cobalt, Total Recoverable	6020A	**0.4**	**J**	ug/L	10	0.03	1	04/08/14 03:22	04/07/14	
Copper, Total Recoverable	6020A	**1**	**J**	ug/L	10	0.3	1	04/08/14 03:22	04/07/14	
Lead, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/08/14 03:22	04/07/14	
Nickel, Total Recoverable	6020A	0.5	U	ug/L	50	0.5	1	04/08/14 03:22	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/08/14 03:22	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/12/14 09:38	04/11/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/08/14 03:22	04/07/14	
Vanadium, Total Recoverable	6010C	**3**	**J**	ug/L	25	2	1	04/12/14 09:38	04/11/14	
Zinc, Total Recoverable	6010C	**6**	**BJ**	ug/L	20	2	1	04/12/14 09:38	04/11/14	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 00:00
Sample Matrix:	Water	**Date Received:**	04/04/14 10:05
Sample Name:	Trip Blnk	**Units:**	ug/L
Lab Code:	J1402451-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/11/14 14:07	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/11/14 14:07	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/11/14 14:07	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/11/14 14:07	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/11/14 14:07	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/11/14 14:07	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/11/14 14:07	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/11/14 14:07	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/11/14 14:07	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/11/14 14:07	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/11/14 14:07	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/11/14 14:07	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/11/14 14:07	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/11/14 14:07	
2-Hexanone	2.2 U	50	2.2	1	04/11/14 14:07	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/11/14 14:07	
Acetone	5.6 U	100	5.6	1	04/11/14 14:07	
Acrylonitrile	1.5 U	200	1.5	1	04/11/14 14:07	
Benzene	0.21 U	1.0	0.21	1	04/11/14 14:07	
Bromochloromethane	0.27 U	5.0	0.27	1	04/11/14 14:07	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/11/14 14:07	
Bromoform	0.42 U	3.0	0.42	1	04/11/14 14:07	
Bromomethane	0.23 U	10	0.23	1	04/11/14 14:07	
Carbon Disulfide	2.4 U	100	2.4	1	04/11/14 14:07	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/11/14 14:07	
Chlorobenzene	0.16 U	3.0	0.16	1	04/11/14 14:07	
Chloroethane	0.52 U	10	0.52	1	04/11/14 14:07	
Chloroform	0.35 U	5.0	0.35	1	04/11/14 14:07	
Chloromethane	0.36 U	1.0	0.36	1	04/11/14 14:07	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/11/14 14:07	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/11/14 14:07	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/11/14 14:07	
Dibromomethane	0.36 U	10	0.36	1	04/11/14 14:07	
Ethylbenzene	0.21 U	1.0	0.21	1	04/11/14 14:07	
Iodomethane	2.7 U	10	2.7	1	04/11/14 14:07	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/11/14 14:07	
Methylene Chloride	0.21 U	5.0	0.21	1	04/11/14 14:07	
o-Xylene	0.14 U	1.0	0.14	1	04/11/14 14:07	
Styrene	0.29 U	1.0	0.29	1	04/11/14 14:07	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/11/14 14:07	
Toluene	0.19 U	1.0	0.19	1	04/11/14 14:07	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/11/14 14:07	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/11/14 14:07	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 00:00
Sample Matrix:	Water	**Date Received:**	04/04/14 10:05
Sample Name:	Trip Blnk	**Units:**	ug/L
Lab Code:	J1402451-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/11/14 14:07	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/11/14 14:07	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/11/14 14:07	
Vinyl Acetate	1.9	U	50	1.9	1	04/11/14 14:07	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/11/14 14:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/11/14 14:07	
4-Bromofluorobenzene	92	86 - 113	04/11/14 14:07	
Dibromofluoromethane	101	86 - 112	04/11/14 14:07	
Toluene-d8	98	88 - 115	04/11/14 14:07	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	NA
Sample Matrix:	Surface Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JQ1402725-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/11/14 13:42	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/11/14 13:42	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/11/14 13:42	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/11/14 13:42	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/11/14 13:42	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/11/14 13:42	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/11/14 13:42	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/11/14 13:42	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/11/14 13:42	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/11/14 13:42	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/11/14 13:42	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/11/14 13:42	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/11/14 13:42	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/11/14 13:42	
2-Hexanone	2.2 U	50	2.2	1	04/11/14 13:42	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/11/14 13:42	
Acetone	5.6 U	100	5.6	1	04/11/14 13:42	
Acrylonitrile	1.5 U	200	1.5	1	04/11/14 13:42	
Benzene	0.21 U	1.0	0.21	1	04/11/14 13:42	
Bromochloromethane	0.27 U	5.0	0.27	1	04/11/14 13:42	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/11/14 13:42	
Bromoform	0.42 U	3.0	0.42	1	04/11/14 13:42	
Bromomethane	0.23 U	10	0.23	1	04/11/14 13:42	
Carbon Disulfide	2.4 U	100	2.4	1	04/11/14 13:42	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/11/14 13:42	
Chlorobenzene	0.16 U	3.0	0.16	1	04/11/14 13:42	
Chloroethane	0.52 U	10	0.52	1	04/11/14 13:42	
Chloroform	0.35 U	5.0	0.35	1	04/11/14 13:42	
Chloromethane	0.36 U	1.0	0.36	1	04/11/14 13:42	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/11/14 13:42	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/11/14 13:42	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/11/14 13:42	
Dibromomethane	0.36 U	10	0.36	1	04/11/14 13:42	
Ethylbenzene	0.21 U	1.0	0.21	1	04/11/14 13:42	
Iodomethane	2.7 U	10	2.7	1	04/11/14 13:42	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/11/14 13:42	
Methylene Chloride	0.21 U	5.0	0.21	1	04/11/14 13:42	
o-Xylene	0.14 U	1.0	0.14	1	04/11/14 13:42	
Styrene	0.29 U	1.0	0.29	1	04/11/14 13:42	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/11/14 13:42	
Toluene	0.19 U	1.0	0.19	1	04/11/14 13:42	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/11/14 13:42	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/11/14 13:42	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	NA
Sample Matrix:	Surface Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JQ1402725-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/11/14 13:42	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/11/14 13:42	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/11/14 13:42	
Vinyl Acetate	1.9 U	50	1.9	1	04/11/14 13:42	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/11/14 13:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/11/14 13:42	
4-Bromofluorobenzene	91	86 - 113	04/11/14 13:42	
Dibromofluoromethane	101	86 - 112	04/11/14 13:42	
Toluene-d8	97	88 - 115	04/11/14 13:42	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	NA
Sample Matrix:	Surface Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	J1402451-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/08/14 03:01	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/08/14 03:01	04/07/14	
Barium, Total Recoverable	6010C	0.3	U	ug/L	100	0.3	1	04/12/14 08:58	04/11/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/08/14 03:01	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/08/14 03:01	04/07/14	
Chromium, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/08/14 03:01	04/07/14	
Cobalt, Total Recoverable	6020A	0.03	U	ug/L	10	0.03	1	04/08/14 03:01	04/07/14	
Copper, Total Recoverable	6020A	0.3	U	ug/L	10	0.3	1	04/08/14 03:01	04/07/14	
Lead, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/08/14 03:01	04/07/14	
Nickel, Total Recoverable	6020A	0.5	U	ug/L	50	0.5	1	04/08/14 03:01	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/08/14 03:01	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/12/14 08:57	04/11/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/08/14 03:01	04/07/14	
Vanadium, Total Recoverable	6010C	2	U	ug/L	25	2	1	04/12/14 08:58	04/11/14	
Zinc, Total Recoverable	6010C	**4**	**J**	ug/L	20	2	1	04/12/14 08:58	04/11/14	

Client: Wake County Solid Waste Management **Service Request:** J1402451
Project: North Wake Lined Landfill
Sample Matrix: Surface Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	1,2-Dichloroethane-d4	4-Bromofluorobenzene	Dibromofluoromethane
		72 - 121	86 - 113	86 - 112
SW4	J1402451-001	96	92	101
SW5	J1402451-002	98	93	102
SW6	J1402451-003	98	92	101
Trip Blnk	J1402451-004	97	92	101
Lab Control Sample	JQ1402725-01	95	93	101
Duplicate Lab Control Sample	JQ1402725-02	95	94	102
Method Blank	JQ1402725-03	97	91	101

Client: Wake County Solid Waste Management **Service Request:** J1402451
Project: North Wake Lined Landfill
Sample Matrix: Surface Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	Toluene-d8 88 - 115
SW4	J1402451-001	96
SW5	J1402451-002	97
SW6	J1402451-003	98
Trip Blnk	J1402451-004	98
Lab Control Sample	JQ1402725-01	99
Duplicate Lab Control Sample	JQ1402725-02	100
Method Blank	JQ1402725-03	97

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Analyzed:**	04/11/14
Sample Matrix:	Surface Water		

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260B	**Units:**	ug/L
		Basis:	NA
		Analysis Lot:	387813

	Lab Control Sample JQ1402725-01			Duplicate Lab Control Sample JQ1402725-02					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	51.7	50.0	103	53.6	50.0	107	77-118	3	30
1,1,1-Trichloroethane (TCA)	50.8	50.0	102	52.9	50.0	106	70-122	4	30
1,1,2,2-Tetrachloroethane	49.4	50.0	99	49.5	50.0	99	66-135	<1	30
1,1,2-Trichloroethane	49.1	50.0	98	49.9	50.0	100	75-122	2	30
1,1-Dichloroethane (1,1-DCA)	49.6	50.0	99	51.7	50.0	103	79-117	4	30
1,1-Dichloroethene (1,1-DCE)	48.9	50.0	98	51.0	50.0	102	72-128	4	30
1,2,3-Trichloropropane	50.8	50.0	102	50.8	50.0	102	70-123	<1	30
1,2-Dibromo-3-chloropropane (DBCP)	45.5	50.0	91	46.5	50.0	93	60-122	2	30
1,2-Dibromoethane (EDB)	50.9	50.0	102	51.8	50.0	104	76-118	2	30
1,2-Dichlorobenzene	49.4	50.0	99	51.5	50.0	103	81-115	4	30
1,2-Dichloroethane	48.3	50.0	97	49.0	50.0	98	70-117	1	30
1,2-Dichloropropane	49.2	50.0	98	51.1	50.0	102	79-117	4	30
1,4-Dichlorobenzene	49.6	50.0	99	51.1	50.0	102	82-115	3	30
2-Butanone (MEK)	48.4	50.0	97	47.2	50.0	94	62-138	2	30
2-Hexanone	46.2	50.0	92	46.1	50.0	92	74-127	<1	30
4-Methyl-2-pentanone (MIBK)	45.2	50.0	90	44.9	50.0	90	77-120	<1	30
Acetone	48.9	50.0	98	50.7	50.0	101	42-161	4	30
Acrylonitrile	44.3	50.0	88	44.7	50.0	89	63-132	1	30
Benzene	51.1	50.0	102	53.1	50.0	106	80-117	4	30
Bromochloromethane	53.3	50.0	107	54.2	50.0	108	78-118	2	30
Bromodichloromethane	51.3	50.0	103	52.8	50.0	106	75-118	3	30
Bromoform	51.3	50.0	103	51.6	50.0	103	63-121	<1	30
Bromomethane	45.1	50.0	90	47.2	50.0	94	31-153	5	30
Carbon Disulfide	54.0	50.0	108	55.8	50.0	112	72-128	3	30
Carbon Tetrachloride	47.1	50.0	94	49.5	50.0	99	67-124	5	30
Chlorobenzene	53.1	50.0	106	54.7	50.0	109	83-118	3	30
Chloroethane	48.2	50.0	96	50.7	50.0	101	68-132	5	30
Chloroform	49.6	50.0	99	51.4	50.0	103	77-116	4	30
Chloromethane	44.1	50.0	88	46.5	50.0	93	60-128	5	30
cis-1,2-Dichloroethene	49.1	50.0	98	50.3	50.0	101	78-117	2	30
cis-1,3-Dichloropropene	47.9	50.0	96	49.6	50.0	99	80-119	4	30
Dibromochloromethane	51.0	50.0	102	52.4	50.0	105	74-121	3	30
Dibromomethane	49.9	50.0	100	51.1	50.0	102	76-117	2	30
Ethylbenzene	52.2	50.0	104	54.1	50.0	108	82-119	4	30
Iodomethane	53.0	50.0	106	54.3	50.0	109	51-137	2	30
m,p-Xylenes	105	100	105	108	100	108	79-122	2	30
Methylene Chloride	51.4	50.0	103	52.4	50.0	105	75-123	2	30
o-Xylene	51.8	50.0	104	53.3	50.0	107	80-119	3	30
Styrene	53.4	50.0	107	54.8	50.0	110	80-121	3	30
Tetrachloroethene (PCE)	54.8	50.0	110	57.3	50.0	115	75-126	5	30
Toluene	52.6	50.0	105	54.4	50.0	109	52-152	3	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Analyzed:**	04/11/14
Sample Matrix:	Surface Water		

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260B	**Units:**	ug/L
		Basis:	NA
		Analysis Lot:	387813

	Lab Control Sample JQ1402725-01			Duplicate Lab Control Sample JQ1402725-02					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
trans-1,2-Dichloroethene	50.6	50.0	101	53.1	50.0	106	75-121	5	30
trans-1,3-Dichloropropene	48.8	50.0	98	50.0	50.0	100	76-118	2	30
trans-1,4-Dichloro-2-butene	39.3	50.0	79	40.1	50.0	80	10-198	2	30
Trichloroethene (TCE)	54.9	50.0	110	57.2	50.0	114	78-122	4	30
Trichlorofluoromethane	49.9	50.0	100	52.1	50.0	104	58-134	4	30
Vinyl Acetate	45.4	50.0	91	46.0	50.0	92	36-169	1	30
Vinyl Chloride	47.5	50.0	95	50.1	50.0	100	69-138	5	30

Client:	Wake County Solid Waste Management	**Service Request:**	J1402451
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14
Sample Matrix:	Surface Water	**Date Received:**	04/04/14
		Date Analyzed:	04/12/14
		Date Extracted:	04/11/14

Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name:	SW4	**Units:**	ug/L
Lab Code:	J1402451-001	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA 3005A		

		Matrix Spike J1402451-001MS			**Duplicate Matrix Spike** J1402451-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Barium, Total Recoverable	20 J	530	500	101	520	500	100	75-125	<1	20
Silver, Total Recoverable	2 U	517	500	103	511	500	102	75-125	1	20
Vanadium, Total Recoverable	3 J	1030	1000	103	1020	1000	102	75-125	<1	20
Zinc, Total Recoverable	5 BJ	993	1000	99	984	1000	98	75-125	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Wake County Solid Waste Management
Project: North Wake Lined Landfill
Sample Matrix: Surface Water

Service Request:J1402451
Date Analyzed:04/08/14 - 04/12/14

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
J1402451-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony, Total Recoverable	6020A	50.7	50.0	101	80-120
Arsenic, Total Recoverable	6020A	50.9	50	102	80-120
Barium, Total Recoverable	6010C	500	500	100	80-120
Beryllium, Total Recoverable	6020A	24.4	25.0	98	80-120
Cadmium, Total Recoverable	6020A	19.9	20.0	99	80-120
Chromium, Total Recoverable	6020A	50.3	50	101	80-120
Cobalt, Total Recoverable	6020A	49.9	50	100	80-120
Copper, Total Recoverable	6020A	50.4	50	101	80-120
Lead, Total Recoverable	6020A	25.4	25	102	80-120
Nickel, Total Recoverable	6020A	99.8	100	100	80-120
Selenium, Total Recoverable	6020A	99.5	100	100	80-120
Silver, Total Recoverable	6010C	509	500	102	80-120
Thallium, Total Recoverable	6020A	10.1	10.0	101	80-120
Vanadium, Total Recoverable	6010C	1010	1000	101	80-120
Zinc, Total Recoverable	6010C	985	1000	98	80-120

ALS Environmental

Cooler Receipt Form

Client: CDM Smith

Service Request #: J1402451

Project: North Waste Lined Landfill

Cooler received on 4-4-14 and opened on 4-4-14 by TA

COURIER: ALS UPS (FEDEX) Client Other _____ Airbill # 8050 4380 2446

1	Were custody seals on outside of cooler?	(Yes)	No		
	If yes, how many and where?	#: 1	on lid	other	
2	Were seals intact and signature and date correct?	(Yes)	No	N/A	
3	Were custody papers properly filled out?	(Yes)	No	N/A	
4	Temperature of cooler(s) upon receipt (Should be > 0°C and < 6°C)	3.6°C			
5	Thermometer ID	T81			
6	Temperature Blank Present?	(Yes)	No		
7	Were Ice or Ice Packs present	(Ice)	Ice Packs	No	
8	Did all bottles arrive in good condition (unbroken, etc....)?	(Yes)	No	N/A	
9	Type of packing material present	Netting	Vial Holder	(Bubble Wrap)	
		Paper	Styrofoam	Other	N/A
10	Were all bottle labels complete (sample ID, preservation, etc....)?	(Yes)	No	N/A	
11	Did all bottle labels and tags agree with custody papers?	(Yes)	No	N/A	
12	Were the correct bottles used for the tests indicated?	(Yes)	No	N/A	
13	Were all of the preserved bottles received with the appropriate preservative?	(Yes)	No	N/A	
	(HNO3 pH<2) H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2				
	Preservative additions noted below				
14	Were all samples received within analysis holding times?	(Yes)	No	N/A	
15	Were all VOA vials free of air bubbles? If present, note below	(Yes)	No	N/A	
16	Where did the bottles originate?	(ALS)	Client		

Sample ID	Reagent	Lot #	ml added	Initials Date/Time

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted: Date:

CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

SR # J1402451
ALS Contact

ALS

9143 Philips Highway, Suite 200 Jacksonville, FL 32256 / Ph(904) 739-2277 / FAX (904) 739-2011

Page 1 of 1

J1402451 5
CDM Smith, Inc.
North Wake Lined Landfill

Project Name: North Wake Lined Landfill	Project Number:
Report To: Aaron Weispfenning	Report CC:
Company/Address: CDM Smith, 5400 Glenwood Ave, Suite 300, Raleigh, NC 27612	
Phone #: 919-325-3532	FAX #:
Sampler's Signature: [signature]	Sampler's Printed Name: Aaron Weispfenning

ANALYSIS REQUESTED (Include Method Numb

Preservative: 1. HCL; 2. HNO3; 3. H2SO4; 4. NaOH; 5. Zn Acetate; 6. MeOH; 7. NaHSO4; 8. Other

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	Matrix	NUMBER OF CONTAINERS		Appendix I VOCs	Appendix I Metals	REMARKS
									Provide edd
9209-SW4		4-3-14	1025	SW	4		X	X	TRRP-4 reporting, TNC
9209-SW5		4-3-14	1130	SW	4		X	X	SWSL guidelines
9209-SW6		4-3-14	1030	SW	4		X	X	

Special Instructions/Comments: 3.6°C

TURNAROUND REQUIREMENTS
- RUSH (SURCHARGES APPLY)
- X STANDARD
- REQUESTED FAX DATE
- REQUESTED REPORT DATE

REPORT REQUIREMENTS
- I. Results Only
- X II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
- III. Results + QC and Calibration Summaries
- IV. Data Validation Report with Raw Data

Edata X Yes ___ No

INVOICE INFORMATION
P.O. #
Bill to: Wake County

Relinquished By	Received By	Relinquished By	Received By	Relinquished By	Received By
Signature: [signature]	Signature: [signature]	Signature	Signature	Signature	Signature
Printed Name: Aaron Weispfenning	Printed Name: T. Billington	Printed Name	Printed Name	Printed Name	Printed Name
Firm: CDM Smith	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 4-3-14 / 1501	Date/Time: 4-4-14 1005	Date/Time	Date/Time	Date/Time	Date/Time

April 21, 2014 Service Request No:J1402452

Aaron Weispfenning
CDM Smith, Inc.
5400 Glenwood Ave
Suite 300
Raleigh, NC 27612

Laboratory Results for: North Wake Lined Landfill

Dear Aaron,

Enclosed are the results of the sample(s) submitted to our laboratory April 04, 2014
For your reference, these analyses have been assigned our service request number **J1402452.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 4409. You may also contact me via email at Craig.Myers@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Craig Myers
Project Manager

ADDRESS 9143 Philips Highway, Suite 200, Jacksonville, FL 32256
PHONE +1 904 739 2277 | FAX +1 904 739 2011
ALS Group USA, Corp.
dba ALS Environmental

SAMPLE DETECTION SUMMARY

CLIENT ID: MW12	Lab ID: J1402452-001					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	280		0.3	100	ug/L	6010C
Vanadium, Total Recoverable	59		2	25	ug/L	6010C
Zinc, Total Recoverable	58	B	2	20	ug/L	6010C
Beryllium, Total Recoverable	0.8	J	0.04	1.0	ug/L	6020A
Cadmium, Total Recoverable	0.2	J	0.10	1.0	ug/L	6020A
Chromium, Total Recoverable	8	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	9	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	36		0.3	10	ug/L	6020A
Lead, Total Recoverable	5	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	5	J	0.5	50	ug/L	6020A
Thallium, Total Recoverable	0.2	J	0.05	5.5	ug/L	6020A
Acetone	6.0	J	5.6	100	ug/L	8260B

CLIENT ID: MW12d	Lab ID: J1402452-002					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	20	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	2	J	2	25	ug/L	6010C
Zinc, Total Recoverable	7	BJ	2	20	ug/L	6010C
Antimony, Total Recoverable	0.4	J	0.2	6.0	ug/L	6020A
Cadmium, Total Recoverable	0.3	J	0.10	1.0	ug/L	6020A
Cobalt, Total Recoverable	0.1	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	6	J	0.3	10	ug/L	6020A

CLIENT ID: MW13	Lab ID: J1402452-003					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	70	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	16	J	2	25	ug/L	6010C
Zinc, Total Recoverable	18	BJ	2	20	ug/L	6010C
Beryllium, Total Recoverable	0.2	J	0.04	1.0	ug/L	6020A
Chromium, Total Recoverable	10	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	3	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	0.9	J	0.3	10	ug/L	6020A
Lead, Total Recoverable	1	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	5	J	0.5	50	ug/L	6020A
Thallium, Total Recoverable	0.07	J	0.05	5.5	ug/L	6020A

CLIENT ID: MW14	Lab ID: J1402452-004					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	80	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	26		2	25	ug/L	6010C
Zinc, Total Recoverable	23	B	2	20	ug/L	6010C
Beryllium, Total Recoverable	0.2	J	0.04	1.0	ug/L	6020A
Chromium, Total Recoverable	6	J	0.2	10	ug/L	6020A

SAMPLE DETECTION SUMMARY

CLIENT ID: MW14	Lab ID: J1402452-004					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Cobalt, Total Recoverable	4	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	10	J	0.3	10	ug/L	6020A
Lead, Total Recoverable	2	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	5	J	0.5	50	ug/L	6020A

CLIENT ID: MW15	Lab ID: J1402452-005					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	120		0.3	100	ug/L	6010C
Vanadium, Total Recoverable	18	J	2	25	ug/L	6010C
Zinc, Total Recoverable	11	BJ	2	20	ug/L	6010C
Beryllium, Total Recoverable	0.07	J	0.04	1.0	ug/L	6020A
Cadmium, Total Recoverable	0.1	J	0.10	1.0	ug/L	6020A
Chromium, Total Recoverable	3	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	4	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	7	J	0.3	10	ug/L	6020A
Lead, Total Recoverable	0.7	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	2	J	0.5	50	ug/L	6020A

CLIENT ID: MW15d	Lab ID: J1402452-006					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	70	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	5	J	2	25	ug/L	6010C
Zinc, Total Recoverable	5	BJ	2	20	ug/L	6010C
Antimony, Total Recoverable	0.5	J	0.2	6.0	ug/L	6020A
Cadmium, Total Recoverable	0.3	J	0.10	1.0	ug/L	6020A
Chromium, Total Recoverable	1	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	0.06	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	3	J	0.3	10	ug/L	6020A
Nickel, Total Recoverable	1.0	J	0.5	50	ug/L	6020A

CLIENT ID: MW16	Lab ID: J1402452-007					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	120		0.3	100	ug/L	6010C
Vanadium, Total Recoverable	12	J	2	25	ug/L	6010C
Zinc, Total Recoverable	29	B	2	20	ug/L	6010C
Antimony, Total Recoverable	0.3	J	0.2	6.0	ug/L	6020A
Arsenic, Total Recoverable	1	J	0.5	10	ug/L	6020A
Beryllium, Total Recoverable	0.1	J	0.04	1.0	ug/L	6020A
Cadmium, Total Recoverable	0.3	J	0.10	1.0	ug/L	6020A
Chromium, Total Recoverable	2	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	4	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	20		0.3	10	ug/L	6020A
Lead, Total Recoverable	3	J	0.2	10	ug/L	6020A

SAMPLE DETECTION SUMMARY

CLIENT ID: MW16	Lab ID: J1402452-007					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Nickel, Total Recoverable	4	J	0.5	50	ug/L	6020A
Thallium, Total Recoverable	0.09	J	0.05	5.5	ug/L	6020A

CLIENT ID: MW17	Lab ID: J1402452-008					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	50	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	35		2	25	ug/L	6010C
Zinc, Total Recoverable	18	BJ	2	20	ug/L	6010C
Beryllium, Total Recoverable	1.2		0.04	1.0	ug/L	6020A
Cadmium, Total Recoverable	0.2	J	0.10	1.0	ug/L	6020A
Chromium, Total Recoverable	19		0.2	10	ug/L	6020A
Cobalt, Total Recoverable	3	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	11		0.3	10	ug/L	6020A
Lead, Total Recoverable	8	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	4	J	0.5	50	ug/L	6020A
Thallium, Total Recoverable	0.07	J	0.05	5.5	ug/L	6020A

CLIENT ID: MW17d	Lab ID: J1402452-009					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	50	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	7	J	2	25	ug/L	6010C
Zinc, Total Recoverable	9	BJ	2	20	ug/L	6010C
Antimony, Total Recoverable	0.3	J	0.2	6.0	ug/L	6020A
Beryllium, Total Recoverable	0.1	J	0.04	1.0	ug/L	6020A
Chromium, Total Recoverable	2	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	0.5	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	11		0.3	10	ug/L	6020A
Lead, Total Recoverable	2	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	1	J	0.5	50	ug/L	6020A

CLIENT ID: MW18	Lab ID: J1402452-010					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	240		0.3	100	ug/L	6010C
Vanadium, Total Recoverable	67		2	25	ug/L	6010C
Zinc, Total Recoverable	84		2	20	ug/L	6010C
Beryllium, Total Recoverable	0.6	J	0.04	1.0	ug/L	6020A
Cadmium, Total Recoverable	0.1	J	0.10	1.0	ug/L	6020A
Chromium, Total Recoverable	70		0.2	10	ug/L	6020A
Cobalt, Total Recoverable	26		0.03	10	ug/L	6020A
Copper, Total Recoverable	81		0.3	10	ug/L	6020A
Lead, Total Recoverable	4	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	35	J	0.5	50	ug/L	6020A
Thallium, Total Recoverable	0.2	J	0.05	5.5	ug/L	6020A

SAMPLE DETECTION SUMMARY

CLIENT ID: MW18	Lab ID: J1402452-010					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**

CLIENT ID: MW19	Lab ID: J1402452-011					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	20	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	4	J	2	25	ug/L	6010C
Zinc, Total Recoverable	7	BJ	2	20	ug/L	6010C
Cadmium, Total Recoverable	0.2	J	0.10	1.0	ug/L	6020A
Chromium, Total Recoverable	4	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	0.4	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	3	J	0.3	10	ug/L	6020A
Nickel, Total Recoverable	2	J	0.5	50	ug/L	6020A

CLIENT ID: MW20	Lab ID: J1402452-012					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	80	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	34		2	25	ug/L	6010C
Zinc, Total Recoverable	41	B	2	20	ug/L	6010C
Beryllium, Total Recoverable	0.2	J	0.04	1.0	ug/L	6020A
Chromium, Total Recoverable	7	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	10	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	68		0.3	10	ug/L	6020A
Lead, Total Recoverable	5	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	13	J	0.5	50	ug/L	6020A
Thallium, Total Recoverable	0.08	J	0.05	5.5	ug/L	6020A
Tetrachloroethene (PCE)	0.35	J	0.22	1.0	ug/L	8260B

CLIENT ID: MW21	Lab ID: J1402452-013					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	90	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	12	J	2	25	ug/L	6010C
Zinc, Total Recoverable	13	BJ	2	20	ug/L	6010C
Beryllium, Total Recoverable	0.1	J	0.04	1.0	ug/L	6020A
Chromium, Total Recoverable	3	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	2	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	14		0.3	10	ug/L	6020A
Lead, Total Recoverable	0.8	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	2	J	0.5	50	ug/L	6020A

CLIENT ID: MW25	Lab ID: J1402452-014					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	70	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	4	J	2	25	ug/L	6010C
Zinc, Total Recoverable	9	BJ	2	20	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW25	Lab ID: J1402452-014					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Chromium, Total Recoverable	2	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	3	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	1.0	J	0.3	10	ug/L	6020A
Lead, Total Recoverable	0.2	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	5	J	0.5	50	ug/L	6020A

CLIENT ID: MW25d	Lab ID: J1402452-015					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	50	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	10	J	2	25	ug/L	6010C
Zinc, Total Recoverable	11	BJ	2	20	ug/L	6010C
Beryllium, Total Recoverable	0.1	J	0.04	1.0	ug/L	6020A
Chromium, Total Recoverable	6	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	3	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	18		0.3	10	ug/L	6020A
Lead, Total Recoverable	0.6	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	5	J	0.5	50	ug/L	6020A

CLIENT ID: MW26	Lab ID: J1402452-016					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	60	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	14	J	2	25	ug/L	6010C
Zinc, Total Recoverable	14	BJ	2	20	ug/L	6010C
Beryllium, Total Recoverable	0.1	J	0.04	1.0	ug/L	6020A
Cadmium, Total Recoverable	0.1	J	0.10	1.0	ug/L	6020A
Chromium, Total Recoverable	4	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	14		0.03	10	ug/L	6020A
Copper, Total Recoverable	28		0.3	10	ug/L	6020A
Lead, Total Recoverable	0.5	J	0.2	10	ug/L	6020A
Nickel, Total Recoverable	11	J	0.5	50	ug/L	6020A

CLIENT ID: DUP	Lab ID: J1402452-017					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total Recoverable	20	J	0.3	100	ug/L	6010C
Vanadium, Total Recoverable	4	J	2	25	ug/L	6010C
Zinc, Total Recoverable	6	BJ	2	20	ug/L	6010C
Cadmium, Total Recoverable	0.1	J	0.10	1.0	ug/L	6020A
Chromium, Total Recoverable	4	J	0.2	10	ug/L	6020A
Cobalt, Total Recoverable	0.6	J	0.03	10	ug/L	6020A
Copper, Total Recoverable	4	J	0.3	10	ug/L	6020A
Nickel, Total Recoverable	2	J	0.5	50	ug/L	6020A

SAMPLE DETECTION SUMMARY

CLIENT ID: EQ Blank	Lab ID: J1402452-018					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Zinc, Total Recoverable	3	BJ	2	20	ug/L	6010C
Beryllium, Total Recoverable	0.1	J	0.04	1.0	ug/L	6020A
2-Butanone (MEK)	15	J	3.8	100	ug/L	8260B
o-Xylene	0.27	J	0.14	1.0	ug/L	8260B

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Florida Department of Health	E82502	6/30/2014
North Carolina Department of Environment and Natural Resources	527	12/31/2014
Virginia Environmental Accreditation Program	460191	12/14/2014
Louisiana Department of Environmental Quality	02086	6/30/2014
Georgia Department of Natural Resources	958	6/30/2014
Kentucky Division of Waste Management	63	6/30/2014
South Carolina Department of Health and Environmental Control	96021001	6/30/2014
Texas Commision on Environmental Quality	T104704197-13-5	5/31/2014
Maine Department of Health and Human Services	2011006	2/3/2015
Department of Defense	66206	5/31/2014
Pennsylvania Department of Environmental Protection	68-04835	8/31/2014

Data Qualifiers

CAS Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.

Data Qualifiers

CAS Standard

S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Wake County Solid Waste Management **Service Request:**J1402452
Project: North Wake Lined Landfill

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J1402452-001	MW12	4/3/2014	0940
J1402452-002	MW12d	4/3/2014	1010
J1402452-003	MW13	4/3/2014	1035
J1402452-004	MW14	4/3/2014	1300
J1402452-005	MW15	4/3/2014	1150
J1402452-006	MW15d	4/2/2014	1500
J1402452-007	MW16	4/3/2014	1140
J1402452-008	MW17	4/3/2014	1120
J1402452-009	MW17d	4/2/2014	1415
J1402452-010	MW18	4/3/2014	1050
J1402452-011	MW19	4/3/2014	0925
J1402452-012	MW20	4/3/2014	0900
J1402452-013	MW21	4/3/2014	0845
J1402452-014	MW25	4/2/2014	1315
J1402452-015	MW25d	4/3/2014	0830
J1402452-016	MW26	4/3/2014	0910
J1402452-017	DUP	4/3/2014	0700
J1402452-018	EQ Blank	4/3/2014	1320
J1402452-019	Trip Blank	4/3/2014	0000

ALS Group USA, Corp.
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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:40
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW12	**Units:**	ug/L
Lab Code:	J1402452-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19	U	5.0	0.19	1	04/10/14 02:53	
1,1,1-Trichloroethane (TCA)	0.17	U	1.0	0.17	1	04/10/14 02:53	
1,1,2,2-Tetrachloroethane	0.29	U	3.0	0.29	1	04/10/14 02:53	
1,1,2-Trichloroethane	0.40	U	1.0	0.40	1	04/10/14 02:53	
1,1-Dichloroethane (1,1-DCA)	0.30	U	5.0	0.30	1	04/10/14 02:53	
1,1-Dichloroethene (1,1-DCE)	0.16	U	5.0	0.16	1	04/10/14 02:53	
1,2,3-Trichloropropane	0.42	U	2.0	0.42	1	04/10/14 02:53	
1,2-Dibromo-3-chloropropane (DBCP)	2.3	U	13	2.3	1	04/10/14 02:53	
1,2-Dibromoethane (EDB)	0.46	U	1.0	0.46	1	04/10/14 02:53	
1,2-Dichlorobenzene	0.48	U	5.0	0.48	1	04/10/14 02:53	
1,2-Dichloroethane	0.22	U	1.0	0.22	1	04/10/14 02:53	
1,2-Dichloropropane	0.19	U	1.0	0.19	1	04/10/14 02:53	
1,4-Dichlorobenzene	0.16	U	1.0	0.16	1	04/10/14 02:53	
2-Butanone (MEK)	3.8	U	100	3.8	1	04/10/14 02:53	
2-Hexanone	2.2	U	50	2.2	1	04/10/14 02:53	
4-Methyl-2-pentanone (MIBK)	1.1	U	100	1.1	1	04/10/14 02:53	
Acetone	**6.0**	**J**	100	5.6	1	04/10/14 02:53	
Acrylonitrile	1.5	U	200	1.5	1	04/10/14 02:53	
Benzene	0.21	U	1.0	0.21	1	04/10/14 02:53	
Bromochloromethane	0.27	U	5.0	0.27	1	04/10/14 02:53	
Bromodichloromethane	0.22	U	1.0	0.22	1	04/10/14 02:53	
Bromoform	0.42	U	3.0	0.42	1	04/10/14 02:53	
Bromomethane	0.23	U	10	0.23	1	04/10/14 02:53	
Carbon Disulfide	2.4	U	100	2.4	1	04/10/14 02:53	
Carbon Tetrachloride	0.34	U	1.0	0.34	1	04/10/14 02:53	
Chlorobenzene	0.16	U	3.0	0.16	1	04/10/14 02:53	
Chloroethane	0.52	U	10	0.52	1	04/10/14 02:53	
Chloroform	0.35	U	5.0	0.35	1	04/10/14 02:53	
Chloromethane	0.36	U	1.0	0.36	1	04/10/14 02:53	
cis-1,2-Dichloroethene	0.36	U	5.0	0.36	1	04/10/14 02:53	
cis-1,3-Dichloropropene	0.20	U	1.0	0.20	1	04/10/14 02:53	
Dibromochloromethane	0.21	U	3.0	0.21	1	04/10/14 02:53	
Dibromomethane	0.36	U	10	0.36	1	04/10/14 02:53	
Ethylbenzene	0.21	U	1.0	0.21	1	04/10/14 02:53	
Iodomethane	2.7	U	10	2.7	1	04/10/14 02:53	
m,p-Xylenes	0.31	U	2.0	0.31	1	04/10/14 02:53	
Methylene Chloride	0.21	U	5.0	0.21	1	04/10/14 02:53	
o-Xylene	0.14	U	1.0	0.14	1	04/10/14 02:53	
Styrene	0.29	U	1.0	0.29	1	04/10/14 02:53	
Tetrachloroethene (PCE)	0.22	U	1.0	0.22	1	04/10/14 02:53	
Toluene	0.19	U	1.0	0.19	1	04/10/14 02:53	
trans-1,2-Dichloroethene	0.19	U	5.0	0.19	1	04/10/14 02:53	
trans-1,3-Dichloropropene	0.23	U	1.0	0.23	1	04/10/14 02:53	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:40
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW12	**Units:**	ug/L
Lab Code:	J1402452-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/10/14 02:53	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/10/14 02:53	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/10/14 02:53	
Vinyl Acetate	1.9	U	50	1.9	1	04/10/14 02:53	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/10/14 02:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 02:53	
4-Bromofluorobenzene	91	86 - 113	04/10/14 02:53	
Dibromofluoromethane	101	86 - 112	04/10/14 02:53	
Toluene-d8	99	88 - 115	04/10/14 02:53	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:40
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW12	**Basis:**	NA
Lab Code:	J1402452-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 20:13	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 20:13	04/07/14	
Barium, Total Recoverable	6010C	**280**		ug/L	100	0.3	1	04/10/14 03:10	04/09/14	
Beryllium, Total Recoverable	6020A	**0.8**	**J**	ug/L	1.0	0.04	1	04/07/14 20:13	04/07/14	
Cadmium, Total Recoverable	6020A	**0.2**	**J**	ug/L	1.0	0.10	1	04/07/14 20:13	04/07/14	
Chromium, Total Recoverable	6020A	**8**	**J**	ug/L	10	0.2	1	04/07/14 20:13	04/07/14	
Cobalt, Total Recoverable	6020A	**9**	**J**	ug/L	10	0.03	1	04/07/14 20:13	04/07/14	
Copper, Total Recoverable	6020A	**36**		ug/L	10	0.3	1	04/07/14 20:13	04/07/14	
Lead, Total Recoverable	6020A	**5**	**J**	ug/L	10	0.2	1	04/07/14 20:13	04/07/14	
Nickel, Total Recoverable	6020A	**5**	**J**	ug/L	50	0.5	1	04/07/14 20:13	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 20:13	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 03:10	04/09/14	
Thallium, Total Recoverable	6020A	**0.2**	**J**	ug/L	5.5	0.05	1	04/07/14 20:13	04/07/14	
Vanadium, Total Recoverable	6010C	**59**		ug/L	25	2	1	04/10/14 03:10	04/09/14	
Zinc, Total Recoverable	6010C	**58**	**B**	ug/L	20	2	1	04/10/14 03:10	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:10
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW12d	**Units:**	ug/L
Lab Code:	J1402452-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 03:19	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 03:19	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 03:19	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 03:19	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 03:19	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 03:19	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 03:19	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 03:19	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 03:19	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 03:19	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 03:19	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 03:19	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 03:19	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 03:19	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 03:19	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 03:19	
Acetone	5.6 U	100	5.6	1	04/10/14 03:19	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 03:19	
Benzene	0.21 U	1.0	0.21	1	04/10/14 03:19	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 03:19	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 03:19	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 03:19	
Bromomethane	0.23 U	10	0.23	1	04/10/14 03:19	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 03:19	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 03:19	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 03:19	
Chloroethane	0.52 U	10	0.52	1	04/10/14 03:19	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 03:19	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 03:19	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 03:19	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 03:19	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 03:19	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 03:19	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 03:19	
Iodomethane	2.7 U	10	2.7	1	04/10/14 03:19	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 03:19	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 03:19	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 03:19	
Styrene	0.29 U	1.0	0.29	1	04/10/14 03:19	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 03:19	
Toluene	0.19 U	1.0	0.19	1	04/10/14 03:19	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 03:19	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 03:19	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:10
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW12d	**Units:**	ug/L
Lab Code:	J1402452-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/10/14 03:19	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/10/14 03:19	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/10/14 03:19	
Vinyl Acetate	1.9	U	50	1.9	1	04/10/14 03:19	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/10/14 03:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	72 - 121	04/10/14 03:19	
4-Bromofluorobenzene	93	86 - 113	04/10/14 03:19	
Dibromofluoromethane	99	86 - 112	04/10/14 03:19	
Toluene-d8	98	88 - 115	04/10/14 03:19	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:10
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW12d	**Basis:**	NA
Lab Code:	J1402452-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	**0.4**	**J**	ug/L	6.0	0.2	1	04/07/14 20:18	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 20:18	04/07/14	
Barium, Total Recoverable	6010C	**20**	**J**	ug/L	100	0.3	1	04/10/14 03:29	04/09/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/07/14 20:18	04/07/14	
Cadmium, Total Recoverable	6020A	**0.3**	**J**	ug/L	1.0	0.10	1	04/07/14 20:18	04/07/14	
Chromium, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/07/14 20:18	04/07/14	
Cobalt, Total Recoverable	6020A	**0.1**	**J**	ug/L	10	0.03	1	04/07/14 20:18	04/07/14	
Copper, Total Recoverable	6020A	**6**	**J**	ug/L	10	0.3	1	04/07/14 20:18	04/07/14	
Lead, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/07/14 20:18	04/07/14	
Nickel, Total Recoverable	6020A	0.5	U	ug/L	50	0.5	1	04/07/14 20:18	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 20:18	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 03:28	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 20:18	04/07/14	
Vanadium, Total Recoverable	6010C	**2**	**J**	ug/L	25	2	1	04/10/14 03:29	04/09/14	
Zinc, Total Recoverable	6010C	**7**	**BJ**	ug/L	20	2	1	04/10/14 03:29	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:35
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW13	**Units:**	ug/L
Lab Code:	J1402452-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 03:45	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 03:45	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 03:45	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 03:45	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 03:45	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 03:45	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 03:45	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 03:45	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 03:45	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 03:45	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 03:45	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 03:45	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 03:45	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 03:45	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 03:45	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 03:45	
Acetone	5.6 U	100	5.6	1	04/10/14 03:45	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 03:45	
Benzene	0.21 U	1.0	0.21	1	04/10/14 03:45	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 03:45	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 03:45	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 03:45	
Bromomethane	0.23 U	10	0.23	1	04/10/14 03:45	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 03:45	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 03:45	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 03:45	
Chloroethane	0.52 U	10	0.52	1	04/10/14 03:45	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 03:45	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 03:45	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 03:45	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 03:45	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 03:45	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 03:45	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 03:45	
Iodomethane	2.7 U	10	2.7	1	04/10/14 03:45	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 03:45	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 03:45	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 03:45	
Styrene	0.29 U	1.0	0.29	1	04/10/14 03:45	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 03:45	
Toluene	0.19 U	1.0	0.19	1	04/10/14 03:45	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 03:45	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 03:45	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:35
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW13	**Units:**	ug/L
Lab Code:	J1402452-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 03:45	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 03:45	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 03:45	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 03:45	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 03:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 03:45	
4-Bromofluorobenzene	92	86 - 113	04/10/14 03:45	
Dibromofluoromethane	100	86 - 112	04/10/14 03:45	
Toluene-d8	98	88 - 115	04/10/14 03:45	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:35
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW13	**Basis:**	NA
Lab Code:	J1402452-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 20:23	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 20:23	04/07/14	
Barium, Total Recoverable	6010C	**70**	**J**	ug/L	100	0.3	1	04/10/14 03:33	04/09/14	
Beryllium, Total Recoverable	6020A	**0.2**	**J**	ug/L	1.0	0.04	1	04/07/14 20:23	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/07/14 20:23	04/07/14	
Chromium, Total Recoverable	6020A	**10**	**J**	ug/L	10	0.2	1	04/07/14 20:23	04/07/14	
Cobalt, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.03	1	04/07/14 20:23	04/07/14	
Copper, Total Recoverable	6020A	**0.9**	**J**	ug/L	10	0.3	1	04/07/14 20:23	04/07/14	
Lead, Total Recoverable	6020A	**1**	**J**	ug/L	10	0.2	1	04/07/14 20:23	04/07/14	
Nickel, Total Recoverable	6020A	**5**	**J**	ug/L	50	0.5	1	04/07/14 20:23	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 20:23	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 03:32	04/09/14	
Thallium, Total Recoverable	6020A	**0.07**	**J**	ug/L	5.5	0.05	1	04/07/14 20:23	04/07/14	
Vanadium, Total Recoverable	6010C	**16**	**J**	ug/L	25	2	1	04/10/14 03:33	04/09/14	
Zinc, Total Recoverable	6010C	**18**	**BJ**	ug/L	20	2	1	04/10/14 03:33	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 13:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW14	**Units:**	ug/L
Lab Code:	J1402452-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 04:10	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 04:10	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 04:10	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 04:10	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 04:10	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 04:10	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 04:10	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 04:10	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 04:10	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 04:10	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 04:10	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 04:10	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 04:10	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 04:10	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 04:10	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 04:10	
Acetone	5.6 U	100	5.6	1	04/10/14 04:10	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 04:10	
Benzene	0.21 U	1.0	0.21	1	04/10/14 04:10	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 04:10	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 04:10	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 04:10	
Bromomethane	0.23 U	10	0.23	1	04/10/14 04:10	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 04:10	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 04:10	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 04:10	
Chloroethane	0.52 U	10	0.52	1	04/10/14 04:10	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 04:10	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 04:10	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 04:10	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 04:10	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 04:10	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 04:10	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 04:10	
Iodomethane	2.7 U	10	2.7	1	04/10/14 04:10	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 04:10	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 04:10	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 04:10	
Styrene	0.29 U	1.0	0.29	1	04/10/14 04:10	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 04:10	
Toluene	0.19 U	1.0	0.19	1	04/10/14 04:10	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 04:10	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 04:10	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 13:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW14	**Units:**	ug/L
Lab Code:	J1402452-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/10/14 04:10	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/10/14 04:10	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/10/14 04:10	
Vinyl Acetate	1.9	U	50	1.9	1	04/10/14 04:10	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/10/14 04:10	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	95	72 - 121	04/10/14 04:10	
4-Bromofluorobenzene	93	86 - 113	04/10/14 04:10	
Dibromofluoromethane	99	86 - 112	04/10/14 04:10	
Toluene-d8	98	88 - 115	04/10/14 04:10	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 13:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW14	**Basis:**	NA
Lab Code:	J1402452-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 20:28	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 20:28	04/07/14	
Barium, Total Recoverable	6010C	**80**	**J**	ug/L	100	0.3	1	04/10/14 03:45	04/09/14	
Beryllium, Total Recoverable	6020A	**0.2**	**J**	ug/L	1.0	0.04	1	04/07/14 20:28	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/07/14 20:28	04/07/14	
Chromium, Total Recoverable	6020A	**6**	**J**	ug/L	10	0.2	1	04/07/14 20:28	04/07/14	
Cobalt, Total Recoverable	6020A	**4**	**J**	ug/L	10	0.03	1	04/07/14 20:28	04/07/14	
Copper, Total Recoverable	6020A	**10**	**J**	ug/L	10	0.3	1	04/07/14 20:28	04/07/14	
Lead, Total Recoverable	6020A	**2**	**J**	ug/L	10	0.2	1	04/07/14 20:28	04/07/14	
Nickel, Total Recoverable	6020A	**5**	**J**	ug/L	50	0.5	1	04/07/14 20:28	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 20:28	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 03:44	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 20:28	04/07/14	
Vanadium, Total Recoverable	6010C	**26**		ug/L	25	2	1	04/10/14 03:44	04/09/14	
Zinc, Total Recoverable	6010C	**23**	**B**	ug/L	20	2	1	04/10/14 03:45	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:50
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW15	**Units:**	ug/L
Lab Code:	J1402452-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 04:36	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 04:36	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 04:36	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 04:36	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 04:36	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 04:36	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 04:36	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 04:36	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 04:36	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 04:36	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 04:36	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 04:36	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 04:36	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 04:36	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 04:36	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 04:36	
Acetone	5.6 U	100	5.6	1	04/10/14 04:36	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 04:36	
Benzene	0.21 U	1.0	0.21	1	04/10/14 04:36	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 04:36	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 04:36	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 04:36	
Bromomethane	0.23 U	10	0.23	1	04/10/14 04:36	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 04:36	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 04:36	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 04:36	
Chloroethane	0.52 U	10	0.52	1	04/10/14 04:36	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 04:36	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 04:36	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 04:36	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 04:36	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 04:36	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 04:36	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 04:36	
Iodomethane	2.7 U	10	2.7	1	04/10/14 04:36	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 04:36	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 04:36	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 04:36	
Styrene	0.29 U	1.0	0.29	1	04/10/14 04:36	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 04:36	
Toluene	0.19 U	1.0	0.19	1	04/10/14 04:36	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 04:36	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 04:36	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:50
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW15	**Units:**	ug/L
Lab Code:	J1402452-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 04:36	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 04:36	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 04:36	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 04:36	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 04:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 04:36	
4-Bromofluorobenzene	91	86 - 113	04/10/14 04:36	
Dibromofluoromethane	100	86 - 112	04/10/14 04:36	
Toluene-d8	97	88 - 115	04/10/14 04:36	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:50
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW15	**Basis:**	NA
Lab Code:	J1402452-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 20:33	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 20:33	04/07/14	
Barium, Total Recoverable	6010C	**120**		ug/L	100	0.3	1	04/10/14 03:48	04/09/14	
Beryllium, Total Recoverable	6020A	**0.07**	**J**	ug/L	1.0	0.04	1	04/07/14 20:33	04/07/14	
Cadmium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.10	1	04/07/14 20:33	04/07/14	
Chromium, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.2	1	04/07/14 20:33	04/07/14	
Cobalt, Total Recoverable	6020A	**4**	**J**	ug/L	10	0.03	1	04/07/14 20:33	04/07/14	
Copper, Total Recoverable	6020A	**7**	**J**	ug/L	10	0.3	1	04/07/14 20:33	04/07/14	
Lead, Total Recoverable	6020A	**0.7**	**J**	ug/L	10	0.2	1	04/07/14 20:33	04/07/14	
Nickel, Total Recoverable	6020A	**2**	**J**	ug/L	50	0.5	1	04/07/14 20:33	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 20:33	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 03:48	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 20:33	04/07/14	
Vanadium, Total Recoverable	6010C	**18**	**J**	ug/L	25	2	1	04/10/14 03:48	04/09/14	
Zinc, Total Recoverable	6010C	**11**	**BJ**	ug/L	20	2	1	04/10/14 03:49	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/02/14 15:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW15d	**Units:**	ug/L
Lab Code:	J1402452-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 05:02	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 05:02	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 05:02	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 05:02	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 05:02	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 05:02	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 05:02	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 05:02	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 05:02	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 05:02	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 05:02	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 05:02	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 05:02	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 05:02	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 05:02	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 05:02	
Acetone	5.6 U	100	5.6	1	04/10/14 05:02	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 05:02	
Benzene	0.21 U	1.0	0.21	1	04/10/14 05:02	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 05:02	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 05:02	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 05:02	
Bromomethane	0.23 U	10	0.23	1	04/10/14 05:02	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 05:02	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 05:02	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 05:02	
Chloroethane	0.52 U	10	0.52	1	04/10/14 05:02	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 05:02	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 05:02	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 05:02	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 05:02	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 05:02	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 05:02	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 05:02	
Iodomethane	2.7 U	10	2.7	1	04/10/14 05:02	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 05:02	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 05:02	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 05:02	
Styrene	0.29 U	1.0	0.29	1	04/10/14 05:02	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 05:02	
Toluene	0.19 U	1.0	0.19	1	04/10/14 05:02	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 05:02	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 05:02	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/02/14 15:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW15d	**Units:**	ug/L
Lab Code:	J1402452-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/10/14 05:02	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/10/14 05:02	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/10/14 05:02	
Vinyl Acetate	1.9	U	50	1.9	1	04/10/14 05:02	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/10/14 05:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	72 - 121	04/10/14 05:02	
4-Bromofluorobenzene	92	86 - 113	04/10/14 05:02	
Dibromofluoromethane	99	86 - 112	04/10/14 05:02	
Toluene-d8	97	88 - 115	04/10/14 05:02	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/02/14 15:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW15d	**Basis:**	NA
Lab Code:	J1402452-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	**0.5**	**J**	ug/L	6.0	0.2	1	04/07/14 20:38	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 20:38	04/07/14	
Barium, Total Recoverable	6010C	**70**	**J**	ug/L	100	0.3	1	04/10/14 03:54	04/09/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/07/14 20:38	04/07/14	
Cadmium, Total Recoverable	6020A	**0.3**	**J**	ug/L	1.0	0.10	1	04/07/14 20:38	04/07/14	
Chromium, Total Recoverable	6020A	**1**	**J**	ug/L	10	0.2	1	04/07/14 20:38	04/07/14	
Cobalt, Total Recoverable	6020A	**0.06**	**J**	ug/L	10	0.03	1	04/07/14 20:38	04/07/14	
Copper, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.3	1	04/07/14 20:38	04/07/14	
Lead, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/07/14 20:38	04/07/14	
Nickel, Total Recoverable	6020A	**1.0**	**J**	ug/L	50	0.5	1	04/07/14 20:38	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 20:38	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 03:53	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 20:38	04/07/14	
Vanadium, Total Recoverable	6010C	**5**	**J**	ug/L	25	2	1	04/10/14 03:54	04/09/14	
Zinc, Total Recoverable	6010C	**5**	**BJ**	ug/L	20	2	1	04/10/14 03:54	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:40
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW16	**Units:**	ug/L
Lab Code:	J1402452-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 05:28	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 05:28	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 05:28	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 05:28	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 05:28	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 05:28	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 05:28	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 05:28	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 05:28	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 05:28	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 05:28	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 05:28	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 05:28	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 05:28	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 05:28	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 05:28	
Acetone	5.6 U	100	5.6	1	04/10/14 05:28	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 05:28	
Benzene	0.21 U	1.0	0.21	1	04/10/14 05:28	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 05:28	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 05:28	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 05:28	
Bromomethane	0.23 U	10	0.23	1	04/10/14 05:28	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 05:28	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 05:28	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 05:28	
Chloroethane	0.52 U	10	0.52	1	04/10/14 05:28	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 05:28	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 05:28	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 05:28	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 05:28	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 05:28	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 05:28	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 05:28	
Iodomethane	2.7 U	10	2.7	1	04/10/14 05:28	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 05:28	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 05:28	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 05:28	
Styrene	0.29 U	1.0	0.29	1	04/10/14 05:28	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 05:28	
Toluene	0.19 U	1.0	0.19	1	04/10/14 05:28	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 05:28	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 05:28	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:40
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW16	**Units:**	ug/L
Lab Code:	J1402452-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 05:28	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 05:28	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 05:28	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 05:28	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 05:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 05:28	
4-Bromofluorobenzene	92	86 - 113	04/10/14 05:28	
Dibromofluoromethane	100	86 - 112	04/10/14 05:28	
Toluene-d8	97	88 - 115	04/10/14 05:28	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:40
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW16	**Basis:**	NA
Lab Code:	J1402452-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	**0.3**	**J**	ug/L	6.0	0.2	1	04/07/14 20:43	04/07/14	
Arsenic, Total Recoverable	6020A	**1**	**J**	ug/L	10	0.5	1	04/07/14 20:43	04/07/14	
Barium, Total Recoverable	6010C	**120**		ug/L	100	0.3	1	04/10/14 03:57	04/09/14	
Beryllium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.04	1	04/07/14 20:43	04/07/14	
Cadmium, Total Recoverable	6020A	**0.3**	**J**	ug/L	1.0	0.10	1	04/07/14 20:43	04/07/14	
Chromium, Total Recoverable	6020A	**2**	**J**	ug/L	10	0.2	1	04/07/14 20:43	04/07/14	
Cobalt, Total Recoverable	6020A	**4**	**J**	ug/L	10	0.03	1	04/07/14 20:43	04/07/14	
Copper, Total Recoverable	6020A	**20**		ug/L	10	0.3	1	04/07/14 20:43	04/07/14	
Lead, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.2	1	04/07/14 20:43	04/07/14	
Nickel, Total Recoverable	6020A	**4**	**J**	ug/L	50	0.5	1	04/07/14 20:43	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 20:43	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 03:57	04/09/14	
Thallium, Total Recoverable	6020A	**0.09**	**J**	ug/L	5.5	0.05	1	04/07/14 20:43	04/07/14	
Vanadium, Total Recoverable	6010C	**12**	**J**	ug/L	25	2	1	04/10/14 03:58	04/09/14	
Zinc, Total Recoverable	6010C	**29**	**B**	ug/L	20	2	1	04/10/14 03:58	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:20
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW17	**Units:**	ug/L
Lab Code:	J1402452-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 05:54	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 05:54	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 05:54	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 05:54	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 05:54	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 05:54	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 05:54	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 05:54	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 05:54	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 05:54	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 05:54	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 05:54	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 05:54	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 05:54	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 05:54	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 05:54	
Acetone	5.6 U	100	5.6	1	04/10/14 05:54	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 05:54	
Benzene	0.21 U	1.0	0.21	1	04/10/14 05:54	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 05:54	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 05:54	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 05:54	
Bromomethane	0.23 U	10	0.23	1	04/10/14 05:54	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 05:54	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 05:54	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 05:54	
Chloroethane	0.52 U	10	0.52	1	04/10/14 05:54	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 05:54	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 05:54	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 05:54	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 05:54	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 05:54	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 05:54	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 05:54	
Iodomethane	2.7 U	10	2.7	1	04/10/14 05:54	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 05:54	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 05:54	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 05:54	
Styrene	0.29 U	1.0	0.29	1	04/10/14 05:54	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 05:54	
Toluene	0.19 U	1.0	0.19	1	04/10/14 05:54	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 05:54	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 05:54	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:20
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW17	**Units:**	ug/L
Lab Code:	J1402452-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/10/14 05:54	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/10/14 05:54	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/10/14 05:54	
Vinyl Acetate	1.9	U	50	1.9	1	04/10/14 05:54	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/10/14 05:54	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	72 - 121	04/10/14 05:54	
4-Bromofluorobenzene	92	86 - 113	04/10/14 05:54	
Dibromofluoromethane	100	86 - 112	04/10/14 05:54	
Toluene-d8	98	88 - 115	04/10/14 05:54	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 11:20
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW17	**Basis:**	NA
Lab Code:	J1402452-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 20:48	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 20:48	04/07/14	
Barium, Total Recoverable	6010C	**50**	**J**	ug/L	100	0.3	1	04/10/14 04:02	04/09/14	
Beryllium, Total Recoverable	6020A	**1.2**		ug/L	1.0	0.04	1	04/07/14 20:48	04/07/14	
Cadmium, Total Recoverable	6020A	**0.2**	**J**	ug/L	1.0	0.10	1	04/07/14 20:48	04/07/14	
Chromium, Total Recoverable	6020A	**19**		ug/L	10	0.2	1	04/07/14 20:48	04/07/14	
Cobalt, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.03	1	04/07/14 20:48	04/07/14	
Copper, Total Recoverable	6020A	**11**		ug/L	10	0.3	1	04/07/14 20:48	04/07/14	
Lead, Total Recoverable	6020A	**8**	**J**	ug/L	10	0.2	1	04/07/14 20:48	04/07/14	
Nickel, Total Recoverable	6020A	**4**	**J**	ug/L	50	0.5	1	04/07/14 20:48	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 20:48	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:01	04/09/14	
Thallium, Total Recoverable	6020A	**0.07**	**J**	ug/L	5.5	0.05	1	04/07/14 20:48	04/07/14	
Vanadium, Total Recoverable	6010C	**35**		ug/L	25	2	1	04/10/14 04:02	04/09/14	
Zinc, Total Recoverable	6010C	**18**	**BJ**	ug/L	20	2	1	04/10/14 04:02	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/02/14 14:15
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW17d	**Units:**	ug/L
Lab Code:	J1402452-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 06:20	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 06:20	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 06:20	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 06:20	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 06:20	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 06:20	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 06:20	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 06:20	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 06:20	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 06:20	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 06:20	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 06:20	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 06:20	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 06:20	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 06:20	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 06:20	
Acetone	5.6 U	100	5.6	1	04/10/14 06:20	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 06:20	
Benzene	0.21 U	1.0	0.21	1	04/10/14 06:20	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 06:20	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 06:20	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 06:20	
Bromomethane	0.23 U	10	0.23	1	04/10/14 06:20	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 06:20	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 06:20	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 06:20	
Chloroethane	0.52 U	10	0.52	1	04/10/14 06:20	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 06:20	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 06:20	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 06:20	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 06:20	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 06:20	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 06:20	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 06:20	
Iodomethane	2.7 U	10	2.7	1	04/10/14 06:20	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 06:20	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 06:20	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 06:20	
Styrene	0.29 U	1.0	0.29	1	04/10/14 06:20	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 06:20	
Toluene	0.19 U	1.0	0.19	1	04/10/14 06:20	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 06:20	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 06:20	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/02/14 14:15
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW17d	**Units:**	ug/L
Lab Code:	J1402452-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/10/14 06:20	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/10/14 06:20	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/10/14 06:20	
Vinyl Acetate	1.9	U	50	1.9	1	04/10/14 06:20	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/10/14 06:20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	98	72 - 121	04/10/14 06:20	
4-Bromofluorobenzene	92	86 - 113	04/10/14 06:20	
Dibromofluoromethane	100	86 - 112	04/10/14 06:20	
Toluene-d8	96	88 - 115	04/10/14 06:20	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/02/14 14:15
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW17d	**Basis:**	NA
Lab Code:	J1402452-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	**0.3**	**J**	ug/L	6.0	0.2	1	04/07/14 21:03	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:03	04/07/14	
Barium, Total Recoverable	6010C	**50**	**J**	ug/L	100	0.3	1	04/10/14 04:06	04/09/14	
Beryllium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.04	1	04/07/14 21:03	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/07/14 21:03	04/07/14	
Chromium, Total Recoverable	6020A	**2**	**J**	ug/L	10	0.2	1	04/07/14 21:03	04/07/14	
Cobalt, Total Recoverable	6020A	**0.5**	**J**	ug/L	10	0.03	1	04/07/14 21:03	04/07/14	
Copper, Total Recoverable	6020A	**11**		ug/L	10	0.3	1	04/07/14 21:03	04/07/14	
Lead, Total Recoverable	6020A	**2**	**J**	ug/L	10	0.2	1	04/07/14 21:03	04/07/14	
Nickel, Total Recoverable	6020A	**1**	**J**	ug/L	50	0.5	1	04/07/14 21:03	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:03	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:05	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 21:03	04/07/14	
Vanadium, Total Recoverable	6010C	**7**	**J**	ug/L	25	2	1	04/10/14 04:06	04/09/14	
Zinc, Total Recoverable	6010C	**9**	**BJ**	ug/L	20	2	1	04/10/14 04:06	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:50
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW18	**Units:**	ug/L
Lab Code:	J1402452-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 06:45	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 06:45	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 06:45	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 06:45	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 06:45	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 06:45	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 06:45	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 06:45	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 06:45	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 06:45	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 06:45	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 06:45	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 06:45	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 06:45	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 06:45	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 06:45	
Acetone	5.6 U	100	5.6	1	04/10/14 06:45	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 06:45	
Benzene	0.21 U	1.0	0.21	1	04/10/14 06:45	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 06:45	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 06:45	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 06:45	
Bromomethane	0.23 U	10	0.23	1	04/10/14 06:45	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 06:45	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 06:45	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 06:45	
Chloroethane	0.52 U	10	0.52	1	04/10/14 06:45	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 06:45	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 06:45	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 06:45	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 06:45	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 06:45	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 06:45	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 06:45	
Iodomethane	2.7 U	10	2.7	1	04/10/14 06:45	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 06:45	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 06:45	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 06:45	
Styrene	0.29 U	1.0	0.29	1	04/10/14 06:45	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 06:45	
Toluene	0.19 U	1.0	0.19	1	04/10/14 06:45	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 06:45	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 06:45	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:50
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW18	**Units:**	ug/L
Lab Code:	J1402452-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 06:45	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 06:45	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 06:45	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 06:45	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 06:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 06:45	
4-Bromofluorobenzene	92	86 - 113	04/10/14 06:45	
Dibromofluoromethane	100	86 - 112	04/10/14 06:45	
Toluene-d8	98	88 - 115	04/10/14 06:45	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 10:50
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW18	**Basis:**	NA
Lab Code:	J1402452-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 21:08	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:08	04/07/14	
Barium, Total Recoverable	6010C	**240**		ug/L	100	0.3	1	04/10/14 04:09	04/09/14	
Beryllium, Total Recoverable	6020A	**0.6**	**J**	ug/L	1.0	0.04	1	04/07/14 21:08	04/07/14	
Cadmium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.10	1	04/07/14 21:08	04/07/14	
Chromium, Total Recoverable	6020A	**70**		ug/L	10	0.2	1	04/07/14 21:08	04/07/14	
Cobalt, Total Recoverable	6020A	**26**		ug/L	10	0.03	1	04/07/14 21:08	04/07/14	
Copper, Total Recoverable	6020A	**81**		ug/L	10	0.3	1	04/07/14 21:08	04/07/14	
Lead, Total Recoverable	6020A	**4**	**J**	ug/L	10	0.2	1	04/07/14 21:08	04/07/14	
Nickel, Total Recoverable	6020A	**35**	**J**	ug/L	50	0.5	1	04/07/14 21:08	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:08	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:09	04/09/14	
Thallium, Total Recoverable	6020A	**0.2**	**J**	ug/L	5.5	0.05	1	04/07/14 21:08	04/07/14	
Vanadium, Total Recoverable	6010C	**67**		ug/L	25	2	1	04/10/14 04:09	04/09/14	
Zinc, Total Recoverable	6010C	**84**		ug/L	20	2	1	04/10/14 04:10	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:25
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW19	**Units:**	ug/L
Lab Code:	J1402452-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 07:11	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 07:11	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 07:11	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 07:11	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 07:11	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 07:11	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 07:11	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 07:11	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 07:11	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 07:11	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 07:11	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 07:11	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 07:11	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 07:11	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 07:11	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 07:11	
Acetone	5.6 U	100	5.6	1	04/10/14 07:11	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 07:11	
Benzene	0.21 U	1.0	0.21	1	04/10/14 07:11	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 07:11	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 07:11	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 07:11	
Bromomethane	0.23 U	10	0.23	1	04/10/14 07:11	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 07:11	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 07:11	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 07:11	
Chloroethane	0.52 U	10	0.52	1	04/10/14 07:11	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 07:11	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 07:11	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 07:11	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 07:11	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 07:11	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 07:11	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 07:11	
Iodomethane	2.7 U	10	2.7	1	04/10/14 07:11	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 07:11	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 07:11	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 07:11	
Styrene	0.29 U	1.0	0.29	1	04/10/14 07:11	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 07:11	
Toluene	0.19 U	1.0	0.19	1	04/10/14 07:11	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 07:11	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 07:11	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:25
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW19	**Units:**	ug/L
Lab Code:	J1402452-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 07:11	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 07:11	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 07:11	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 07:11	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 07:11	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 07:11	
4-Bromofluorobenzene	94	86 - 113	04/10/14 07:11	
Dibromofluoromethane	100	86 - 112	04/10/14 07:11	
Toluene-d8	97	88 - 115	04/10/14 07:11	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:25
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW19	**Basis:**	NA
Lab Code:	J1402452-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 21:13	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:13	04/07/14	
Barium, Total Recoverable	6010C	**20**	**J**	ug/L	100	0.3	1	04/10/14 04:15	04/09/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/07/14 21:13	04/07/14	
Cadmium, Total Recoverable	6020A	**0.2**	**J**	ug/L	1.0	0.10	1	04/07/14 21:13	04/07/14	
Chromium, Total Recoverable	6020A	**4**	**J**	ug/L	10	0.2	1	04/07/14 21:13	04/07/14	
Cobalt, Total Recoverable	6020A	**0.4**	**J**	ug/L	10	0.03	1	04/07/14 21:13	04/07/14	
Copper, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.3	1	04/07/14 21:13	04/07/14	
Lead, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/07/14 21:13	04/07/14	
Nickel, Total Recoverable	6020A	**2**	**J**	ug/L	50	0.5	1	04/07/14 21:13	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:13	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:14	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 21:13	04/07/14	
Vanadium, Total Recoverable	6010C	**4**	**J**	ug/L	25	2	1	04/10/14 04:15	04/09/14	
Zinc, Total Recoverable	6010C	**7**	**BJ**	ug/L	20	2	1	04/10/14 04:15	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW20	**Units:**	ug/L
Lab Code:	J1402452-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 07:37	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 07:37	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 07:37	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 07:37	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 07:37	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 07:37	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 07:37	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 07:37	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 07:37	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 07:37	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 07:37	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 07:37	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 07:37	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 07:37	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 07:37	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 07:37	
Acetone	5.6 U	100	5.6	1	04/10/14 07:37	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 07:37	
Benzene	0.21 U	1.0	0.21	1	04/10/14 07:37	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 07:37	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 07:37	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 07:37	
Bromomethane	0.23 U	10	0.23	1	04/10/14 07:37	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 07:37	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 07:37	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 07:37	
Chloroethane	0.52 U	10	0.52	1	04/10/14 07:37	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 07:37	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 07:37	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 07:37	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 07:37	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 07:37	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 07:37	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 07:37	
Iodomethane	2.7 U	10	2.7	1	04/10/14 07:37	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 07:37	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 07:37	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 07:37	
Styrene	0.29 U	1.0	0.29	1	04/10/14 07:37	
Tetrachloroethene (PCE)	**0.35 J**	1.0	0.22	1	04/10/14 07:37	
Toluene	0.19 U	1.0	0.19	1	04/10/14 07:37	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 07:37	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 07:37	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW20	**Units:**	ug/L
Lab Code:	J1402452-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/10/14 07:37	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/10/14 07:37	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/10/14 07:37	
Vinyl Acetate	1.9	U	50	1.9	1	04/10/14 07:37	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/10/14 07:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	98	72 - 121	04/10/14 07:37	
4-Bromofluorobenzene	92	86 - 113	04/10/14 07:37	
Dibromofluoromethane	101	86 - 112	04/10/14 07:37	
Toluene-d8	97	88 - 115	04/10/14 07:37	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW20	**Basis:**	NA
Lab Code:	J1402452-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 21:18	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:18	04/07/14	
Barium, Total Recoverable	6010C	**80**	**J**	ug/L	100	0.3	1	04/10/14 04:19	04/09/14	
Beryllium, Total Recoverable	6020A	**0.2**	**J**	ug/L	1.0	0.04	1	04/07/14 21:18	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/07/14 21:18	04/07/14	
Chromium, Total Recoverable	6020A	**7**	**J**	ug/L	10	0.2	1	04/07/14 21:18	04/07/14	
Cobalt, Total Recoverable	6020A	**10**	**J**	ug/L	10	0.03	1	04/07/14 21:18	04/07/14	
Copper, Total Recoverable	6020A	**68**		ug/L	10	0.3	1	04/07/14 21:18	04/07/14	
Lead, Total Recoverable	6020A	**5**	**J**	ug/L	10	0.2	1	04/07/14 21:18	04/07/14	
Nickel, Total Recoverable	6020A	**13**	**J**	ug/L	50	0.5	1	04/07/14 21:18	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:18	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:18	04/09/14	
Thallium, Total Recoverable	6020A	**0.08**	**J**	ug/L	5.5	0.05	1	04/07/14 21:18	04/07/14	
Vanadium, Total Recoverable	6010C	**34**		ug/L	25	2	1	04/10/14 04:18	04/09/14	
Zinc, Total Recoverable	6010C	**41**	**B**	ug/L	20	2	1	04/10/14 04:19	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 08:45
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW21	**Units:**	ug/L
Lab Code:	J1402452-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 08:03	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 08:03	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 08:03	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 08:03	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 08:03	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 08:03	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 08:03	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 08:03	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 08:03	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 08:03	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 08:03	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 08:03	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 08:03	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 08:03	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 08:03	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 08:03	
Acetone	5.6 U	100	5.6	1	04/10/14 08:03	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 08:03	
Benzene	0.21 U	1.0	0.21	1	04/10/14 08:03	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 08:03	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 08:03	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 08:03	
Bromomethane	0.23 U	10	0.23	1	04/10/14 08:03	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 08:03	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 08:03	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 08:03	
Chloroethane	0.52 U	10	0.52	1	04/10/14 08:03	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 08:03	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 08:03	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 08:03	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 08:03	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 08:03	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 08:03	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 08:03	
Iodomethane	2.7 U	10	2.7	1	04/10/14 08:03	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 08:03	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 08:03	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 08:03	
Styrene	0.29 U	1.0	0.29	1	04/10/14 08:03	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 08:03	
Toluene	0.19 U	1.0	0.19	1	04/10/14 08:03	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 08:03	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 08:03	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 08:45
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW21	**Units:**	ug/L
Lab Code:	J1402452-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 08:03	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 08:03	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 08:03	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 08:03	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 08:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	72 - 121	04/10/14 08:03	
4-Bromofluorobenzene	92	86 - 113	04/10/14 08:03	
Dibromofluoromethane	100	86 - 112	04/10/14 08:03	
Toluene-d8	98	88 - 115	04/10/14 08:03	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 08:45
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW21	**Basis:**	NA
Lab Code:	J1402452-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 21:23	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:23	04/07/14	
Barium, Total Recoverable	6010C	**90**	**J**	ug/L	100	0.3	1	04/10/14 04:23	04/09/14	
Beryllium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.04	1	04/07/14 21:23	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/07/14 21:23	04/07/14	
Chromium, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.2	1	04/07/14 21:23	04/07/14	
Cobalt, Total Recoverable	6020A	**2**	**J**	ug/L	10	0.03	1	04/07/14 21:23	04/07/14	
Copper, Total Recoverable	6020A	**14**		ug/L	10	0.3	1	04/07/14 21:23	04/07/14	
Lead, Total Recoverable	6020A	**0.8**	**J**	ug/L	10	0.2	1	04/07/14 21:23	04/07/14	
Nickel, Total Recoverable	6020A	**2**	**J**	ug/L	50	0.5	1	04/07/14 21:23	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:23	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:22	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 21:23	04/07/14	
Vanadium, Total Recoverable	6010C	**12**	**J**	ug/L	25	2	1	04/10/14 04:23	04/09/14	
Zinc, Total Recoverable	6010C	**13**	**BJ**	ug/L	20	2	1	04/10/14 04:23	04/09/14	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/02/14 13:15
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW25	**Units:**	ug/L
Lab Code:	J1402452-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 08:29	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 08:29	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 08:29	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 08:29	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 08:29	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 08:29	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 08:29	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 08:29	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 08:29	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 08:29	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 08:29	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 08:29	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 08:29	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 08:29	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 08:29	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 08:29	
Acetone	5.6 U	100	5.6	1	04/10/14 08:29	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 08:29	
Benzene	0.21 U	1.0	0.21	1	04/10/14 08:29	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 08:29	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 08:29	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 08:29	
Bromomethane	0.23 U	10	0.23	1	04/10/14 08:29	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 08:29	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 08:29	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 08:29	
Chloroethane	0.52 U	10	0.52	1	04/10/14 08:29	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 08:29	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 08:29	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 08:29	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 08:29	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 08:29	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 08:29	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 08:29	
Iodomethane	2.7 U	10	2.7	1	04/10/14 08:29	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 08:29	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 08:29	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 08:29	
Styrene	0.29 U	1.0	0.29	1	04/10/14 08:29	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 08:29	
Toluene	0.19 U	1.0	0.19	1	04/10/14 08:29	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 08:29	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 08:29	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/02/14 13:15
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW25	**Units:**	ug/L
Lab Code:	J1402452-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 08:29	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 08:29	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 08:29	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 08:29	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 08:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 08:29	
4-Bromofluorobenzene	92	86 - 113	04/10/14 08:29	
Dibromofluoromethane	99	86 - 112	04/10/14 08:29	
Toluene-d8	96	88 - 115	04/10/14 08:29	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/02/14 13:15
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW25	**Basis:**	NA
Lab Code:	J1402452-014		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 21:28	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:28	04/07/14	
Barium, Total Recoverable	6010C	**70**	**J**	ug/L	100	0.3	1	04/10/14 04:35	04/09/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/07/14 21:28	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/07/14 21:28	04/07/14	
Chromium, Total Recoverable	6020A	**2**	**J**	ug/L	10	0.2	1	04/07/14 21:28	04/07/14	
Cobalt, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.03	1	04/07/14 21:28	04/07/14	
Copper, Total Recoverable	6020A	**1.0**	**J**	ug/L	10	0.3	1	04/07/14 21:28	04/07/14	
Lead, Total Recoverable	6020A	**0.2**	**J**	ug/L	10	0.2	1	04/07/14 21:28	04/07/14	
Nickel, Total Recoverable	6020A	**5**	**J**	ug/L	50	0.5	1	04/07/14 21:28	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:28	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:34	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 21:28	04/07/14	
Vanadium, Total Recoverable	6010C	**4**	**J**	ug/L	25	2	1	04/10/14 04:35	04/09/14	
Zinc, Total Recoverable	6010C	**9**	**BJ**	ug/L	20	2	1	04/10/14 04:35	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 08:30
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW25d	**Units:**	ug/L
Lab Code:	J1402452-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 08:55	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 08:55	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 08:55	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 08:55	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 08:55	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 08:55	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 08:55	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 08:55	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 08:55	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 08:55	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 08:55	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 08:55	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 08:55	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 08:55	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 08:55	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 08:55	
Acetone	5.6 U	100	5.6	1	04/10/14 08:55	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 08:55	
Benzene	0.21 U	1.0	0.21	1	04/10/14 08:55	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 08:55	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 08:55	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 08:55	
Bromomethane	0.23 U	10	0.23	1	04/10/14 08:55	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 08:55	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 08:55	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 08:55	
Chloroethane	0.52 U	10	0.52	1	04/10/14 08:55	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 08:55	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 08:55	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 08:55	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 08:55	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 08:55	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 08:55	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 08:55	
Iodomethane	2.7 U	10	2.7	1	04/10/14 08:55	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 08:55	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 08:55	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 08:55	
Styrene	0.29 U	1.0	0.29	1	04/10/14 08:55	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 08:55	
Toluene	0.19 U	1.0	0.19	1	04/10/14 08:55	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 08:55	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 08:55	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 08:30
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW25d	**Units:**	ug/L
Lab Code:	J1402452-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 08:55	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 08:55	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 08:55	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 08:55	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 08:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	98	72 - 121	04/10/14 08:55	
4-Bromofluorobenzene	92	86 - 113	04/10/14 08:55	
Dibromofluoromethane	100	86 - 112	04/10/14 08:55	
Toluene-d8	98	88 - 115	04/10/14 08:55	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 08:30
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW25d	**Basis:**	NA
Lab Code:	J1402452-015		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 21:33	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:33	04/07/14	
Barium, Total Recoverable	6010C	**50**	**J**	ug/L	100	0.3	1	04/10/14 04:39	04/09/14	
Beryllium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.04	1	04/07/14 21:33	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/07/14 21:33	04/07/14	
Chromium, Total Recoverable	6020A	**6**	**J**	ug/L	10	0.2	1	04/07/14 21:33	04/07/14	
Cobalt, Total Recoverable	6020A	**3**	**J**	ug/L	10	0.03	1	04/07/14 21:33	04/07/14	
Copper, Total Recoverable	6020A	**18**		ug/L	10	0.3	1	04/07/14 21:33	04/07/14	
Lead, Total Recoverable	6020A	**0.6**	**J**	ug/L	10	0.2	1	04/07/14 21:33	04/07/14	
Nickel, Total Recoverable	6020A	**5**	**J**	ug/L	50	0.5	1	04/07/14 21:33	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:33	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:38	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 21:33	04/07/14	
Vanadium, Total Recoverable	6010C	**10**	**J**	ug/L	25	2	1	04/10/14 04:39	04/09/14	
Zinc, Total Recoverable	6010C	**11**	**BJ**	ug/L	20	2	1	04/10/14 04:39	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:10
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW26	**Units:**	ug/L
Lab Code:	J1402452-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 09:21	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 09:21	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 09:21	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 09:21	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 09:21	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 09:21	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 09:21	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 09:21	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 09:21	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 09:21	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 09:21	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 09:21	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 09:21	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 09:21	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 09:21	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 09:21	
Acetone	5.6 U	100	5.6	1	04/10/14 09:21	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 09:21	
Benzene	0.21 U	1.0	0.21	1	04/10/14 09:21	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 09:21	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 09:21	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 09:21	
Bromomethane	0.23 U	10	0.23	1	04/10/14 09:21	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 09:21	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 09:21	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 09:21	
Chloroethane	0.52 U	10	0.52	1	04/10/14 09:21	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 09:21	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 09:21	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 09:21	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 09:21	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 09:21	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 09:21	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 09:21	
Iodomethane	2.7 U	10	2.7	1	04/10/14 09:21	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 09:21	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 09:21	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 09:21	
Styrene	0.29 U	1.0	0.29	1	04/10/14 09:21	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 09:21	
Toluene	0.19 U	1.0	0.19	1	04/10/14 09:21	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 09:21	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 09:21	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:10
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW26	**Units:**	ug/L
Lab Code:	J1402452-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 09:21	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 09:21	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 09:21	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 09:21	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 09:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 09:21	
4-Bromofluorobenzene	91	86 - 113	04/10/14 09:21	
Dibromofluoromethane	100	86 - 112	04/10/14 09:21	
Toluene-d8	96	88 - 115	04/10/14 09:21	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 09:10
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	MW26	**Basis:**	NA
Lab Code:	J1402452-016		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 21:38	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:38	04/07/14	
Barium, Total Recoverable	6010C	**60**	**J**	ug/L	100	0.3	1	04/10/14 04:43	04/09/14	
Beryllium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.04	1	04/07/14 21:38	04/07/14	
Cadmium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.10	1	04/07/14 21:38	04/07/14	
Chromium, Total Recoverable	6020A	**4**	**J**	ug/L	10	0.2	1	04/07/14 21:38	04/07/14	
Cobalt, Total Recoverable	6020A	**14**		ug/L	10	0.03	1	04/07/14 21:38	04/07/14	
Copper, Total Recoverable	6020A	**28**		ug/L	10	0.3	1	04/07/14 21:38	04/07/14	
Lead, Total Recoverable	6020A	**0.5**	**J**	ug/L	10	0.2	1	04/07/14 21:38	04/07/14	
Nickel, Total Recoverable	6020A	**11**	**J**	ug/L	50	0.5	1	04/07/14 21:38	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:38	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:42	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 21:38	04/07/14	
Vanadium, Total Recoverable	6010C	**14**	**J**	ug/L	25	2	1	04/10/14 04:42	04/09/14	
Zinc, Total Recoverable	6010C	**14**	**BJ**	ug/L	20	2	1	04/10/14 04:43	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 07:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	DUP	**Units:**	ug/L
Lab Code:	J1402452-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 09:47	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 09:47	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 09:47	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 09:47	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 09:47	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 09:47	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 09:47	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 09:47	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 09:47	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 09:47	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 09:47	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 09:47	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 09:47	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 09:47	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 09:47	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 09:47	
Acetone	5.6 U	100	5.6	1	04/10/14 09:47	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 09:47	
Benzene	0.21 U	1.0	0.21	1	04/10/14 09:47	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 09:47	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 09:47	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 09:47	
Bromomethane	0.23 U	10	0.23	1	04/10/14 09:47	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 09:47	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 09:47	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 09:47	
Chloroethane	0.52 U	10	0.52	1	04/10/14 09:47	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 09:47	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 09:47	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 09:47	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 09:47	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 09:47	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 09:47	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 09:47	
Iodomethane	2.7 U	10	2.7	1	04/10/14 09:47	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 09:47	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 09:47	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 09:47	
Styrene	0.29 U	1.0	0.29	1	04/10/14 09:47	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 09:47	
Toluene	0.19 U	1.0	0.19	1	04/10/14 09:47	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 09:47	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 09:47	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 07:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	DUP	**Units:**	ug/L
Lab Code:	J1402452-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 09:47	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 09:47	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 09:47	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 09:47	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 09:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 09:47	
4-Bromofluorobenzene	92	86 - 113	04/10/14 09:47	
Dibromofluoromethane	101	86 - 112	04/10/14 09:47	
Toluene-d8	97	88 - 115	04/10/14 09:47	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 07:00
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	DUP	**Basis:**	NA
Lab Code:	J1402452-017		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 21:43	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:43	04/07/14	
Barium, Total Recoverable	6010C	**20**	**J**	ug/L	100	0.3	1	04/10/14 04:48	04/09/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/07/14 21:43	04/07/14	
Cadmium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.10	1	04/07/14 21:43	04/07/14	
Chromium, Total Recoverable	6020A	**4**	**J**	ug/L	10	0.2	1	04/07/14 21:43	04/07/14	
Cobalt, Total Recoverable	6020A	**0.6**	**J**	ug/L	10	0.03	1	04/07/14 21:43	04/07/14	
Copper, Total Recoverable	6020A	**4**	**J**	ug/L	10	0.3	1	04/07/14 21:43	04/07/14	
Lead, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/07/14 21:43	04/07/14	
Nickel, Total Recoverable	6020A	**2**	**J**	ug/L	50	0.5	1	04/07/14 21:43	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:43	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:47	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 21:43	04/07/14	
Vanadium, Total Recoverable	6010C	**4**	**J**	ug/L	25	2	1	04/10/14 04:48	04/09/14	
Zinc, Total Recoverable	6010C	**6**	**BJ**	ug/L	20	2	1	04/10/14 04:48	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 13:20
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	EQ Blank	**Units:**	ug/L
Lab Code:	J1402452-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19	U	5.0	0.19	1	04/10/14 10:13	
1,1,1-Trichloroethane (TCA)	0.17	U	1.0	0.17	1	04/10/14 10:13	
1,1,2,2-Tetrachloroethane	0.29	U	3.0	0.29	1	04/10/14 10:13	
1,1,2-Trichloroethane	0.40	U	1.0	0.40	1	04/10/14 10:13	
1,1-Dichloroethane (1,1-DCA)	0.30	U	5.0	0.30	1	04/10/14 10:13	
1,1-Dichloroethene (1,1-DCE)	0.16	U	5.0	0.16	1	04/10/14 10:13	
1,2,3-Trichloropropane	0.42	U	2.0	0.42	1	04/10/14 10:13	
1,2-Dibromo-3-chloropropane (DBCP)	2.3	U	13	2.3	1	04/10/14 10:13	
1,2-Dibromoethane (EDB)	0.46	U	1.0	0.46	1	04/10/14 10:13	
1,2-Dichlorobenzene	0.48	U	5.0	0.48	1	04/10/14 10:13	
1,2-Dichloroethane	0.22	U	1.0	0.22	1	04/10/14 10:13	
1,2-Dichloropropane	0.19	U	1.0	0.19	1	04/10/14 10:13	
1,4-Dichlorobenzene	0.16	U	1.0	0.16	1	04/10/14 10:13	
2-Butanone (MEK)	**15**	**J**	100	3.8	1	04/10/14 10:13	
2-Hexanone	2.2	U	50	2.2	1	04/10/14 10:13	
4-Methyl-2-pentanone (MIBK)	1.1	U	100	1.1	1	04/10/14 10:13	
Acetone	5.6	U	100	5.6	1	04/10/14 10:13	
Acrylonitrile	1.5	U	200	1.5	1	04/10/14 10:13	
Benzene	0.21	U	1.0	0.21	1	04/10/14 10:13	
Bromochloromethane	0.27	U	5.0	0.27	1	04/10/14 10:13	
Bromodichloromethane	0.22	U	1.0	0.22	1	04/10/14 10:13	
Bromoform	0.42	U	3.0	0.42	1	04/10/14 10:13	
Bromomethane	0.23	U	10	0.23	1	04/10/14 10:13	
Carbon Disulfide	2.4	U	100	2.4	1	04/10/14 10:13	
Carbon Tetrachloride	0.34	U	1.0	0.34	1	04/10/14 10:13	
Chlorobenzene	0.16	U	3.0	0.16	1	04/10/14 10:13	
Chloroethane	0.52	U	10	0.52	1	04/10/14 10:13	
Chloroform	0.35	U	5.0	0.35	1	04/10/14 10:13	
Chloromethane	0.36	U	1.0	0.36	1	04/10/14 10:13	
cis-1,2-Dichloroethene	0.36	U	5.0	0.36	1	04/10/14 10:13	
cis-1,3-Dichloropropene	0.20	U	1.0	0.20	1	04/10/14 10:13	
Dibromochloromethane	0.21	U	3.0	0.21	1	04/10/14 10:13	
Dibromomethane	0.36	U	10	0.36	1	04/10/14 10:13	
Ethylbenzene	0.21	U	1.0	0.21	1	04/10/14 10:13	
Iodomethane	2.7	U	10	2.7	1	04/10/14 10:13	
m,p-Xylenes	0.31	U	2.0	0.31	1	04/10/14 10:13	
Methylene Chloride	0.21	U	5.0	0.21	1	04/10/14 10:13	
o-Xylene	**0.27**	**J**	1.0	0.14	1	04/10/14 10:13	
Styrene	0.29	U	1.0	0.29	1	04/10/14 10:13	
Tetrachloroethene (PCE)	0.22	U	1.0	0.22	1	04/10/14 10:13	
Toluene	0.19	U	1.0	0.19	1	04/10/14 10:13	
trans-1,2-Dichloroethene	0.19	U	5.0	0.19	1	04/10/14 10:13	
trans-1,3-Dichloropropene	0.23	U	1.0	0.23	1	04/10/14 10:13	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 13:20
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	EQ Blank	**Units:**	ug/L
Lab Code:	J1402452-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	100	2.2	1	04/10/14 10:13	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	04/10/14 10:13	
Trichlorofluoromethane	0.24 U	20	0.24	1	04/10/14 10:13	
Vinyl Acetate	1.9 U	50	1.9	1	04/10/14 10:13	
Vinyl Chloride	0.36 U	1.0	0.36	1	04/10/14 10:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	98	72 - 121	04/10/14 10:13	
4-Bromofluorobenzene	92	86 - 113	04/10/14 10:13	
Dibromofluoromethane	100	86 - 112	04/10/14 10:13	
Toluene-d8	97	88 - 115	04/10/14 10:13	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 13:20
Sample Matrix:	Ground Water	**Date Received:**	04/04/14 10:05
Sample Name:	EQ Blank	**Basis:**	NA
Lab Code:	J1402452-018		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 21:48	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 21:48	04/07/14	
Barium, Total Recoverable	6010C	0.3	U	ug/L	100	0.3	1	04/10/14 04:53	04/09/14	
Beryllium, Total Recoverable	6020A	**0.1**	**J**	ug/L	1.0	0.04	1	04/07/14 21:48	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/07/14 21:48	04/07/14	
Chromium, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/07/14 21:48	04/07/14	
Cobalt, Total Recoverable	6020A	0.03	U	ug/L	10	0.03	1	04/07/14 21:48	04/07/14	
Copper, Total Recoverable	6020A	0.3	U	ug/L	10	0.3	1	04/07/14 21:48	04/07/14	
Lead, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/07/14 21:48	04/07/14	
Nickel, Total Recoverable	6020A	0.5	U	ug/L	50	0.5	1	04/07/14 21:48	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 21:48	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 04:52	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 21:48	04/07/14	
Vanadium, Total Recoverable	6010C	2	U	ug/L	25	2	1	04/10/14 04:53	04/09/14	
Zinc, Total Recoverable	6010C	**3**	**BJ**	ug/L	20	2	1	04/10/14 04:53	04/09/14	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 00:00
Sample Matrix:	Water	**Date Received:**	04/04/14 10:05
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	J1402452-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 10:38	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 10:38	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 10:38	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 10:38	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 10:38	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 10:38	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 10:38	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 10:38	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 10:38	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 10:38	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 10:38	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 10:38	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 10:38	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 10:38	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 10:38	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 10:38	
Acetone	5.6 U	100	5.6	1	04/10/14 10:38	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 10:38	
Benzene	0.21 U	1.0	0.21	1	04/10/14 10:38	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 10:38	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 10:38	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 10:38	
Bromomethane	0.23 U	10	0.23	1	04/10/14 10:38	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 10:38	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 10:38	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 10:38	
Chloroethane	0.52 U	10	0.52	1	04/10/14 10:38	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 10:38	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 10:38	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 10:38	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 10:38	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 10:38	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 10:38	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 10:38	
Iodomethane	2.7 U	10	2.7	1	04/10/14 10:38	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 10:38	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 10:38	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 10:38	
Styrene	0.29 U	1.0	0.29	1	04/10/14 10:38	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 10:38	
Toluene	0.19 U	1.0	0.19	1	04/10/14 10:38	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 10:38	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 10:38	

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Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14 00:00
Sample Matrix:	Water	**Date Received:**	04/04/14 10:05
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	J1402452-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/10/14 10:38	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/10/14 10:38	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/10/14 10:38	
Vinyl Acetate	1.9	U	50	1.9	1	04/10/14 10:38	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/10/14 10:38	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	04/10/14 10:38	
4-Bromofluorobenzene	92	86 - 113	04/10/14 10:38	
Dibromofluoromethane	100	86 - 112	04/10/14 10:38	
Toluene-d8	98	88 - 115	04/10/14 10:38	

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JQ1402657-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	5.0	0.19	1	04/10/14 02:27	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	04/10/14 02:27	
1,1,2,2-Tetrachloroethane	0.29 U	3.0	0.29	1	04/10/14 02:27	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	04/10/14 02:27	
1,1-Dichloroethane (1,1-DCA)	0.30 U	5.0	0.30	1	04/10/14 02:27	
1,1-Dichloroethene (1,1-DCE)	0.16 U	5.0	0.16	1	04/10/14 02:27	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	04/10/14 02:27	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	13	2.3	1	04/10/14 02:27	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	04/10/14 02:27	
1,2-Dichlorobenzene	0.48 U	5.0	0.48	1	04/10/14 02:27	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	04/10/14 02:27	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	04/10/14 02:27	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	04/10/14 02:27	
2-Butanone (MEK)	3.8 U	100	3.8	1	04/10/14 02:27	
2-Hexanone	2.2 U	50	2.2	1	04/10/14 02:27	
4-Methyl-2-pentanone (MIBK)	1.1 U	100	1.1	1	04/10/14 02:27	
Acetone	5.6 U	100	5.6	1	04/10/14 02:27	
Acrylonitrile	1.5 U	200	1.5	1	04/10/14 02:27	
Benzene	0.21 U	1.0	0.21	1	04/10/14 02:27	
Bromochloromethane	0.27 U	5.0	0.27	1	04/10/14 02:27	
Bromodichloromethane	0.22 U	1.0	0.22	1	04/10/14 02:27	
Bromoform	0.42 U	3.0	0.42	1	04/10/14 02:27	
Bromomethane	0.23 U	10	0.23	1	04/10/14 02:27	
Carbon Disulfide	2.4 U	100	2.4	1	04/10/14 02:27	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	04/10/14 02:27	
Chlorobenzene	0.16 U	3.0	0.16	1	04/10/14 02:27	
Chloroethane	0.52 U	10	0.52	1	04/10/14 02:27	
Chloroform	0.35 U	5.0	0.35	1	04/10/14 02:27	
Chloromethane	0.36 U	1.0	0.36	1	04/10/14 02:27	
cis-1,2-Dichloroethene	0.36 U	5.0	0.36	1	04/10/14 02:27	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	04/10/14 02:27	
Dibromochloromethane	0.21 U	3.0	0.21	1	04/10/14 02:27	
Dibromomethane	0.36 U	10	0.36	1	04/10/14 02:27	
Ethylbenzene	0.21 U	1.0	0.21	1	04/10/14 02:27	
Iodomethane	2.7 U	10	2.7	1	04/10/14 02:27	
m,p-Xylenes	0.31 U	2.0	0.31	1	04/10/14 02:27	
Methylene Chloride	0.21 U	5.0	0.21	1	04/10/14 02:27	
o-Xylene	0.14 U	1.0	0.14	1	04/10/14 02:27	
Styrene	0.29 U	1.0	0.29	1	04/10/14 02:27	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	04/10/14 02:27	
Toluene	0.19 U	1.0	0.19	1	04/10/14 02:27	
trans-1,2-Dichloroethene	0.19 U	5.0	0.19	1	04/10/14 02:27	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	04/10/14 02:27	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JQ1402657-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2	U	100	2.2	1	04/10/14 02:27	
Trichloroethene (TCE)	0.36	U	1.0	0.36	1	04/10/14 02:27	
Trichlorofluoromethane	0.24	U	20	0.24	1	04/10/14 02:27	
Vinyl Acetate	1.9	U	50	1.9	1	04/10/14 02:27	
Vinyl Chloride	0.36	U	1.0	0.36	1	04/10/14 02:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	72 - 121	04/10/14 02:27	
4-Bromofluorobenzene	92	86 - 113	04/10/14 02:27	
Dibromofluoromethane	99	86 - 112	04/10/14 02:27	
Toluene-d8	98	88 - 115	04/10/14 02:27	

Analytical Report

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	J1402452-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020A	0.2	U	ug/L	6.0	0.2	1	04/07/14 20:03	04/07/14	
Arsenic, Total Recoverable	6020A	0.5	U	ug/L	10	0.5	1	04/07/14 20:03	04/07/14	
Barium, Total Recoverable	6010C	0.3	U	ug/L	100	0.3	1	04/10/14 03:03	04/09/14	
Beryllium, Total Recoverable	6020A	0.04	U	ug/L	1.0	0.04	1	04/07/14 20:03	04/07/14	
Cadmium, Total Recoverable	6020A	0.10	U	ug/L	1.0	0.10	1	04/07/14 20:03	04/07/14	
Chromium, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/07/14 20:03	04/07/14	
Cobalt, Total Recoverable	6020A	0.03	U	ug/L	10	0.03	1	04/07/14 20:03	04/07/14	
Copper, Total Recoverable	6020A	0.3	U	ug/L	10	0.3	1	04/07/14 20:03	04/07/14	
Lead, Total Recoverable	6020A	0.2	U	ug/L	10	0.2	1	04/07/14 20:03	04/07/14	
Nickel, Total Recoverable	6020A	0.5	U	ug/L	50	0.5	1	04/07/14 20:03	04/07/14	
Selenium, Total Recoverable	6020A	2	U	ug/L	10	2	1	04/07/14 20:03	04/07/14	
Silver, Total Recoverable	6010C	2	U	ug/L	10	2	1	04/10/14 03:03	04/09/14	
Thallium, Total Recoverable	6020A	0.05	U	ug/L	5.5	0.05	1	04/07/14 20:03	04/07/14	
Vanadium, Total Recoverable	6010C	2	U	ug/L	25	2	1	04/10/14 03:03	04/09/14	
Zinc, Total Recoverable	6010C	**6**	**J**	ug/L	20	2	1	04/10/14 03:03	04/09/14	

Client: Wake County Solid Waste Management **Service Request:** J1402452
Project: North Wake Lined Landfill
Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	1,2-Dichloroethane-d4	4-Bromofluorobenzene	Dibromofluoromethane
		72 - 121	86 - 113	86 - 112
MW12	J1402452-001	97	91	101
MW12d	J1402452-002	96	93	99
MW13	J1402452-003	97	92	100
MW14	J1402452-004	95	93	99
MW15	J1402452-005	97	91	100
MW15d	J1402452-006	96	92	99
MW16	J1402452-007	97	92	100
MW17	J1402452-008	96	92	100
MW17d	J1402452-009	98	92	100
MW18	J1402452-010	97	92	100
MW19	J1402452-011	97	94	100
MW20	J1402452-012	98	92	101
MW21	J1402452-013	96	92	100
MW25	J1402452-014	97	92	99
MW25d	J1402452-015	98	92	100
MW26	J1402452-016	97	91	100
DUP	J1402452-017	97	92	101
EQ Blank	J1402452-018	98	92	100
Trip Blank	J1402452-019	97	92	100
Lab Control Sample	JQ1402657-01	97	95	101
Duplicate Lab Control Sample	JQ1402657-02	96	95	101
Method Blank	JQ1402657-03	96	92	99

Client: Wake County Solid Waste Management **Service Request:** J1402452
Project: North Wake Lined Landfill
Sample Matrix: Ground Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	Toluene-d8 88 - 115
MW12	J1402452-001	99
MW12d	J1402452-002	98
MW13	J1402452-003	98
MW14	J1402452-004	98
MW15	J1402452-005	97
MW15d	J1402452-006	97
MW16	J1402452-007	97
MW17	J1402452-008	98
MW17d	J1402452-009	96
MW18	J1402452-010	98
MW19	J1402452-011	97
MW20	J1402452-012	97
MW21	J1402452-013	98
MW25	J1402452-014	96
MW25d	J1402452-015	98
MW26	J1402452-016	96
DUP	J1402452-017	97
EQ Blank	J1402452-018	97
Trip Blank	J1402452-019	98
Lab Control Sample	JQ1402657-01	100
Duplicate Lab Control Sample	JQ1402657-02	99
Method Blank	JQ1402657-03	98

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Analyzed:**	04/10/14
Sample Matrix:	Ground Water		

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260B	**Units:**	ug/L
		Basis:	NA
		Analysis Lot:	387478

	Lab Control Sample JQ1402657-01			Duplicate Lab Control Sample JQ1402657-02					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	53.1	50.0	106	51.7	50.0	103	77-118	3	30
1,1,1-Trichloroethane (TCA)	52.9	50.0	106	50.4	50.0	101	70-122	5	30
1,1,2,2-Tetrachloroethane	49.6	50.0	99	48.7	50.0	97	66-135	2	30
1,1,2-Trichloroethane	49.9	50.0	100	49.0	50.0	98	75-122	2	30
1,1-Dichloroethane (1,1-DCA)	50.2	50.0	100	49.2	50.0	98	79-117	2	30
1,1-Dichloroethene (1,1-DCE)	49.5	50.0	99	47.1	50.0	94	72-128	5	30
1,2,3-Trichloropropane	51.1	50.0	102	49.7	50.0	99	70-123	3	30
1,2-Dibromo-3-chloropropane (DBCP)	48.4	50.0	97	48.3	50.0	97	60-122	<1	30
1,2-Dibromoethane (EDB)	51.4	50.0	103	50.7	50.0	101	76-118	1	30
1,2-Dichlorobenzene	50.8	50.0	102	49.4	50.0	99	81-115	3	30
1,2-Dichloroethane	48.9	50.0	98	47.9	50.0	96	70-117	2	30
1,2-Dichloropropane	49.9	50.0	100	49.3	50.0	99	79-117	1	30
1,4-Dichlorobenzene	50.0	50.0	100	49.3	50.0	99	82-115	1	30
2-Butanone (MEK)	50.0	50.0	100	48.3	50.0	97	62-138	3	30
2-Hexanone	46.8	50.0	94	46.8	50.0	94	74-127	<1	30
4-Methyl-2-pentanone (MIBK)	45.6	50.0	91	45.4	50.0	91	77-120	<1	30
Acetone	54.0	50.0	108	52.8	50.0	106	42-161	2	30
Acrylonitrile	45.4	50.0	91	44.4	50.0	89	63-132	2	30
Benzene	51.6	50.0	103	49.8	50.0	100	80-117	4	30
Bromochloromethane	52.7	50.0	105	51.7	50.0	103	78-118	2	30
Bromodichloromethane	51.5	50.0	103	50.4	50.0	101	75-118	2	30
Bromoform	52.0	50.0	104	51.7	50.0	103	63-121	<1	30
Bromomethane	44.9	50.0	90	46.2	50.0	92	31-153	3	30
Carbon Disulfide	54.0	50.0	108	51.5	50.0	103	72-128	5	30
Carbon Tetrachloride	50.0	50.0	100	47.4	50.0	95	67-124	5	30
Chlorobenzene	53.7	50.0	107	52.1	50.0	104	83-118	3	30
Chloroethane	49.5	50.0	99	47.6	50.0	95	68-132	4	30
Chloroform	50.6	50.0	101	48.6	50.0	97	77-116	4	30
Chloromethane	46.8	50.0	94	47.3	50.0	95	60-128	1	30
cis-1,2-Dichloroethene	50.2	50.0	100	48.7	50.0	97	78-117	3	30
cis-1,3-Dichloropropene	48.9	50.0	98	46.8	50.0	94	80-119	4	30
Dibromochloromethane	52.2	50.0	104	51.6	50.0	103	74-121	1	30
Dibromomethane	50.3	50.0	101	49.5	50.0	99	76-117	2	30
Ethylbenzene	52.5	50.0	105	50.1	50.0	100	82-119	5	30
Iodomethane	53.0	50.0	106	53.1	50.0	106	51-137	<1	30
m,p-Xylenes	105	100	105	102	100	102	79-122	4	30
Methylene Chloride	51.4	50.0	103	50.3	50.0	101	75-123	2	30
o-Xylene	51.5	50.0	103	49.7	50.0	99	80-119	3	30
Styrene	53.9	50.0	108	51.9	50.0	104	80-121	4	30
Tetrachloroethene (PCE)	55.0	50.0	110	52.9	50.0	106	75-126	4	30
Toluene	52.8	50.0	106	50.9	50.0	102	52-152	4	30

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Analyzed:**	04/10/14
Sample Matrix:	Ground Water		

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260B	**Units:**	ug/L
		Basis:	NA
		Analysis Lot:	387478

	Lab Control Sample JQ1402657-01			Duplicate Lab Control Sample JQ1402657-02					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
trans-1,2-Dichloroethene	50.8	50.0	102	49.5	50.0	99	75-121	3	30
trans-1,3-Dichloropropene	49.1	50.0	98	48.1	50.0	96	76-118	2	30
trans-1,4-Dichloro-2-butene	40.1	50.0	80	39.6	50.0	79	10-198	1	30
Trichloroethene (TCE)	54.6	50.0	109	53.2	50.0	106	78-122	2	30
Trichlorofluoromethane	50.9	50.0	102	48.2	50.0	96	58-134	6	30
Vinyl Acetate	47.1	50.0	94	46.1	50.0	92	36-169	2	30
Vinyl Chloride	49.5	50.0	99	47.0	50.0	94	69-138	5	30

Client:	Wake County Solid Waste Management	**Service Request:**	J1402452
Project:	North Wake Lined Landfill	**Date Collected:**	04/03/14
Sample Matrix:	Ground Water	**Date Received:**	04/04/14
		Date Analyzed:	04/10/14
		Date Extracted:	04/9/14

Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name:	MW12	**Units:**	ug/L
Lab Code:	J1402452-001	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA 3005A		

		Matrix Spike J1402452-001MS			**Duplicate Matrix Spike** J1402452-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Barium, Total Recoverable	280	770	500	98	760	500	97	75-125	<1	20
Silver, Total Recoverable	2 U	511	500	102	513	500	103	75-125	<1	20
Vanadium, Total Recoverable	59	1010	1000	95	1010	1000	95	75-125	<1	20
Zinc, Total Recoverable	58 B	978	1000	92	978	1000	92	75-125	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Wake County Solid Waste Management
Project: North Wake Lined Landfill
Sample Matrix: Ground Water

Service Request:J1402452
Date Analyzed:04/07/14 - 04/10/14

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
J1402452-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony, Total Recoverable	6020A	51.9	50.0	104	80-120
Arsenic, Total Recoverable	6020A	50.6	50	101	80-120
Barium, Total Recoverable	6010C	498	500	100	80-120
Beryllium, Total Recoverable	6020A	23.0	25.0	92	80-120
Cadmium, Total Recoverable	6020A	20.3	20.0	102	80-120
Chromium, Total Recoverable	6020A	50.8	50	102	80-120
Cobalt, Total Recoverable	6020A	50.0	50	100	80-120
Copper, Total Recoverable	6020A	50.6	50	101	80-120
Lead, Total Recoverable	6020A	26.3	25	105	80-120
Nickel, Total Recoverable	6020A	103	100	102	80-120
Selenium, Total Recoverable	6020A	102	100	102	80-120
Silver, Total Recoverable	6010C	509	500	102	80-120
Thallium, Total Recoverable	6020A	10.0	10.0	100	80-120
Vanadium, Total Recoverable	6010C	952	1000	95	80-120
Zinc, Total Recoverable	6010C	940	1000	94	80-120

ALS Environmental

Cooler Receipt Form

Client: CDM Smith

Service Request #: J1402452

Project: North White Lined Landfill

Cooler received on 4-4-14 and opened on 4-4-14 by TP

COURIER: ALS UPS (FEDEX) Client Other _____ Airbill # 8050 4380 2446

1	Were custody seals on outside of cooler?	(Yes)	No		
	If yes, how many and where?	#: 1	on lid	other	
2	Were seals intact and signature and date correct?	(Yes)	No	N/A	
3	Were custody papers properly filled out?	(Yes)	No	N/A	
4	Temperature of cooler(s) upon receipt (Should be > 0°C and < 6°C)	3.6°C			
5	Thermometer ID	T81			
6	Temperature Blank Present?	(Yes)	No		
7	Were Ice or Ice Packs present	(Ice)	Ice Packs	No	
8	Did all bottles arrive in good condition (unbroken, etc....)?	(Yes)	No	N/A	
9	Type of packing material present	Netting	Vial Holder	(Bubble Wrap)	
		Paper	Styrofoam	Other	N/A
10	Were all bottle labels complete (sample ID, preservation, etc....)?	(Yes)	No	N/A	
11	Did all bottle labels and tags agree with custody papers?	(Yes)	No	N/A	
12	Were the correct bottles used for the tests indicated?	(Yes)	No	N/A	
13	Were all of the preserved bottles received with the appropriate preservative?	(Yes)	No	N/A	
	(HNO3 pH<2) H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2				
	Preservative additions noted below				
14	Were all samples received within analysis holding times?	(Yes)	No	N/A	
15	Were all VOA vials free of air bubbles? If present, note below	(Yes)	No	N/A	
16	Where did the bottles originate?	(ALS)	Client		

Sample ID	Reagent	Lot #	ml added	Initials Date/Time

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted: Date:

CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

ALS Environmental

9143 Philips Highway, Suite 200 Jacksonville, FL 32256 / Ph(904) 739-2277 / FAX (904) 739-2011

SR # J1402452
ALS Contact

Page 1 of 2

Project Name: North Wake Lined Landfill	Project Number:
Report To: Aaron Weispfenning	Report CC:
Company/Address: CDM Smith, 5400 Glenwood Ave, Suite 300, Raleigh, NC 27612	
Phone #: 919-325-3532	FAX #:
Sampler's Signature: [signature]	Sampler's Printed Name: Aaron Weispfenning

ANALYSIS REQUESTED (Include Method Number and Cr

J1402452 5
CDM Smith, Inc.
North Wake Lined Landfill

Preservative: 2. HNO3; 3. H2SO4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. NaHSO4; 8. Other

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	Matrix	NUMBER OF CONTAINERS		Appendix I VOCs	Appendix I Metals	REMARKS
9209-MW12		4-3-14	940	GW	4		X	X	report according to NC SWSL guidelines
9209-MW12d		4-3-14	1010	GW	4		X	X	provide edd
9209-MW13		4-3-14	1035	GW	4		X	X	
9209-MW14		4-3-14	1300	GW	4		X	X	
9209-MW15		4-3-14	1150	GW	4		X	X	
9209-MW15d		4-2-14	1500	GW	4		X	X	
9209-MW16		4-3-14	1140	GW	4		X	X	
9209-MW17		4-3-14	1120	GW	4		X	X	
9209-MW17d		4-2-14	1415	GW	4		X	X	
9209-MW18		4-3-14	1050	GW	4		X	X	

Special Instructions/Comments: 3.6°C

TURNAROUND REQUIREMENTS
RUSH (SURCHARGES APPLY)
X STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
I. Results Only
X II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
III. Results + QC and Calibration Summaries
IV. Data Validation Report with Raw Data
Edata X Yes ___ No

INVOICE INFORMATION
P.O. #
Bill to: Wake County

Relinquished By	Received By	Relinquished By	Received By	Relinquished By	Received By
Signature: [signature]	Signature: [signature]	Signature	Signature	Signature	Signature
Printed Name: Aaron Weispfenning	Printed Name: T. Pirrington	Printed Name	Printed Name	Printed Name	Printed Name
Firm: CDM Smith	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 4-3-14 / 1500	Date/Time: 4-4-14 1000	Date/Time	Date/Time	Date/Time	Date/Time

CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

SR # J1402452
ALS Contact

(ALS) 9143 Philips Highway, Suite 200 Jacksonville, FL 32256 / Ph(904) 739-2277 / FAX (904) 739-2011

Page 2 of 2

J1402452 5
CDM Smith, Inc.
North Wake Lined Landfill

Project Name: North Wake Lined Landfill	Project Number:
Report To: Aaron Weispfenning	Report CC:
Company/Address: CDM Smith, 5400 Glenwood Ave, Suite 300, Raleigh, NC 27612	
Phone #: 919-325-3532	FAX #:
Sampler's Signature: [signature]	Sampler's Printed Name: Aaron Weispfenning

ANALYSIS REQUESTED (Include Method Number)

Preservative: 2. HNO3; 3. H2SO4; 4. NaOH; 5. Zn Acetate; 6. MeOH; 7. NaHSO4; 8. Other

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	Matrix	NUMBER OF CONTAINERS		Appendix I VOCs	Appendix I Metals	REMARKS
9209-MW19		4-3-14	925	GW	4		X	X	See Page 1
9209-MW20		4-3-14	900	GW	4		X	X	
9209-MW21		4-3-14	845	GW	4		X	X	
9209-MW25		4-2-14	1315	GW	4		X	X	
9209-MW25d		4-3-14	830	GW	4		X	X	
9209-MW26		4-3-14	910	GW	4		X	X	
9209-DUP		4-3-14	700	GW	4		X	X	
9209-EQ Blank		4-3-14	1320	GW	4		X	X	
9209-Trip Blank		—	—	GW	3		X		

Special Instructions/Comments: 3.6°C

TURNAROUND REQUIREMENTS
- RUSH (SURCHARGES APPLY)
- X STANDARD
- REQUESTED FAX DATE
- REQUESTED REPORT DATE

REPORT REQUIREMENTS
- I. Results Only
- X II. Results + QC Summaries (LCS, DUP MS/MSD as required)
- III. Results + QC and Calibration Summaries
- IV. Data Validation Report with Raw Data

Edata: X Yes ___ No

INVOICE INFORMATION
P.O. #
Bill to: Wake County

Relinquished By	Received By	Relinquished By	Received By	Relinquished By	Received By
Signature: [signature]	Signature: [signature]	Signature	Signature	Signature	Signature
Printed Name: Aaron Weispfenning	Printed Name: T. Billington	Printed Name	Printed Name	Printed Name	Printed Name
Firm: CDM Smith	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 4-3-14 / 1500	Date/Time: 4-4-14 1005	Date/Time	Date/Time	Date/Time	Date/Time

CDM Smith

cdmsmith.com