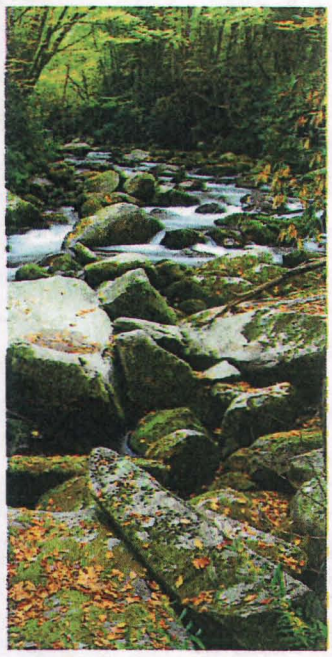

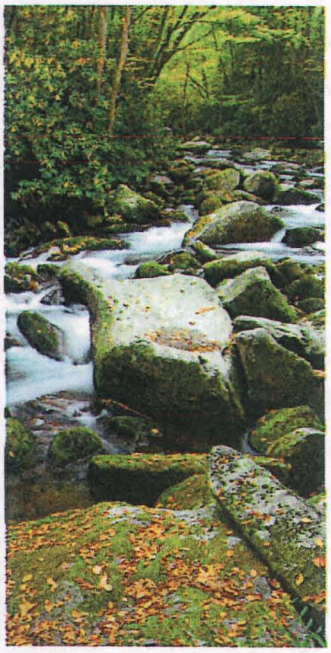

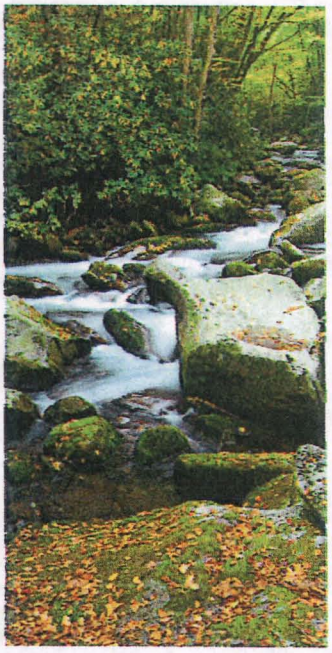

ALTAMONT ENVIRONMENTAL, INC.

ENGINEERING & HYDROGEOLOGY

JAN 2013
Brownfields

Groundwater Monitoring Report

Elk Mountain Landfill Brownfields Project

March 19, 2012

Prepared for
LandTech Receiver Services, LLC
As Receiver For
Reynolds Mountain Partners, LLC
55 Weaverville Road, Suite 12
Asheville, NC 28804
Job Number 2408.01

Prepared by
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Groundwater Monitoring Report

Elk Mountain Landfill Brownfields Project

March 19, 2012

Evan Yurkovich

Robert W. Hastings, P.G.

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EXECUTIVE SUMMARY

The Elk Mountain Landfill Brownfields site is located in Woodfin, Buncombe County, North Carolina.

The Brownfields Agreement (Brownfields Project Number: 07007-03-11) for the site requires annual groundwater sampling of the four monitoring wells (i.e. MW-1, MW-2, MW-3, and MW-4). On February 15, 2012, groundwater samples were collected and submitted for analysis of volatile organic compounds, metals, nitrate-nitrite, ammonia, chloride, chemical oxygen demand, and total organic compounds.

A Land Use Restrictions Update (LURU) is to be submitted to the North Carolina Department of Environment and Natural Resources (DENR) Division of Waste Management Brownfields Program annually during the month of January. As part of the LURU and according to the Brownfields Agreement, this report shall be submitted to the DENR.

The groundwater analysis results were compared to the Title 15A, North Carolina Administrative Code (NCAC), Subchapter 2L standards (2L standards). Similar to the previous sampling event, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride exceeded the 2L standards in MW-2. Chromium and lead were detected and exceeded the 2L standards in all of the wells during this sampling event in February 2012.

Monitoring well MW-1 had detections of chromium and lead exceeding the 2L Standard. This monitoring well was dry during the last sampling event in May 2011 and a sample was not collected.

Certification Page

On behalf of Altamont Environmental, Inc., a firm licensed to practice both engineering (certification number C-2185) and geology (certification number C-299) in the State of North Carolina, I do hereby certify that the information contained in this report is correct and accurate to the best of my knowledge.

NORTH CAROLINA LICENSED SEAL 1336 GEOLOGIST Robert W. Hastings

Robert W. Hastings, P.G.

1.0 Introduction

The Elk Mountain Landfill Brownfields site (landfill) is located at 70 Old Beaverdam Road in Woodfin, North Carolina. The general location of the property is depicted on Figure 1. The site consists of 156-acres with three separate waste containing areas. A site map showing monitoring wells, landfill areas, site topography, and other prominent features, is included as Figure 2.

According to the Brownfields Agreement finalized on March 23, 2007 (NC Brownfields Program Project Number 07007-03-11), portions of the property were first developed in approximately 1970 as a municipal landfill. The landfill was used by the City of Asheville and closed in the early 1980s. The property is currently addressed under the Brownfields Property Reuse Act of 1997 (Brownfields Property).

As stated in paragraph 23 of the Brownfields Agreement, the Prospective Developer is required to sample groundwater monitoring wells MW-1, MW-2, MW-3, and MW-4 in conformance with the Department of Environment and Natural Resources (DENR) Inactive Hazardous Sites Branch (IHSB) Guidelines for Assessment and Cleanup. This report summarizes implementation of the Brownfields Agreement groundwater monitoring requirements and presents monitoring data for the 2012 reporting period.

2.0 Location and Geology

The Elk Mountain landfill site is located in Buncombe County North Carolina, and according to Google Earth, at the approximate latitude and longitude of 35 degrees, 38 minutes, 26 seconds north and 82 degrees, 35 minutes, 16 seconds west, respectively. The site consists of one parcel totaling approximately 156 acres. The site generally slopes to the southwest and the elevation ranges from 2,260 feet in the northern portion of the property to 1,960 feet along the southern portion of the property along Beaverdam Creek. Drainage across the site flows in a southwesterly direction toward Beaverdam Creek (see Figure 2).

According to NC Department of Environment and Natural Resources's (DENR's) *Geologic Map of North Carolina* (1985), the site is located in the Blue Ridge Physiographic Province. The bedrock in this area is comprised of the rocks of the Ashe Metamorphic Suite consisting of high-grade metamorphic marine sediments.

3.0 Groundwater Monitoring

3.1 Groundwater Measurements

Depth to water in the monitoring wells was gauged on February 15, 2012 to determine the groundwater elevation in each well. The approximate monitoring well locations are shown on Figure 2. Additionally, groundwater elevation data are summarized in Table 1.

3.2 Monitoring Well Sampling

Under the Brownfields Agreement for the property, annual monitoring of the on-site groundwater monitoring wells is required. On February 15, 2012, Altamont collected groundwater samples from monitoring wells MW-1, MW-2, MW-3, and MW-4. MW-1 was purged dry, allowed to recharge, and then a sample was collected from the well. Monitoring well MW-1 was dry during the last sampling event and was not sampled.

Prior to sampling, the monitoring wells were purged of a minimum of three well volumes or the well was purged until it was dry using disposable Teflon bailers. Table 2 summarizes field parameter measurements collected once purging was complete. Altamont's well sampling logs and equipment documentation and instrument calibration data sheet are included in Appendix A.

After purging, groundwater samples were collected, transferred to sample containers, placed in a cooler on ice, and mailed to SGS North America Inc. (SGS).

3.3 Groundwater Sample Analysis and Results

The groundwater samples were analyzed by SGS for the following:

- Volatile organic compounds (VOCs) by US Environmental Protection Agency (EPA) Method 8260B
- Metals by EPA Method 6010C
- Nitrate-Nitrite by EPA Method 353.2
- Ammonia by EPA Method 350.1
- Chloride by EPA Method 300.0
- Chemical oxygen demand (COD) by EPA 410.4
- Total organic compound (TOC) by standard method (SM) 5310-B

The laboratory analytical report and chain-of-custody form are included as Appendix B.

The analytical results, summarized in Table 3, indicate that concentrations of constituents exceeding the North Carolina Administrative Code Title 15A Subchapter 2L .0202 Groundwater Quality Standards (2L Standards) are as follows:

- Chromium and lead in MW-1
- Cis-1,2-dichloroethene, trichloroethene, vinyl chloride, chromium, and lead in MW-2 (duplicate sample was collected from MW-2 and contained the same exceedances)
- Chromium and lead in MW-3
- Chromium and lead in MW-4

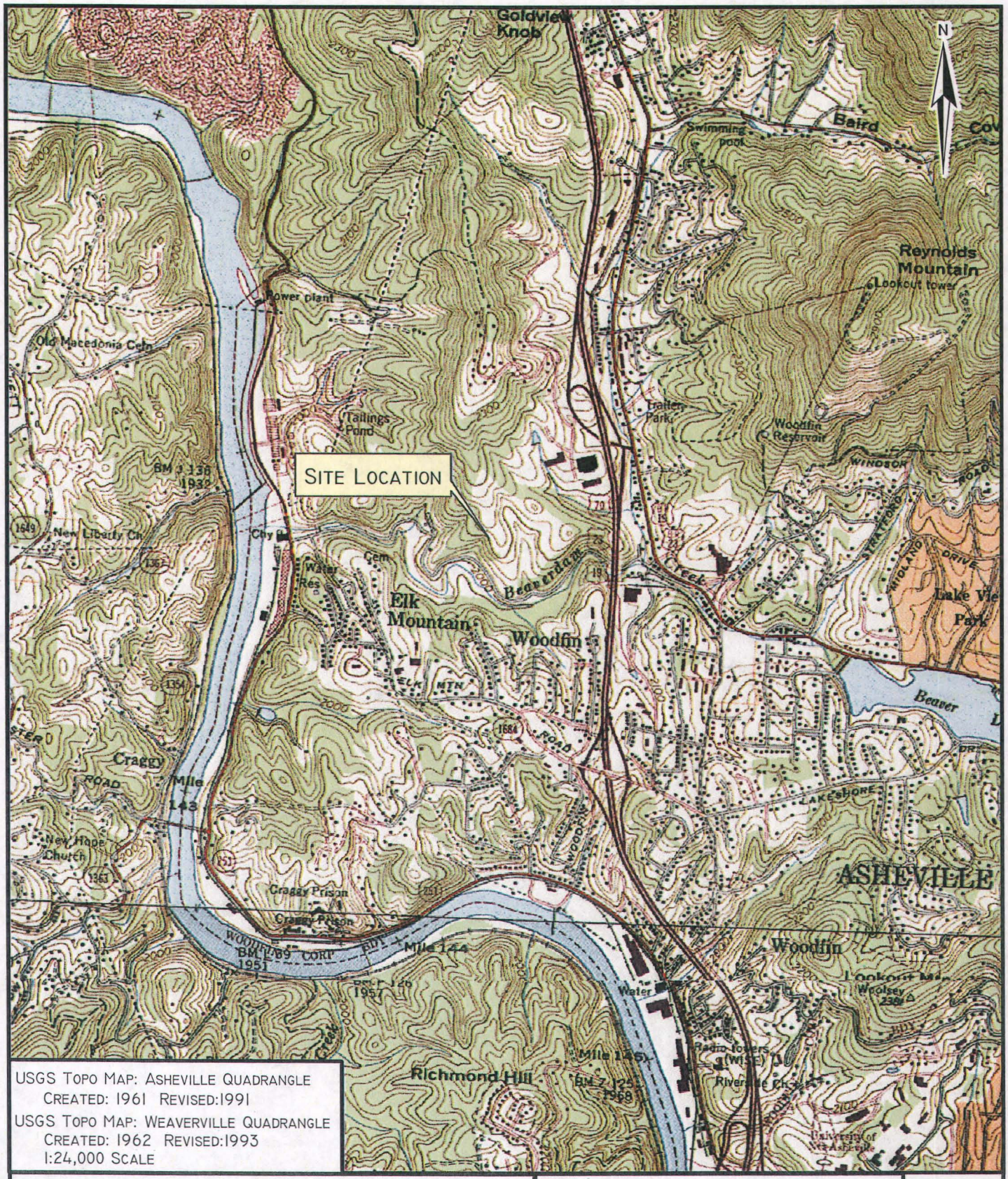
In addition to detections above the 2L Standards, in the following samples the following constituents were detected above the laboratory analytical reporting limits:

- MW-1: cis-1,2-dichloroethene, nitrogen, chloride, COD, TOC, copper, nickel, and zinc
- MW-2: ammonia, chloride, COD, TOC, copper, nickel, and zinc
- MW-3: chlorobenzene, 1,4-dichlorobenzene, ammonia, chloride, COD, TOC, copper, nickel, and zinc
- MW-4: chlorobenzene, ammonia, nitrogen, chloride, COD, TOC, copper, nickel, and zinc

3.4 Groundwater Flow Direction

Groundwater levels were collected from each of the monitoring wells prior to collecting groundwater samples. The groundwater elevation data is shown on Table 1. Based on the groundwater elevation data, the groundwater flow direction is determined to the south-southeast toward Beaverdam Creek. This groundwater flow direction is consistent with the last sampling event conducted in May 2011 and generally consistent with overall area topography.

FIGURES



USGS TOPO MAP: ASHEVILLE QUADRANGLE
CREATED: 1961 REVISED:1991
USGS TOPO MAP: WEAVERVILLE QUADRANGLE
CREATED: 1962 REVISED:1993
1:24,000 SCALE

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SITE LOCATION MAP

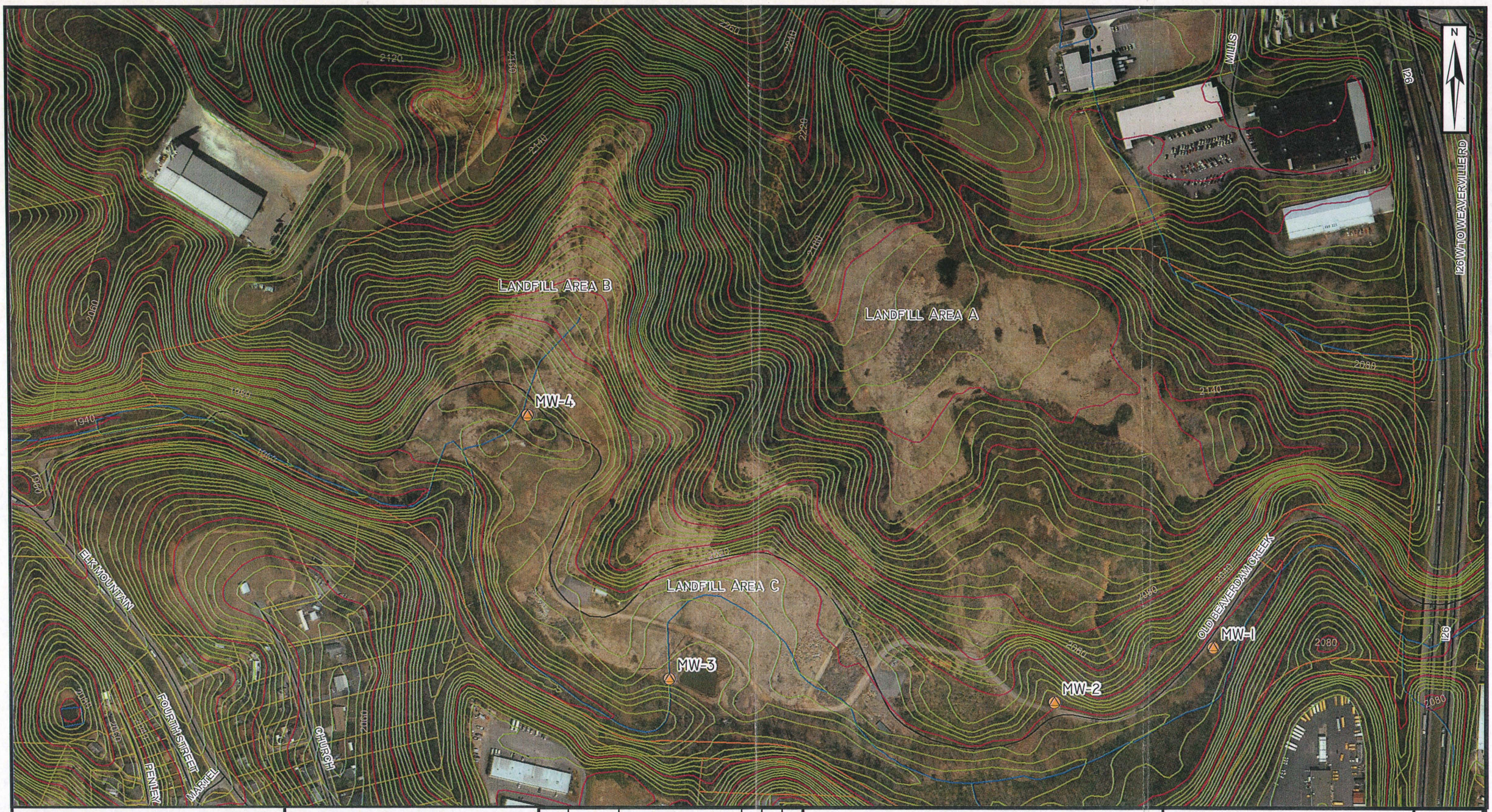
ELK MOUNTAIN LANDFILL
70 OLD BEAVERDAM CREEK ROAD
WOODFIN, NORTH CAROLINA

FIGURE
1

DRAWN BY: EVAN YURKOVICH
PROJECT MANAGER: PAUL DOW
CLIENT: LANDTECH
DATE: 2/24/2012

SCALE
0 1,000 2,000 FEET

P:\LANDTECH -2408\LURU & GW MONITORING - 2408.01\FIGURES\SITE LOCATION


N
LANDFILL AREA B
LANDFILL AREA A
LANDFILL AREA C
MW-4
MW-3
MW-2
MW-1
ELK MOUNTAIN
PENLEY
FOURTH STREET
MARTEL
CHURCH
OLD BEAVERDAM CREEK
STILLWELL
126 W. TO WEAVERVILLE RD
2120
2160
2240
2260
2220
2180
2140
2080
2060
1940
1960
1980
2000
2020
2040
2100
2080
2089
2140
2080
2080
2080

TABLES

Table 1
Groundwater Elevation Data
Elk Mountain Landfill, Woodfin, North Carolina

Well ID	Date (mm/dd/yy)	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
MW-1	05/24/11	2012.78	6.40	2006.38
	02/15/12		5.20	2007.58
MW-2	05/24/12	2012.30	3.00	2009.30
	02/15/12		2.37	2009.93
MW-3	05/23/12	1994.84	13.63	1981.21
	02/15/12		13.60	1981.24
MW-4	05/23/12	1977.04	3.10	1973.94
	02/15/12		2.51	1974.53

Notes:

1. Depth to water is measured from top of casing.
2. May 23 and 24, 2011 groundwater elevations obtained from Table 2 of the SCS Engineers July 19, 2011 *Groundwater Monitoring Report.*
3. According to the July 19, 2011 report, MW-1 was dry so the depth of water is referred to as the bottom of the monitoring well.

Table 2
Field Measurements
Elk Mountain Landfill, Woodfin, North Carolina

Well ID	Date (mm/dd/yyyy)	Sample Collection Time (hh:mm)	pH (SU)	Specific Conductivity (µS)	Temperature (°C)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)
MW-1	02/15/2012	09:15	5.86	144	8.91	9.12	244.8	788.7
MW-2	02/15/2012	10:49	6.31	619	14.25	4.14	-30.1	715.0
MW-3	02/15/2012	11:59	6.46	944	14.35	2.46	-54.2	441.0
MW-4	02/15/2012	12:58	6.57	559	13.44	2.41	-76.1	89.43

Notes:
1. Listed field parameters measured at time of sample collection.
2. SU is Standard Units.
3. µS is microsiemens.
4. °C is degrees Celsius.
5. mg/L is milligrams per liter.
6. mV is millivolts.
7. NTU is nephelometric turbidity units.

Table 3
Groundwater Analytical Results
Elk Mountain Landfill, Woodfin, North Carolina

Well ID	Date (mm/dd/yyyy)	Benzene (µg/L)	Chlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Trichloroethene (µg/L)	Vinyl Chloride (µg/L)	Nitrogen, Ammonia (mg/L)	Nitrogen (mg/L)	Chloride (mg/L)	Chemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Arsenic (µg/L)	Chromium (µg/L)	Copper (µg/L)	Lead (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Zinc (µg/L)
MW-1	02/15/2012	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.77	< 1.0	< 1.0	< 1.0	< 0.02	0.41	5.86	140	2.96	< 10.0	**54.2**	81.2	**56.0**	24.8	< 20.0	175
MW-2	05/24/2011	**1.4**	1.2	< 1.0	3.7	3.0	**198**	< 1.0	**44.3**	**25.4**	2.2	< 0.10	142	48.0	14.3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 10.0
	02/15/2012	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**222**	< 5.0	**32.3**	**19.8**	2.25	< 0.02	117	81.0	7.83	< 10.0	**77.6**	45.5	**21.7**	33.4	< 20.0	40.7
	DUP	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**221**	< 5.0	**29.1**	**18.5**	2.15	0.04	122	59.0	10.4	< 10.0	**107**	57.2	**24.1**	44.4	< 20.0	54.7
MW-3	05/23/2011	< 1.0	6.1	2.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	68.4	< 0.10	72.5	82.0	41.6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 10.0
	02/15/2012	< 1.0	6.64	3.27	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	59.7	< 0.02	50.7	221	23.7	< 10.0	**48.0**	50.9	**125**	59.9	< 20.0	933
MW-4	05/23/2011	< 1.0	1.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	11.0	< 0.10	16.5	66.0	21.6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	15.7
	DUP	< 1.0	1.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	10.6	< 0.10	17.1	48.0	21.2	5.3	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	14.9
	02/15/2012	< 1.0	1.85	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	10.9	0.02	17.8	70.2	13.7	< 10.0	**10.3**	15.6	**15.6**	39.1	< 20.0	372
2L Standard		**1**	**50**	**6**	**6**	**7**	**70**	**100**	**3**	**0.03**	**NL**	**1**	**250**	**NL**	**NL**	**10**	**10**	**1,000**	**15**	**100**	**20**	**1,000**

Notes:
1. < indicates the compound was not detected at or above the concentration shown (Pace Analytical, Inc. reporting limit).
2. **Bold** numbers indicate concentrations above the 2L Standard.
3. 2L Standard from "North Carolina Administrative Code, Title 15A: Department of Environment and Natural Resources, Subchapter 2L - Groundwater Classifications and Standards," DENR, January 2010.
4. NL indicates a 2L Standard is not listed for the compound.
5. May 23 and 24, 2011 groundwater analytical results obtained from Pace Analytical Report included in the SCS Engineers July 19, 2011 Groundwater Monitoring Report.
6. µg/L is micrograms per liter.
7. mg/L is milligrams per liter.

APPENDIX A

Monitoring Well Sampling Logs, Equipment Documentation, and Instrument Calibration Data Sheet

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WWW.ALTAMONTENVIRONMENTAL.COM

Well Sampling Log

PROJECT NAME: Elk Mountain Landfill
PROJECT NUMBER: 2408.01
SAMPLING PERSONNEL: E. Yurkovich

DATE: 2/15/2012
WEATHER: Sunny 35°
SAMPLE TIME: 915

WELL NUMBER: MW-1
WELL DIAMETER: 1"
TYPE OF CASING: PVC
MEASURING POINT: TOC
FLUSH MOUNT / STICK-UP
COMMENTS: Bailed well dry after one well volume, allowed to recharge and then collected samples

WELL DEPTH IN FEET (WD): 6.40
WATER LEVEL IN FEET (WL): 5.20
LENGTH OF WATER COLUMN: 1.20 FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: 0.0492 GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: 0.147 GALLONS
ACTUAL VOLUME PURGED: GALLONS

WELL CASING VOLUMES (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

PURGE METHOD: BAILER-DISP. BAILER-TEFLON DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-DISP. BAILER-TEFLON DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	TIME	GALLONS PURGED	TEMP (°C)	SPECIFIC COND. (µS)	DISSOLVED OXYGEN (mg/L)	pH (S.U.) *report to 0.1 S.U.*	OXIDATION REDUCTION POTENTIAL (mV)	TURBIDITY (NTU)	COMMENTS
1	initial	0.05	8.91	144	9.12	5.86	244.3	738.7	Orangish/Brown Color
2									
3									
4									
5									
6									
7									
8									
9									
10									

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
500 mL PLASTIC	2	Metals, Ammonia
250 mL PLASTIC		
125 mL PLASTIC	3	Nitrate/Nitrite, Chloride, COD
40 mL GLASS	5	VOCs 8260, TOC
1 L GLASS		
OTHER		

PROTECTIVE CASING: ok PAD: ok LOCK: NA VEGETATION: ok ACCESS: ok

Sampling Personnel Signature: [signature] Date: 2/15/12

Notes: °C = degrees Celsius
µS = micro-Siemen
mg/L = milligrams per liter
S.U. = Standard Units
mV = millivolt
NTU = nephelometric turbidity units
Samples are analyzed immediately upon collection.

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WWW.ALTAMONTENVIRONMENTAL.COM

Well Sampling Log

PROJECT NAME: Elk Mountain Landfill
PROJECT NUMBER: 2408.01
SAMPLING PERSONNEL: E. Yurkovich

DATE: 2/15/2012
WEATHER: Sunny 40°
SAMPLE TIME: 1049

WELL NUMBER: MW-2
WELL DIAMETER: 1"
TYPE OF CASING: PVC
MEASURING POINT: TOC
FLUSH MOUNT / STICK-UP
COMMENTS: Collect duplicate sample "DUP"

WELL DEPTH IN FEET (WD): 2.37
WATER LEVEL IN FEET (WL): 15.90
LENGTH OF WATER COLUMN: 13.53 FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: 0.55 GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: 1.66 GALLONS
ACTUAL VOLUME PURGED: 1.75 GALLONS

WELL CASING VOLUMES (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

PURGE METHOD: BAILER-DISP. BAILER-TEFLON DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-DISP. BAILER-TEFLON DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	TIME	GALLONS PURGED	TEMP (°C)	SPECIFIC COND. (µS)	DISSOLVED OXYGEN (mg/L)	pH (S.U.) *report to 0.1 S.U.*	OXIDATION REDUCTION POTENTIAL (mV)	TURBIDITY (NTU)	COMMENTS
1	1021	initial	13.39	583	4.92	6.27	-22.3	>1100	Orange/Brown Color
2	1029	0.75	13.74	608	4.34	6.33	-30.1	1086	
3	1038	1.25	14.74	617	3.90	6.27	-29.7	858.6	
4	1049	1.75	14.25	619	4.14	6.31	-30.1	715.0	
5									
6									
7									
8									
9									
10									

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
500 mL PLASTIC	2	Metals, Ammonia
250 mL PLASTIC		
125 mL PLASTIC	3	Nitrate/Nitrite, Chloride, COD
40 mL GLASS	5	VOCs 8260, TOC
1 L GLASS		
OTHER		

PROTECTIVE CASING: ok PAD: ok LOCK: NA VEGETATION: ok ACCESS: ok

Sampling Personnel Signature: [signature] Date: 2/15/12

Notes: °C = degrees Celsius
µS = micro-Siemen
mg/L = milligrams per liter
S.U. = Standard Units
mV = millivolt
NTU = nephelometric turbidity units
Samples are analyzed immediately upon collection.

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Well Sampling Log

PROJECT NAME: Elk Mountain Landfill
PROJECT NUMBER: 2408.01
SAMPLING PERSONNEL: E. Yurkovich

DATE: 2/15/2012
WEATHER: Sunny 45°
SAMPLE TIME: 1159

WELL NUMBER: MW-3
WELL DIAMETER: 1"
TYPE OF CASING: PVC
MEASURING POINT: TOC
FLUSH MOUNT / STICK-UP
COMMENTS:

WELL DEPTH IN FEET (WD): 19.0
WATER LEVEL IN FEET (WL): 13.60
LENGTH OF WATER COLUMN: 5.4 FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: 0.22 GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: 0.66 GALLONS
ACTUAL VOLUME PURGED: 0.75 GALLONS

WELL CASING VOLUMES (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

PURGE METHOD: BAILER-DISP. BAILER-TEFLON DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-DISP. BAILER-TEFLON DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	TIME	GALLONS PURGED	TEMP (°C)	SPECIFIC COND. (µS)	DISSOLVED OXYGEN (mg/L)	pH (S.U.) *report to 0.1 S.U.*	OXIDATION REDUCTION POTENTIAL (mV)	TURBIDITY (NTU)	COMMENTS
1	1143	Initial	16.27	935	4.21	6.49	-66.9	183.8	
2	1148	0.25	15.46	945	3.01	6.47	-65.2	528.2	Grayish/Black Color
3	1154	0.50	14.84	943	2.34	6.43	-60.7	400.3	
4	1159	0.75	14.35	944	2.46	6.46	-54.2	441.0	
5									
6									
7									
8									
9									
10									

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
500 mL PLASTIC	2	Metals, Ammonia
250 mL PLASTIC		
125 mL PLASTIC	3	Nitrate/Nitrite, Chloride, COD
40 mL GLASS	5	VOCs 8260, TOC
1 L GLASS		
OTHER		

PROTECTIVE CASING: ok PAD: ok LOCK: NA VEGETATION: ok ACCESS: ok

Sampling Personnel Signature: [signature] Date: 2/15/12

Notes: °C = degrees Celsius
µS = micro-Siemen
mg/L = milligrams per liter
S.U. = Standard Units
mV = millivolt
NTU = nephelometric turbidity units
Samples are analyzed immediately upon collection.

ALTAMONT ENVIRONMENTAL, INC.
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Well Sampling Log

PROJECT NAME: Elk Mountain Landfill
PROJECT NUMBER: 2408.01
SAMPLING PERSONNEL: E. Yurkovich

DATE: 8/15/2012
WEATHER: Sunny 50°
SAMPLE TIME: 1258

WELL NUMBER: MW-4
WELL DIAMETER: 1"
TYPE OF CASING: PVC
MEASURING POINT: TOC
FLUSH MOUNT / STICK-UP
COMMENTS: Water grayish/black color w/ slight odor

WELL DEPTH IN FEET (WD): 15.55
WATER LEVEL IN FEET (WL): 2.51
LENGTH OF WATER COLUMN: ~~15.55~~ 13.04 FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: 0.53 GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: 1.60 GALLONS
ACTUAL VOLUME PURGED: 1.75 GALLONS

WELL CASING VOLUMES (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

PURGE METHOD: BAILER-DISP. ~~BAILER-TEFLON~~ DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-DISP. BAILER-TEFLON DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	TIME	GALLONS PURGED	TEMP (°C)	SPECIFIC COND. (µS)	DISSOLVED OXYGEN (mg/L)	pH (S.U.) report to 0.1 S.U.	OXIDATION REDUCTION POTENTIAL (mV)	TURBIDITY (NTU)	COMMENTS
1	1231	initial	15.77	514	2.62	6.88	-77.6	129.8	
2	1240	0.50	12.54	551	2.31	6.48	-101.4	256.7	Foamy
3	1249	1.0	13.22	559	2.56	6.20	-79.8	159.4	Greyish Black Color
4	1258	1.75	13.44	559	2.41	6.57	-76.1	89.43	
5									
6									
7									
8									
9									
10									

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
500 mL PLASTIC	2	Metals, Ammonia
250 mL PLASTIC		
125 mL PLASTIC	3	Nitrate/Nitrite, Chloride, COD
40 mL GLASS	5	VOCs 8260, TOC
1 L GLASS		
OTHER		

PROTECTIVE CASING: ok PAD: ok LOCK: NA VEGETATION: ok ACCESS: ok

Sampling Personnel Signature: [signature] Date: 8/15/12

Notes: °C = degrees Celsius
µS = micro-Siemen
mg/L = milligrams per liter
S.U. = Standard Units
mV = millivolt
NTU = nephelometric turbidity units
Samples are analyzed immediately upon collection.

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Equipment Documentation & Instrument Calibration Data Sheet

	Calibration Documentation
Project Name: Elk Mountain Landfill	Person Conducting Calibration: E. Yurkovich
Project Number: 2408.01	Date of Calibration: 2/15/2012
Project Location: Woodfin, NC	Date of Field Measurements: 2/15/2012

Equipment Documentation

Equipment or meters used to take measurements (e.g. water level meters, survey equipment, etc.):

Equipment Type	Serial Number	Brand	Date of Use
150-ft Water Level	26154	Solinist	
150-ft Water Level	22754	Solinist	
150-ft Water Level	150	Testwell	
150-ft Drawdown	MP30-1527	QED	
Other			

Micro TPW Turbidity Meter

Calibration Standards Exp Date	Instrument Serial #	Instrument Reading		
		0.02 NTU	10.0 NTU	1000 NTU
August 2013	200601045	Initial: 0.14	Initial: 9.72	Initial: 960.1
		Cal: 0.02	Cal: 10.06	Cal: 1010
		Time: 880	Time: 881	Time: 882

YSI 556 Multiparameter Meter

Instrument Serial Number	07D100979						
Instrument Readings							Calibration Expiration Date
Dissolved Oxygen	Initial: 7.99	Cal: 8.55	mmHg: 709.2	Time: 806			NA
QC*	AM Time:	Meas:	Mid Day Time:	Check:	PM Time:	Check:	NA
pH 7 S.U. *report to 0.1 S.U.*	Initial: 7.13	pHmV:	Cal: 7.00	pHmV:	Time: 811		June 2013
pH 4 S.U. *report to 0.1 S.U.*	Initial: 3.94	pHmV:	Cal: 4.00	pHmV:	Time: 814		April 2013
pH 10 S.U. *report to 0.1 S.U.*	Initial: 10.02	pHmV:	Cal: 10.00	pHmV:	Time: 817		Sept 2012
QC* pH 7 S.U. *report to 0.1 S.U.*	AM Time: 822	Meas: 6.99	Mid Day Time:	Check:	PM Time:	Check:	June 2013
Spec. Cond. 447/84/23 mS**	Initial: 6.08	Cal: 447	Time: 808				June 2012
QC* 84 mS	AM Time: 824	Meas: 84	Mid Day Time:	Check:	PM Time:	Check:	April 2012
ORP 200 mV	Initial: 191.1	Cal: 200.0	Time: 820				Feb 2012

Comments:

Signature: Date: 2/15/12

Notes:

1. Electronic equipment calibrated according to the manufacturer's operation manual.
2. Specific Conductivity should be calibrated according to values representative of historic range.
3. Order of Calibration is as follows : Specific Conductivity, pH 7, pH 4, pH 10, ORP, QC checks.
4. QC Acceptable Ranges: pH +/- 0.1 S.U. and Specific Conductivity 10% of the true value. If readings are out of these ranges, meter needs to be recalibrated.
5. * Indicates that a QC check must be performed in the morning, afternoon, and the end of the day, or every four hours.
6. ** Indicates to choose a Specific Conductivity buffer of 447, 84, or 23 mS which is closest to historical readings from the project location.

APPENDIX B

Groundwater Sampling Laboratory Analytical Report and Chain-of-Custody Form

SGS

Laboratory Report of Analysis

To: Evan Yurkovich
Altamont Environmental, Inc.
231 Haywood Street
Asheville, NC 28801

Report Number: **31200399**

Client Project: **Elk Mountain Landfill 2408.01**

Dear Evan Yurkovich,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Michael D. Page at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

Digitally signed by: Michael Page
Date: 2012.02.29 09:26:47 -05'00'

Michael D. Page
Project Manager
michael.page@sgs.com

Date

Print Date: 02/28/2012

N.C. Certification # 481

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Laboratory Qualifiers

Report Definitions

DL	Method, Instrument, or Estimated Detection Limit per Analytical Method
CL	Control Limits for the recovery result of a parameter
LOQ	Reporting Limit
DF	Dilution Factor
RPD	Relative Percent Difference
LCS(D)	Laboratory Control Spike (Duplicate)
MS(D)	Matrix Spike (Duplicate)
MB	Method Blank

Qualifier Definitions

*	Recovery or RPD outside of control limits
B	Analyte was detected in the Lab Method Blank at a level above the LOQ
U	Undetected (Reported as ND or < DL)
V	Recovery is below quality control limit. The data has been validated based on a favorable signal-to-noise and detection limit
A	Amount detected is less than the Lower Method Calibration Limit
J	Estimated Concentration.
O	The recovery of this analyte in the OPR is above the Method QC Limits and the reported concentration in the sample may be biased high
E	Amount detected is greater than the Upper Calibration Limit
S	The amount of analyte present has saturated the detector. This situation results in an underestimation of the affected analyte(s)
Q	Indicates the presence of a quantitative interference. This situation may result in an underestimation of the affected analyte(s)
I	Indicates the presence of a qualitative interference that could cause a false positive or an overestimation of the affected analyte(s)
DPE	Indicates the presence of a peak in the polychlorinated diphenylether channel that could cause a false positive or an overestimation of the affected analyte(s)
TIC	Tentatively Identified Compound
EMPC	Estimated Maximum possible Concentration due to ion ratio failure
ND	Not Detected
K	Result is estimated due to ion ratio failure in High Resolution PCB Analysis
P	RPD > 40% between results of dual columns
D	Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration range

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1	Mis-identified peak
M2	Software did not integrate peak
M3	Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one)
M4	Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane)
M5	Other - Explained in case narrative

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

SGS North America Inc.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
MW-1	31200399001	02/15/2012 09:15	02/16/2012 09:45	Water
MW-2	31200399002	02/15/2012 10:49	02/16/2012 09:45	Water
MW-3	31200399003	02/15/2012 11:59	02/16/2012 09:45	Water
MW-4	31200399004	02/15/2012 12:58	02/16/2012 09:45	Water
DUP	31200399005	02/15/2012 00:00	02/16/2012 09:45	Water
Trip Blank Lab	31200399006	02/15/2012 00:00	02/16/2012 09:45	Water

Print Date: 02/28/2012

N.C. Certification # 481

Case Narrative

MB for HBN 19950 [VXX/2788]

8260B - The LMB (water LMB; VMS1926) associated with batch VMS1926 has a reported concentration for Methyl Iodide. All of the associated samples are ND for this analyte.

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Results of **MW-1**

Client Sample ID: **MW-1**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399001-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 09:15
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND		1.00	ug/L	1	02/17/2012 19:06
1,1,1-Trichloroethane	ND		1.00	ug/L	1	02/17/2012 19:06
1,1,2,2-Tetrachloroethane	ND		1.00	ug/L	1	02/17/2012 19:06
1,1,2-Trichloroethane	ND		1.00	ug/L	1	02/17/2012 19:06
1,1-Dichloroethane	ND		1.00	ug/L	1	02/17/2012 19:06
1,1-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 19:06
1,1-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 19:06
1,2,3-Trichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:06
1,2,3-Trichloropropane	ND		1.00	ug/L	1	02/17/2012 19:06
1,2,4-Trichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:06
1,2,4-Trimethylbenzene	ND		1.00	ug/L	1	02/17/2012 19:06
1,2-Dibromo-3-chloropropane	ND		5.00	ug/L	1	02/17/2012 19:06
1,2-Dibromoethane	ND		1.00	ug/L	1	02/17/2012 19:06
1,2-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:06
1,2-Dichloroethane	ND		1.00	ug/L	1	02/17/2012 19:06
1,2-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 19:06
1,3,5-Trimethylbenzene	ND		1.00	ug/L	1	02/17/2012 19:06
1,3-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:06
1,3-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 19:06
1,4-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:06
2,2-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 19:06
2-Butanone	ND		25.0	ug/L	1	02/17/2012 19:06
2-Chlorotoluene	ND		1.00	ug/L	1	02/17/2012 19:06
2-Hexanone	ND		5.00	ug/L	1	02/17/2012 19:06
4-Chlorotoluene	ND		1.00	ug/L	1	02/17/2012 19:06
4-Isopropyltoluene	ND		1.00	ug/L	1	02/17/2012 19:06
4-Methyl-2-pentanone	ND		5.00	ug/L	1	02/17/2012 19:06
Acetone	ND		25.0	ug/L	1	02/17/2012 19:06
Benzene	ND		1.00	ug/L	1	02/17/2012 19:06
Bromobenzene	ND		1.00	ug/L	1	02/17/2012 19:06
Bromochloromethane	ND		1.00	ug/L	1	02/17/2012 19:06
Bromodichloromethane	ND		1.00	ug/L	1	02/17/2012 19:06
Bromoform	ND		1.00	ug/L	1	02/17/2012 19:06
Bromomethane	ND		1.00	ug/L	1	02/17/2012 19:06
n-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 19:06
Carbon disulfide	ND		1.00	ug/L	1	02/17/2012 19:06
Carbon tetrachloride	ND		1.00	ug/L	1	02/17/2012 19:06
Chlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:06
Chloroethane	ND		1.00	ug/L	1	02/17/2012 19:06
Chloroform	ND		1.00	ug/L	1	02/17/2012 19:06
Chloromethane	ND		1.00	ug/L	1	02/17/2012 19:06
Dibromochloromethane	ND		1.00	ug/L	1	02/17/2012 19:06
Dibromomethane	ND		1.00	ug/L	1	02/17/2012 19:06

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of MW-1

Client Sample ID: **MW-1**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399001-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 09:15
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND		5.00	ug/L	1	02/17/2012 19:06
cis-1,3-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 19:06
trans-1,3-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 19:06
Diisopropyl Ether	ND		1.00	ug/L	1	02/17/2012 19:06
Ethyl Benzene	ND		1.00	ug/L	1	02/17/2012 19:06
Hexachlorobutadiene	ND		1.00	ug/L	1	02/17/2012 19:06
Isopropylbenzene (Cumene)	ND		1.00	ug/L	1	02/17/2012 19:06
Methyl iodide	ND		1.00	ug/L	1	02/17/2012 19:06
Methylene chloride	ND		5.00	ug/L	1	02/17/2012 19:06
Naphthalene	ND		1.00	ug/L	1	02/17/2012 19:06
Styrene	ND		1.00	ug/L	1	02/17/2012 19:06
Tetrachloroethene	ND		1.00	ug/L	1	02/17/2012 19:06
Toluene	ND		1.00	ug/L	1	02/17/2012 19:06
Trichloroethene	ND		1.00	ug/L	1	02/17/2012 19:06
Trichlorofluoromethane	ND		1.00	ug/L	1	02/17/2012 19:06
Vinyl chloride	ND		1.00	ug/L	1	02/17/2012 19:06
cis-1,2-Dichloroethene	**2.77**		1.00	ug/L	1	02/17/2012 19:06
m,p-Xylene	ND		2.00	ug/L	1	02/17/2012 19:06
n-Propylbenzene	ND		1.00	ug/L	1	02/17/2012 19:06
o-Xylene	ND		1.00	ug/L	1	02/17/2012 19:06
sec-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 19:06
tert-Butyl methyl ether (MTBE)	ND		1.00	ug/L	1	02/17/2012 19:06
tert-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 19:06
trans-1,2-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 19:06
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L	1	02/17/2012 19:06
Surrogates						
1,2-Dichloroethane-d4	98.0		64.0-140	%	1	02/17/2012 19:06
4-Bromofluorobenzene	101		85.0-115	%	1	02/17/2012 19:06
Toluene d8	100		82.0-117	%	1	02/17/2012 19:06

Batch Information

Analytical Batch: **VMS1926**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **02/17/2012 19:06**

Prep Batch: **VXX2788**
Prep Method: **SW-846 5030B**
Prep Date/Time: **02/17/2012 11:51**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

N.C. Certification # 481

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Results of MW-1

Client Sample ID: **MW-1**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399001-F
Lab Project ID: 31200399

Collection Date: 02/15/2012 09:15
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SW-846 6010C

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Arsenic	ND		0.0100	mg/L	1	02/20/2012 12:40
Chromium	**0.0542**		0.0100	mg/L	1	02/20/2012 12:40
Copper	**0.0812**		0.0100	mg/L	1	02/20/2012 12:40
Lead	**0.0560**		0.0100	mg/L	1	02/20/2012 12:40
Nickel	**0.0248**		0.0100	mg/L	1	02/20/2012 12:40
Selenium	ND		0.0200	mg/L	1	02/20/2012 12:40
Zinc	**0.175**		0.0200	mg/L	1	02/20/2012 12:40

Batch Information

Analytical Batch: **MIP1429**
Analytical Method: **SW-846 6010C**
Instrument: **ICP1**
Analyst: **PSW**
Analytical Date/Time: **02/20/2012 12:40**

Prep Batch: **MXX1807**
Prep Method: **SW-846 3010A**
Prep Date/Time: **02/17/2012 10:47**
Prep Initial Wt./Vol.: **50 mL**
Prep Extract Vol: **50 mL**

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **MW-1**

Client Sample ID: **MW-1**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399001-I
Lab Project ID: 31200399

Collection Date: 02/15/2012 09:15
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 300.0**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Chloride	**5.86**		0.300	mg/L	1	02/17/2012 13:17

Batch Information

Analytical Batch: **INO1482**
Analytical Method: **EPA 300.0**
Instrument: **IC1**
Analyst: **PSW**
Analytical Date/Time: **02/17/2012 13:17**

Prep Batch: **INO1482**
Prep Method: **EPA 300.0**
Prep Date/Time: **02/17/2012 13:17**
Prep Initial Wt./Vol.: **10 mL**
Prep Extract Vol: **10 mL**

Print Date: 02/28/2012

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Results of MW-1

Client Sample ID: **MW-1**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399001-D
Lab Project ID: 31200399

Collection Date: 02/15/2012 09:15
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SM 5310-B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Total Organic Carbon	**2.96**		0.500	mg/L	1	02/27/2012 17:02

Batch Information

Analytical Batch: **INO1496**
Analytical Method: **SM 5310-B**
Instrument: **TOC1**
Analyst: **NTM**
Analytical Date/Time: **02/27/2012 17:02**

Prep Batch: **INO1496**
Prep Method: **SM 5310-B**
Prep Date/Time: **02/27/2012 17:02**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of **MW-1**

Client Sample ID: **MW-1**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399001-H
Lab Project ID: 31200399

Collection Date: 02/15/2012 09:15
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 350.1 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Ammonia	<0.02			mg/L	1	02/23/2012 13:45

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:45**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

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Results of **MW-1**

Client Sample ID: **MW-1**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399001-G
Lab Project ID: 31200399

Collection Date: 02/15/2012 09:15
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 353.2 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Nitrate + Nitrite as N	**0.41**			mg/L	1	02/23/2012 13:47

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:47**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **MW-1**

Client Sample ID: **MW-1**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399001-J
Lab Project ID: 31200399

Collection Date: 02/15/2012 09:15
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 410.4 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
COD	**140**			mg/L	1	02/21/2012 8:41

Laboratory: **TriTest**
Analytical Date/Time: **02/21/2012 08:41**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **MW-2**

Client Sample ID: **MW-2**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399002-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 10:49
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND		5.00	ug/L	5	02/17/2012 20:22
1,1,1-Trichloroethane	ND		5.00	ug/L	5	02/17/2012 20:22
1,1,2,2-Tetrachloroethane	ND		5.00	ug/L	5	02/17/2012 20:22
1,1,2-Trichloroethane	ND		5.00	ug/L	5	02/17/2012 20:22
1,1-Dichloroethane	ND		5.00	ug/L	5	02/17/2012 20:22
1,1-Dichloroethene	ND		5.00	ug/L	5	02/17/2012 20:22
1,1-Dichloropropene	ND		5.00	ug/L	5	02/17/2012 20:22
1,2,3-Trichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:22
1,2,3-Trichloropropane	ND		5.00	ug/L	5	02/17/2012 20:22
1,2,4-Trichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:22
1,2,4-Trimethylbenzene	ND		5.00	ug/L	5	02/17/2012 20:22
1,2-Dibromo-3-chloropropane	ND		25.0	ug/L	5	02/17/2012 20:22
1,2-Dibromoethane	ND		5.00	ug/L	5	02/17/2012 20:22
1,2-Dichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:22
1,2-Dichloroethane	ND		5.00	ug/L	5	02/17/2012 20:22
1,2-Dichloropropane	ND		5.00	ug/L	5	02/17/2012 20:22
1,3,5-Trimethylbenzene	ND		5.00	ug/L	5	02/17/2012 20:22
1,3-Dichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:22
1,3-Dichloropropane	ND		5.00	ug/L	5	02/17/2012 20:22
1,4-Dichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:22
2,2-Dichloropropane	ND		5.00	ug/L	5	02/17/2012 20:22
2-Butanone	ND		125	ug/L	5	02/17/2012 20:22
2-Chlorotoluene	ND		5.00	ug/L	5	02/17/2012 20:22
2-Hexanone	ND		25.0	ug/L	5	02/17/2012 20:22
4-Chlorotoluene	ND		5.00	ug/L	5	02/17/2012 20:22
4-Isopropyltoluene	ND		5.00	ug/L	5	02/17/2012 20:22
4-Methyl-2-pentanone	ND		25.0	ug/L	5	02/17/2012 20:22
Acetone	ND		125	ug/L	5	02/17/2012 20:22
Benzene	ND		5.00	ug/L	5	02/17/2012 20:22
Bromobenzene	ND		5.00	ug/L	5	02/17/2012 20:22
Bromochloromethane	ND		5.00	ug/L	5	02/17/2012 20:22
Bromodichloromethane	ND		5.00	ug/L	5	02/17/2012 20:22
Bromoform	ND		5.00	ug/L	5	02/17/2012 20:22
Bromomethane	ND		5.00	ug/L	5	02/17/2012 20:22
n-Butylbenzene	ND		5.00	ug/L	5	02/17/2012 20:22
Carbon disulfide	ND		5.00	ug/L	5	02/17/2012 20:22
Carbon tetrachloride	ND		5.00	ug/L	5	02/17/2012 20:22
Chlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:22
Chloroethane	ND		5.00	ug/L	5	02/17/2012 20:22
Chloroform	ND		5.00	ug/L	5	02/17/2012 20:22
Chloromethane	ND		5.00	ug/L	5	02/17/2012 20:22
Dibromochloromethane	ND		5.00	ug/L	5	02/17/2012 20:22
Dibromomethane	ND		5.00	ug/L	5	02/17/2012 20:22

Print Date: 02/28/2012

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Results of MW-2

Client Sample ID: **MW-2**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399002-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 10:49
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND		25.0	ug/L	5	02/17/2012 20:22
cis-1,3-Dichloropropene	ND		5.00	ug/L	5	02/17/2012 20:22
trans-1,3-Dichloropropene	ND		5.00	ug/L	5	02/17/2012 20:22
Diisopropyl Ether	ND		5.00	ug/L	5	02/17/2012 20:22
Ethyl Benzene	ND		5.00	ug/L	5	02/17/2012 20:22
Hexachlorobutadiene	ND		5.00	ug/L	5	02/17/2012 20:22
Isopropylbenzene (Cumene)	ND		5.00	ug/L	5	02/17/2012 20:22
Methyl iodide	ND		5.00	ug/L	5	02/17/2012 20:22
Methylene chloride	ND		25.0	ug/L	5	02/17/2012 20:22
Naphthalene	ND		5.00	ug/L	5	02/17/2012 20:22
Styrene	ND		5.00	ug/L	5	02/17/2012 20:22
Tetrachloroethene	ND		5.00	ug/L	5	02/17/2012 20:22
Toluene	ND		5.00	ug/L	5	02/17/2012 20:22
Trichloroethene	**32.3**		5.00	ug/L	5	02/17/2012 20:22
Trichlorofluoromethane	ND		5.00	ug/L	5	02/17/2012 20:22
Vinyl chloride	**19.8**		5.00	ug/L	5	02/17/2012 20:22
cis-1,2-Dichloroethene	**222**		5.00	ug/L	5	02/17/2012 20:22
m,p-Xylene	ND		10.0	ug/L	5	02/17/2012 20:22
n-Propylbenzene	ND		5.00	ug/L	5	02/17/2012 20:22
o-Xylene	ND		5.00	ug/L	5	02/17/2012 20:22
sec-Butylbenzene	ND		5.00	ug/L	5	02/17/2012 20:22
tert-Butyl methyl ether (MTBE)	ND		5.00	ug/L	5	02/17/2012 20:22
tert-Butylbenzene	ND		5.00	ug/L	5	02/17/2012 20:22
trans-1,2-Dichloroethene	ND		5.00	ug/L	5	02/17/2012 20:22
trans-1,4-Dichloro-2-butene	ND		25.0	ug/L	5	02/17/2012 20:22
Surrogates						
1,2-Dichloroethane-d4	97.0		64.0-140	%	5	02/17/2012 20:22
4-Bromofluorobenzene	101		85.0-115	%	5	02/17/2012 20:22
Toluene d8	100		82.0-117	%	5	02/17/2012 20:22

Batch Information

Analytical Batch: **VMS1926**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **02/17/2012 20:22**

Prep Batch: **VXX2788**
Prep Method: **SW-846 5030B**
Prep Date/Time: **02/17/2012 11:51**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

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Results of MW-2

Client Sample ID: **MW-2**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399002-F
Lab Project ID: 31200399

Collection Date: 02/15/2012 10:49
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SW-846 6010C

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Arsenic	ND		0.0100	mg/L	1	02/20/2012 13:01
Chromium	**0.0776**		0.0100	mg/L	1	02/20/2012 13:01
Copper	**0.0455**		0.0100	mg/L	1	02/20/2012 13:01
Lead	**0.0217**		0.0100	mg/L	1	02/20/2012 13:01
Nickel	**0.0334**		0.0100	mg/L	1	02/20/2012 13:01
Selenium	ND		0.0200	mg/L	1	02/20/2012 13:01
Zinc	**0.0407**		0.0200	mg/L	1	02/20/2012 13:01

Batch Information

Analytical Batch: **MIP1429**
Analytical Method: **SW-846 6010C**
Instrument: **ICP1**
Analyst: **PSW**
Analytical Date/Time: **02/20/2012 13:01**

Prep Batch: **MXX1807**
Prep Method: **SW-846 3010A**
Prep Date/Time: **02/17/2012 10:47**
Prep Initial Wt./Vol.: **50 mL**
Prep Extract Vol: **50 mL**

Print Date: 02/28/2012

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Results of MW-2

Client Sample ID: **MW-2**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399002-I
Lab Project ID: 31200399

Collection Date: 02/15/2012 10:49
Received Date: 02/16/2012 09:45
Matrix: Water

Results by EPA 300.0

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Chloride	**117**		3.00	mg/L	10	02/27/2012 14:38

Batch Information

Analytical Batch: **INO1493**
Analytical Method: **EPA 300.0**
Instrument: **IC1**
Analyst: **PSW**
Analytical Date/Time: **02/27/2012 14:38**

Prep Batch: **INO1493**
Prep Method: **EPA 300.0**
Prep Date/Time: **02/27/2012 14:38**
Prep Initial Wt./Vol.: **10 mL**
Prep Extract Vol: **10 mL**

Print Date: 02/28/2012

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Results of MW-2

Client Sample ID: **MW-2**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399002-D
Lab Project ID: 31200399

Collection Date: 02/15/2012 10:49
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SM 5310-B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Total Organic Carbon	**7.83**		0.500	mg/L	1	02/27/2012 18:01

Batch Information

Analytical Batch: **INO1496**
Analytical Method: **SM 5310-B**
Instrument: **TOC1**
Analyst: **NTM**
Analytical Date/Time: **02/27/2012 18:01**

Prep Batch: **INO1496**
Prep Method: **SM 5310-B**
Prep Date/Time: **02/27/2012 18:01**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

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Results of **MW-2**

Client Sample ID: **MW-2**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399002-H
Lab Project ID: 31200399

Collection Date: 02/15/2012 10:49
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 350.1 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Ammonia	**2.25**			mg/L	1	02/23/2012 13:45

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:45**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

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Results of **MW-2**

Client Sample ID: **MW-2**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399002-G
Lab Project ID: 31200399

Collection Date: 02/15/2012 10:49
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 353.2 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Nitrate + Nitrite as N	<0.02			mg/L	1	02/23/2012 13:47

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:47**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

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Results of **MW-2**

Client Sample ID: **MW-2**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399002-J
Lab Project ID: 31200399

Collection Date: 02/15/2012 10:49
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 410.4 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
COD	**81.0**			mg/L	1	02/21/2012 8:41

Laboratory: **TriTest**
Analytical Date/Time: **02/21/2012 08:41**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

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Results of **MW-3**

Client Sample ID: **MW-3**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399003-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 11:59
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND		1.00	ug/L	1	02/17/2012 19:31
1,1,1-Trichloroethane	ND		1.00	ug/L	1	02/17/2012 19:31
1,1,2,2-Tetrachloroethane	ND		1.00	ug/L	1	02/17/2012 19:31
1,1,2-Trichloroethane	ND		1.00	ug/L	1	02/17/2012 19:31
1,1-Dichloroethane	ND		1.00	ug/L	1	02/17/2012 19:31
1,1-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 19:31
1,1-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 19:31
1,2,3-Trichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:31
1,2,3-Trichloropropane	ND		1.00	ug/L	1	02/17/2012 19:31
1,2,4-Trichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:31
1,2,4-Trimethylbenzene	ND		1.00	ug/L	1	02/17/2012 19:31
1,2-Dibromo-3-chloropropane	ND		5.00	ug/L	1	02/17/2012 19:31
1,2-Dibromoethane	ND		1.00	ug/L	1	02/17/2012 19:31
1,2-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:31
1,2-Dichloroethane	ND		1.00	ug/L	1	02/17/2012 19:31
1,2-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 19:31
1,3,5-Trimethylbenzene	ND		1.00	ug/L	1	02/17/2012 19:31
1,3-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:31
1,3-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 19:31
1,4-Dichlorobenzene	**3.27**		1.00	ug/L	1	02/17/2012 19:31
2,2-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 19:31
2-Butanone	ND		25.0	ug/L	1	02/17/2012 19:31
2-Chlorotoluene	ND		1.00	ug/L	1	02/17/2012 19:31
2-Hexanone	ND		5.00	ug/L	1	02/17/2012 19:31
4-Chlorotoluene	ND		1.00	ug/L	1	02/17/2012 19:31
4-Isopropyltoluene	ND		1.00	ug/L	1	02/17/2012 19:31
4-Methyl-2-pentanone	ND		5.00	ug/L	1	02/17/2012 19:31
Acetone	ND		25.0	ug/L	1	02/17/2012 19:31
Benzene	ND		1.00	ug/L	1	02/17/2012 19:31
Bromobenzene	ND		1.00	ug/L	1	02/17/2012 19:31
Bromochloromethane	ND		1.00	ug/L	1	02/17/2012 19:31
Bromodichloromethane	ND		1.00	ug/L	1	02/17/2012 19:31
Bromoform	ND		1.00	ug/L	1	02/17/2012 19:31
Bromomethane	ND		1.00	ug/L	1	02/17/2012 19:31
n-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 19:31
Carbon disulfide	ND		1.00	ug/L	1	02/17/2012 19:31
Carbon tetrachloride	ND		1.00	ug/L	1	02/17/2012 19:31
Chlorobenzene	**6.64**		1.00	ug/L	1	02/17/2012 19:31
Chloroethane	ND		1.00	ug/L	1	02/17/2012 19:31
Chloroform	ND		1.00	ug/L	1	02/17/2012 19:31
Chloromethane	ND		1.00	ug/L	1	02/17/2012 19:31
Dibromochloromethane	ND		1.00	ug/L	1	02/17/2012 19:31
Dibromomethane	ND		1.00	ug/L	1	02/17/2012 19:31

Print Date: 02/28/2012

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Results of MW-3

Client Sample ID: **MW-3**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399003-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 11:59
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND		5.00	ug/L	1	02/17/2012 19:31
cis-1,3-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 19:31
trans-1,3-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 19:31
Diisopropyl Ether	ND		1.00	ug/L	1	02/17/2012 19:31
Ethyl Benzene	ND		1.00	ug/L	1	02/17/2012 19:31
Hexachlorobutadiene	ND		1.00	ug/L	1	02/17/2012 19:31
Isopropylbenzene (Cumene)	ND		1.00	ug/L	1	02/17/2012 19:31
Methyl iodide	ND		1.00	ug/L	1	02/17/2012 19:31
Methylene chloride	ND		5.00	ug/L	1	02/17/2012 19:31
Naphthalene	ND		1.00	ug/L	1	02/17/2012 19:31
Styrene	ND		1.00	ug/L	1	02/17/2012 19:31
Tetrachloroethene	ND		1.00	ug/L	1	02/17/2012 19:31
Toluene	ND		1.00	ug/L	1	02/17/2012 19:31
Trichloroethene	ND		1.00	ug/L	1	02/17/2012 19:31
Trichlorofluoromethane	ND		1.00	ug/L	1	02/17/2012 19:31
Vinyl chloride	ND		1.00	ug/L	1	02/17/2012 19:31
cis-1,2-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 19:31
m,p-Xylene	ND		2.00	ug/L	1	02/17/2012 19:31
n-Propylbenzene	ND		1.00	ug/L	1	02/17/2012 19:31
o-Xylene	ND		1.00	ug/L	1	02/17/2012 19:31
sec-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 19:31
tert-Butyl methyl ether (MTBE)	ND		1.00	ug/L	1	02/17/2012 19:31
tert-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 19:31
trans-1,2-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 19:31
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L	1	02/17/2012 19:31
Surrogates						
1,2-Dichloroethane-d4	98.0		64.0-140	%	1	02/17/2012 19:31
4-Bromofluorobenzene	100		85.0-115	%	1	02/17/2012 19:31
Toluene d8	102		82.0-117	%	1	02/17/2012 19:31

Batch Information

Analytical Batch: **VMS1926**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **02/17/2012 19:31**

Prep Batch: **VXX2788**
Prep Method: **SW-846 5030B**
Prep Date/Time: **02/17/2012 11:51**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

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Results of MW-3

Client Sample ID: **MW-3**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399003-F
Lab Project ID: 31200399

Collection Date: 02/15/2012 11:59
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SW-846 6010C

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Arsenic	ND		0.0100	mg/L	1	02/20/2012 13:07
Chromium	**0.0480**		0.0100	mg/L	1	02/20/2012 13:07
Copper	**0.0509**		0.0100	mg/L	1	02/20/2012 13:07
Lead	**0.125**		0.0100	mg/L	1	02/20/2012 13:07
Nickel	**0.0599**		0.0100	mg/L	1	02/20/2012 13:07
Selenium	ND		0.0200	mg/L	1	02/20/2012 13:07
Zinc	**0.933**		0.0200	mg/L	1	02/20/2012 13:07

Batch Information

Analytical Batch: **MIP1429**
Analytical Method: **SW-846 6010C**
Instrument: **ICP1**
Analyst: **PSW**
Analytical Date/Time: **02/20/2012 13:07**

Prep Batch: **MXX1807**
Prep Method: **SW-846 3010A**
Prep Date/Time: **02/17/2012 10:47**
Prep Initial Wt./Vol.: **50 mL**
Prep Extract Vol: **50 mL**

Print Date: 02/28/2012

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Results of MW-3

Client Sample ID: **MW-3**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399003-I
Lab Project ID: 31200399

Collection Date: 02/15/2012 11:59
Received Date: 02/16/2012 09:45
Matrix: Water

Results by EPA 300.0

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Chloride	**50.7**		3.00	mg/L	10	02/27/2012 16:19

Batch Information

Analytical Batch: **INO1493**
Analytical Method: **EPA 300.0**
Instrument: **IC1**
Analyst: **PSW**
Analytical Date/Time: **02/27/2012 16:19**

Prep Batch: **INO1493**
Prep Method: **EPA 300.0**
Prep Date/Time: **02/27/2012 16:19**
Prep Initial Wt./Vol.: **10 mL**
Prep Extract Vol: **10 mL**

Print Date: 02/28/2012

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Results of **MW-3**

Client Sample ID: **MW-3**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399003-D
Lab Project ID: 31200399

Collection Date: 02/15/2012 11:59
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **SM 5310-B**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Total Organic Carbon	**23.7**		0.500	mg/L	1	02/27/2012 18:19

Batch Information

Analytical Batch: **INO1496**
Analytical Method: **SM 5310-B**
Instrument: **TOC1**
Analyst: **NTM**
Analytical Date/Time: **02/27/2012 18:19**

Prep Batch: **INO1496**
Prep Method: **SM 5310-B**
Prep Date/Time: **02/27/2012 18:19**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

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Results of **MW-3**

Client Sample ID: **MW-3**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399003-H
Lab Project ID: 31200399

Collection Date: 02/15/2012 11:59
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 350.1 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Ammonia	**59.7**			mg/L	1	02/23/2012 13:45

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:45**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

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Results of **MW-3**

Client Sample ID: **MW-3**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399003-G
Lab Project ID: 31200399

Collection Date: 02/15/2012 11:59
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 353.2 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Nitrate + Nitrite as N	<0.02			mg/L	1	02/23/2012 13:47

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:47**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of **MW-3**

Client Sample ID: **MW-3**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399003-J
Lab Project ID: 31200399

Collection Date: 02/15/2012 11:59
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 410.4 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
COD	**221**			mg/L	1	02/21/2012 8:41

Laboratory: **TriTest**
Analytical Date/Time: **02/21/2012 08:41**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of **MW-4**

Client Sample ID: **MW-4**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399004-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 12:58
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND		1.00	ug/L	1	02/17/2012 19:57
1,1,1-Trichloroethane	ND		1.00	ug/L	1	02/17/2012 19:57
1,1,2,2-Tetrachloroethane	ND		1.00	ug/L	1	02/17/2012 19:57
1,1,2-Trichloroethane	ND		1.00	ug/L	1	02/17/2012 19:57
1,1-Dichloroethane	ND		1.00	ug/L	1	02/17/2012 19:57
1,1-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 19:57
1,1-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 19:57
1,2,3-Trichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:57
1,2,3-Trichloropropane	ND		1.00	ug/L	1	02/17/2012 19:57
1,2,4-Trichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:57
1,2,4-Trimethylbenzene	ND		1.00	ug/L	1	02/17/2012 19:57
1,2-Dibromo-3-chloropropane	ND		5.00	ug/L	1	02/17/2012 19:57
1,2-Dibromoethane	ND		1.00	ug/L	1	02/17/2012 19:57
1,2-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:57
1,2-Dichloroethane	ND		1.00	ug/L	1	02/17/2012 19:57
1,2-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 19:57
1,3,5-Trimethylbenzene	ND		1.00	ug/L	1	02/17/2012 19:57
1,3-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:57
1,3-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 19:57
1,4-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 19:57
2,2-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 19:57
2-Butanone	ND		25.0	ug/L	1	02/17/2012 19:57
2-Chlorotoluene	ND		1.00	ug/L	1	02/17/2012 19:57
2-Hexanone	ND		5.00	ug/L	1	02/17/2012 19:57
4-Chlorotoluene	ND		1.00	ug/L	1	02/17/2012 19:57
4-Isopropyltoluene	ND		1.00	ug/L	1	02/17/2012 19:57
4-Methyl-2-pentanone	ND		5.00	ug/L	1	02/17/2012 19:57
Acetone	ND		25.0	ug/L	1	02/17/2012 19:57
Benzene	ND		1.00	ug/L	1	02/17/2012 19:57
Bromobenzene	ND		1.00	ug/L	1	02/17/2012 19:57
Bromochloromethane	ND		1.00	ug/L	1	02/17/2012 19:57
Bromodichloromethane	ND		1.00	ug/L	1	02/17/2012 19:57
Bromoform	ND		1.00	ug/L	1	02/17/2012 19:57
Bromomethane	ND		1.00	ug/L	1	02/17/2012 19:57
n-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 19:57
Carbon disulfide	ND		1.00	ug/L	1	02/17/2012 19:57
Carbon tetrachloride	ND		1.00	ug/L	1	02/17/2012 19:57
Chlorobenzene	**1.85**		1.00	ug/L	1	02/17/2012 19:57
Chloroethane	ND		1.00	ug/L	1	02/17/2012 19:57
Chloroform	ND		1.00	ug/L	1	02/17/2012 19:57
Chloromethane	ND		1.00	ug/L	1	02/17/2012 19:57
Dibromochloromethane	ND		1.00	ug/L	1	02/17/2012 19:57
Dibromomethane	ND		1.00	ug/L	1	02/17/2012 19:57

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of MW-4

Client Sample ID: **MW-4**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399004-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 12:58
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND		5.00	ug/L	1	02/17/2012 19:57
cis-1,3-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 19:57
trans-1,3-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 19:57
Diisopropyl Ether	ND		1.00	ug/L	1	02/17/2012 19:57
Ethyl Benzene	ND		1.00	ug/L	1	02/17/2012 19:57
Hexachlorobutadiene	ND		1.00	ug/L	1	02/17/2012 19:57
Isopropylbenzene (Cumene)	ND		1.00	ug/L	1	02/17/2012 19:57
Methyl iodide	ND		1.00	ug/L	1	02/17/2012 19:57
Methylene chloride	ND		5.00	ug/L	1	02/17/2012 19:57
Naphthalene	ND		1.00	ug/L	1	02/17/2012 19:57
Styrene	ND		1.00	ug/L	1	02/17/2012 19:57
Tetrachloroethene	ND		1.00	ug/L	1	02/17/2012 19:57
Toluene	ND		1.00	ug/L	1	02/17/2012 19:57
Trichloroethene	ND		1.00	ug/L	1	02/17/2012 19:57
Trichlorofluoromethane	ND		1.00	ug/L	1	02/17/2012 19:57
Vinyl chloride	ND		1.00	ug/L	1	02/17/2012 19:57
cis-1,2-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 19:57
m,p-Xylene	ND		2.00	ug/L	1	02/17/2012 19:57
n-Propylbenzene	ND		1.00	ug/L	1	02/17/2012 19:57
o-Xylene	ND		1.00	ug/L	1	02/17/2012 19:57
sec-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 19:57
tert-Butyl methyl ether (MTBE)	ND		1.00	ug/L	1	02/17/2012 19:57
tert-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 19:57
trans-1,2-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 19:57
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L	1	02/17/2012 19:57
Surrogates						
1,2-Dichloroethane-d4	100		64.0-140	%	1	02/17/2012 19:57
4-Bromofluorobenzene	100		85.0-115	%	1	02/17/2012 19:57
Toluene d8	99.0		82.0-117	%	1	02/17/2012 19:57

Batch Information

Analytical Batch: **VMS1926**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **02/17/2012 19:57**

Prep Batch: **VXX2788**
Prep Method: **SW-846 5030B**
Prep Date/Time: **02/17/2012 11:51**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of MW-4

Client Sample ID: **MW-4**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399004-F
Lab Project ID: 31200399

Collection Date: 02/15/2012 12:58
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SW-846 6010C

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Arsenic	ND		0.0100	mg/L	1	02/20/2012 13:14
Chromium	**0.0103**		0.0100	mg/L	1	02/20/2012 13:14
Copper	**0.0156**		0.0100	mg/L	1	02/20/2012 13:14
Lead	**0.0156**		0.0100	mg/L	1	02/20/2012 13:14
Nickel	**0.0391**		0.0100	mg/L	1	02/20/2012 13:14
Selenium	ND		0.0200	mg/L	1	02/20/2012 13:14
Zinc	**0.372**		0.0200	mg/L	1	02/20/2012 13:14

Batch Information

Analytical Batch: **MIP1429**
Analytical Method: **SW-846 6010C**
Instrument: **ICP1**
Analyst: **PSW**
Analytical Date/Time: **02/20/2012 13:14**

Prep Batch: **MXX1807**
Prep Method: **SW-846 3010A**
Prep Date/Time: **02/17/2012 10:47**
Prep Initial Wt./Vol.: **50 mL**
Prep Extract Vol: **50 mL**

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of **MW-4**

Client Sample ID: **MW-4**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399004-I
Lab Project ID: 31200399

Collection Date: 02/15/2012 12:58
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 300.0**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Chloride	**17.8**		0.300	mg/L	1	02/17/2012 14:58

Batch Information

Analytical Batch: **INO1482**
Analytical Method: **EPA 300.0**
Instrument: **IC1**
Analyst: **PSW**
Analytical Date/Time: **02/17/2012 14:58**

Prep Batch: **INO1482**
Prep Method: **EPA 300.0**
Prep Date/Time: **02/17/2012 14:58**
Prep Initial Wt./Vol.: **10 mL**
Prep Extract Vol: **10 mL**

Print Date: 02/28/2012

N.C. Certification # 481

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Results of MW-4

Client Sample ID: **MW-4**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399004-D
Lab Project ID: 31200399

Collection Date: 02/15/2012 12:58
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SM 5310-B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Total Organic Carbon	**13.7**		0.500	mg/L	1	02/27/2012 18:38

Batch Information

Analytical Batch: **INO1496**
Analytical Method: **SM 5310-B**
Instrument: **TOC1**
Analyst: **NTM**
Analytical Date/Time: **02/27/2012 18:38**

Prep Batch: **INO1496**
Prep Method: **SM 5310-B**
Prep Date/Time: **02/27/2012 18:38**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **MW-4**

Client Sample ID: **MW-4**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399004-H
Lab Project ID: 31200399

Collection Date: 02/15/2012 12:58
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 350.1 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Ammonia	**10.9**			mg/L	1	02/23/2012 13:45

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:45**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **MW-4**

Client Sample ID: **MW-4**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399004-G
Lab Project ID: 31200399

Collection Date: 02/15/2012 12:58
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 353.2 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Nitrate + Nitrite as N	**0.02**			mg/L	1	02/23/2012 13:47

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:47**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **MW-4**

Client Sample ID: **MW-4**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399004-J
Lab Project ID: 31200399

Collection Date: 02/15/2012 12:58
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 410.4 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
COD	**70.2**			mg/L	1	02/21/2012 8:41

Laboratory: **TriTest**
Analytical Date/Time: **02/21/2012 08:41**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **DUP**

Client Sample ID: **DUP**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399005-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND		5.00	ug/L	5	02/17/2012 20:47
1,1,1-Trichloroethane	ND		5.00	ug/L	5	02/17/2012 20:47
1,1,2,2-Tetrachloroethane	ND		5.00	ug/L	5	02/17/2012 20:47
1,1,2-Trichloroethane	ND		5.00	ug/L	5	02/17/2012 20:47
1,1-Dichloroethane	ND		5.00	ug/L	5	02/17/2012 20:47
1,1-Dichloroethene	ND		5.00	ug/L	5	02/17/2012 20:47
1,1-Dichloropropene	ND		5.00	ug/L	5	02/17/2012 20:47
1,2,3-Trichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:47
1,2,3-Trichloropropane	ND		5.00	ug/L	5	02/17/2012 20:47
1,2,4-Trichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:47
1,2,4-Trimethylbenzene	ND		5.00	ug/L	5	02/17/2012 20:47
1,2-Dibromo-3-chloropropane	ND		25.0	ug/L	5	02/17/2012 20:47
1,2-Dibromoethane	ND		5.00	ug/L	5	02/17/2012 20:47
1,2-Dichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:47
1,2-Dichloroethane	ND		5.00	ug/L	5	02/17/2012 20:47
1,2-Dichloropropane	ND		5.00	ug/L	5	02/17/2012 20:47
1,3,5-Trimethylbenzene	ND		5.00	ug/L	5	02/17/2012 20:47
1,3-Dichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:47
1,3-Dichloropropane	ND		5.00	ug/L	5	02/17/2012 20:47
1,4-Dichlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:47
2,2-Dichloropropane	ND		5.00	ug/L	5	02/17/2012 20:47
2-Butanone	ND		125	ug/L	5	02/17/2012 20:47
2-Chlorotoluene	ND		5.00	ug/L	5	02/17/2012 20:47
2-Hexanone	ND		25.0	ug/L	5	02/17/2012 20:47
4-Chlorotoluene	ND		5.00	ug/L	5	02/17/2012 20:47
4-Isopropyltoluene	ND		5.00	ug/L	5	02/17/2012 20:47
4-Methyl-2-pentanone	ND		25.0	ug/L	5	02/17/2012 20:47
Acetone	ND		125	ug/L	5	02/17/2012 20:47
Benzene	ND		5.00	ug/L	5	02/17/2012 20:47
Bromobenzene	ND		5.00	ug/L	5	02/17/2012 20:47
Bromochloromethane	ND		5.00	ug/L	5	02/17/2012 20:47
Bromodichloromethane	ND		5.00	ug/L	5	02/17/2012 20:47
Bromoform	ND		5.00	ug/L	5	02/17/2012 20:47
Bromomethane	ND		5.00	ug/L	5	02/17/2012 20:47
n-Butylbenzene	ND		5.00	ug/L	5	02/17/2012 20:47
Carbon disulfide	ND		5.00	ug/L	5	02/17/2012 20:47
Carbon tetrachloride	ND		5.00	ug/L	5	02/17/2012 20:47
Chlorobenzene	ND		5.00	ug/L	5	02/17/2012 20:47
Chloroethane	ND		5.00	ug/L	5	02/17/2012 20:47
Chloroform	ND		5.00	ug/L	5	02/17/2012 20:47
Chloromethane	ND		5.00	ug/L	5	02/17/2012 20:47
Dibromochloromethane	ND		5.00	ug/L	5	02/17/2012 20:47
Dibromomethane	ND		5.00	ug/L	5	02/17/2012 20:47

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Results of DUP

Client Sample ID: **DUP**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399005-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND		25.0	ug/L	5	02/17/2012 20:47
cis-1,3-Dichloropropene	ND		5.00	ug/L	5	02/17/2012 20:47
trans-1,3-Dichloropropene	ND		5.00	ug/L	5	02/17/2012 20:47
Diisopropyl Ether	ND		5.00	ug/L	5	02/17/2012 20:47
Ethyl Benzene	ND		5.00	ug/L	5	02/17/2012 20:47
Hexachlorobutadiene	ND		5.00	ug/L	5	02/17/2012 20:47
Isopropylbenzene (Cumene)	ND		5.00	ug/L	5	02/17/2012 20:47
Methyl iodide	ND		5.00	ug/L	5	02/17/2012 20:47
Methylene chloride	ND		25.0	ug/L	5	02/17/2012 20:47
Naphthalene	ND		5.00	ug/L	5	02/17/2012 20:47
Styrene	ND		5.00	ug/L	5	02/17/2012 20:47
Tetrachloroethene	ND		5.00	ug/L	5	02/17/2012 20:47
Toluene	ND		5.00	ug/L	5	02/17/2012 20:47
Trichloroethene	**29.1**		5.00	ug/L	5	02/17/2012 20:47
Trichlorofluoromethane	ND		5.00	ug/L	5	02/17/2012 20:47
Vinyl chloride	**18.5**		5.00	ug/L	5	02/17/2012 20:47
cis-1,2-Dichloroethene	**221**		5.00	ug/L	5	02/17/2012 20:47
m,p-Xylene	ND		10.0	ug/L	5	02/17/2012 20:47
n-Propylbenzene	ND		5.00	ug/L	5	02/17/2012 20:47
o-Xylene	ND		5.00	ug/L	5	02/17/2012 20:47
sec-Butylbenzene	ND		5.00	ug/L	5	02/17/2012 20:47
tert-Butyl methyl ether (MTBE)	ND		5.00	ug/L	5	02/17/2012 20:47
tert-Butylbenzene	ND		5.00	ug/L	5	02/17/2012 20:47
trans-1,2-Dichloroethene	ND		5.00	ug/L	5	02/17/2012 20:47
trans-1,4-Dichloro-2-butene	ND		25.0	ug/L	5	02/17/2012 20:47
Surrogates						
1,2-Dichloroethane-d4	99.0		64.0-140	%	5	02/17/2012 20:47
4-Bromofluorobenzene	100		85.0-115	%	5	02/17/2012 20:47
Toluene d8	101		82.0-117	%	5	02/17/2012 20:47

Batch Information

Analytical Batch: **VMS1926**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **02/17/2012 20:47**

Prep Batch: **VXX2788**
Prep Method: **SW-846 5030B**
Prep Date/Time: **02/17/2012 11:51**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of **DUP**

Client Sample ID: **DUP**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399005-F
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **SW-846 6010C**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Arsenic	ND		0.0100	mg/L	1	02/20/2012 13:34
Chromium	**0.107**		0.0100	mg/L	1	02/20/2012 13:34
Copper	**0.0572**		0.0100	mg/L	1	02/20/2012 13:34
Lead	**0.0241**		0.0100	mg/L	1	02/20/2012 13:34
Nickel	**0.0444**		0.0100	mg/L	1	02/20/2012 13:34
Selenium	ND		0.0200	mg/L	1	02/20/2012 13:34
Zinc	**0.0547**		0.0200	mg/L	1	02/20/2012 13:34

Batch Information

Analytical Batch: **MIP1429**
Analytical Method: **SW-846 6010C**
Instrument: **ICP1**
Analyst: **PSW**
Analytical Date/Time: **02/20/2012 13:34**

Prep Batch: **MXX1807**
Prep Method: **SW-846 3010A**
Prep Date/Time: **02/17/2012 10:47**
Prep Initial Wt./Vol.: **50 mL**
Prep Extract Vol: **50 mL**

Print Date: 02/28/2012

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SGS

Results of DUP

Client Sample ID: **DUP**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399005-I
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by EPA 300.0

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Chloride	**122**		3.00	mg/L	10	02/27/2012 16:40

Batch Information

Analytical Batch: **INO1493**
Analytical Method: **EPA 300.0**
Instrument: **IC1**
Analyst: **PSW**
Analytical Date/Time: **02/27/2012 16:40**

Prep Batch: **INO1493**
Prep Method: **EPA 300.0**
Prep Date/Time: **02/27/2012 16:40**
Prep Initial Wt./Vol.: **10 mL**
Prep Extract Vol: **10 mL**

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of DUP

Client Sample ID: **DUP**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399005-D
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by SM 5310-B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Total Organic Carbon	**10.4**		0.500	mg/L	1	02/27/2012 18:57

Batch Information

Analytical Batch: **INO1496**
Analytical Method: **SM 5310-B**
Instrument: **TOC1**
Analyst: **NTM**
Analytical Date/Time: **02/27/2012 18:57**

Prep Batch: **INO1496**
Prep Method: **SM 5310-B**
Prep Date/Time: **02/27/2012 18:57**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of **DUP**

Client Sample ID: **DUP**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399005-H
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 350.1 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Ammonia	**2.15**			mg/L	1	02/23/2012 13:45

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:45**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **DUP**

Client Sample ID: **DUP**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399005-G
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 353.2 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Nitrate + Nitrite as N	**0.04**			mg/L	1	02/23/2012 13:47

Laboratory: **TriTest**
Analytical Date/Time: **02/23/2012 13:47**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

SGS

Results of **DUP**

Client Sample ID: **DUP**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399005-J
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **EPA 410.4 (SUB)**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
COD	**59.0**			mg/L	1	02/21/2012 8:41

Laboratory: **TriTest**
Analytical Date/Time: **02/21/2012 08:41**

Prep Method:
Prep Date/Time:

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **Trip Blank Lab**

Client Sample ID: **Trip Blank Lab**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399006-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND		1.00	ug/L	1	02/17/2012 18:41
1,1,1-Trichloroethane	ND		1.00	ug/L	1	02/17/2012 18:41
1,1,2,2-Tetrachloroethane	ND		1.00	ug/L	1	02/17/2012 18:41
1,1,2-Trichloroethane	ND		1.00	ug/L	1	02/17/2012 18:41
1,1-Dichloroethane	ND		1.00	ug/L	1	02/17/2012 18:41
1,1-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 18:41
1,1-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 18:41
1,2,3-Trichlorobenzene	ND		1.00	ug/L	1	02/17/2012 18:41
1,2,3-Trichloropropane	ND		1.00	ug/L	1	02/17/2012 18:41
1,2,4-Trichlorobenzene	ND		1.00	ug/L	1	02/17/2012 18:41
1,2,4-Trimethylbenzene	ND		1.00	ug/L	1	02/17/2012 18:41
1,2-Dibromo-3-chloropropane	ND		5.00	ug/L	1	02/17/2012 18:41
1,2-Dibromoethane	ND		1.00	ug/L	1	02/17/2012 18:41
1,2-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 18:41
1,2-Dichloroethane	ND		1.00	ug/L	1	02/17/2012 18:41
1,2-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 18:41
1,3,5-Trimethylbenzene	ND		1.00	ug/L	1	02/17/2012 18:41
1,3-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 18:41
1,3-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 18:41
1,4-Dichlorobenzene	ND		1.00	ug/L	1	02/17/2012 18:41
2,2-Dichloropropane	ND		1.00	ug/L	1	02/17/2012 18:41
2-Butanone	ND		25.0	ug/L	1	02/17/2012 18:41
2-Chlorotoluene	ND		1.00	ug/L	1	02/17/2012 18:41
2-Hexanone	ND		5.00	ug/L	1	02/17/2012 18:41
4-Chlorotoluene	ND		1.00	ug/L	1	02/17/2012 18:41
4-Isopropyltoluene	ND		1.00	ug/L	1	02/17/2012 18:41
4-Methyl-2-pentanone	ND		5.00	ug/L	1	02/17/2012 18:41
Acetone	ND		25.0	ug/L	1	02/17/2012 18:41
Benzene	ND		1.00	ug/L	1	02/17/2012 18:41
Bromobenzene	ND		1.00	ug/L	1	02/17/2012 18:41
Bromochloromethane	ND		1.00	ug/L	1	02/17/2012 18:41
Bromodichloromethane	ND		1.00	ug/L	1	02/17/2012 18:41
Bromoform	ND		1.00	ug/L	1	02/17/2012 18:41
Bromomethane	ND		1.00	ug/L	1	02/17/2012 18:41
n-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 18:41
Carbon disulfide	ND		1.00	ug/L	1	02/17/2012 18:41
Carbon tetrachloride	ND		1.00	ug/L	1	02/17/2012 18:41
Chlorobenzene	ND		1.00	ug/L	1	02/17/2012 18:41
Chloroethane	ND		1.00	ug/L	1	02/17/2012 18:41
Chloroform	ND		1.00	ug/L	1	02/17/2012 18:41
Chloromethane	ND		1.00	ug/L	1	02/17/2012 18:41
Dibromochloromethane	ND		1.00	ug/L	1	02/17/2012 18:41
Dibromomethane	ND		1.00	ug/L	1	02/17/2012 18:41

Print Date: 02/28/2012

N.C. Certification # 481

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Results of **Trip Blank Lab**

Client Sample ID: **Trip Blank Lab**
Client Project ID: **Elk Mountain Landfill 2408.01**
Lab Sample ID: 31200399006-A
Lab Project ID: 31200399

Collection Date: 02/15/2012 00:00
Received Date: 02/16/2012 09:45
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND		5.00	ug/L	1	02/17/2012 18:41
cis-1,3-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 18:41
trans-1,3-Dichloropropene	ND		1.00	ug/L	1	02/17/2012 18:41
Diisopropyl Ether	ND		1.00	ug/L	1	02/17/2012 18:41
Ethyl Benzene	ND		1.00	ug/L	1	02/17/2012 18:41
Hexachlorobutadiene	ND		1.00	ug/L	1	02/17/2012 18:41
Isopropylbenzene (Cumene)	ND		1.00	ug/L	1	02/17/2012 18:41
Methyl iodide	ND		1.00	ug/L	1	02/17/2012 18:41
Methylene chloride	ND		5.00	ug/L	1	02/17/2012 18:41
Naphthalene	ND		1.00	ug/L	1	02/17/2012 18:41
Styrene	ND		1.00	ug/L	1	02/17/2012 18:41
Tetrachloroethene	ND		1.00	ug/L	1	02/17/2012 18:41
Toluene	ND		1.00	ug/L	1	02/17/2012 18:41
Trichloroethene	ND		1.00	ug/L	1	02/17/2012 18:41
Trichlorofluoromethane	ND		1.00	ug/L	1	02/17/2012 18:41
Vinyl chloride	ND		1.00	ug/L	1	02/17/2012 18:41
cis-1,2-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 18:41
m,p-Xylene	ND		2.00	ug/L	1	02/17/2012 18:41
n-Propylbenzene	ND		1.00	ug/L	1	02/17/2012 18:41
o-Xylene	ND		1.00	ug/L	1	02/17/2012 18:41
sec-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 18:41
tert-Butyl methyl ether (MTBE)	ND		1.00	ug/L	1	02/17/2012 18:41
tert-Butylbenzene	ND		1.00	ug/L	1	02/17/2012 18:41
trans-1,2-Dichloroethene	ND		1.00	ug/L	1	02/17/2012 18:41
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L	1	02/17/2012 18:41
Surrogates						
1,2-Dichloroethane-d4	98.0		64.0-140	%	1	02/17/2012 18:41
4-Bromofluorobenzene	100		85.0-115	%	1	02/17/2012 18:41
Toluene d8	100		82.0-117	%	1	02/17/2012 18:41

Batch Information

Analytical Batch: **VMS1926**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **02/17/2012 18:41**

Prep Batch: **VXX2788**
Prep Method: **SW-846 5030B**
Prep Date/Time: **02/17/2012 11:51**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 02/28/2012

N.C. Certification # 481

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Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5030B
Prep Batch: VXX2788
Prep Date: 02/16/2012 07:57

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS for HBN 19950 [VXX/2788]	58165	02/17/2012 13:00	VMS1926	MSD4	DVO
LCSD for HBN 19950 [VXX/2788]	58166	02/17/2012 13:25	VMS1926	MSD4	DVO
MB for HBN 19950 [VXX/2788]	58167	02/17/2012 15:06	VMS1926	MSD4	DVO
Trip Blank Lab	31200399006	02/17/2012 18:41	VMS1926	MSD4	DVO
MW-1	31200399001	02/17/2012 19:06	VMS1926	MSD4	DVO
MW-3	31200399003	02/17/2012 19:31	VMS1926	MSD4	DVO
MW-4	31200399004	02/17/2012 19:57	VMS1926	MSD4	DVO
MW-2	31200399002	02/17/2012 20:22	VMS1926	MSD4	DVO
DUP	31200399005	02/17/2012 20:47	VMS1926	MSD4	DVO

Print Date: 02/28/2012

N.C. Certification # 481

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Method Blank

Blank ID: MB for HBN 19950 [VXX/2788] Matrix: Water
Blank Lab ID: 58167
QC for Samples:
31200399001, 31200399002, 31200399003, 31200399004, 31200399005, 31200399006

Results by **SW-846 8260B**

Parameter	Result	Qual	LOQ/CL	Units	DF
Dichlorodifluoromethane	ND		5.00	ug/L	1
Chloromethane	ND		1.00	ug/L	1
Vinyl chloride	ND		1.00	ug/L	1
Bromomethane	ND		1.00	ug/L	1
Chloroethane	ND		1.00	ug/L	1
Trichlorofluoromethane	ND		1.00	ug/L	1
1,1-Dichloroethene	ND		1.00	ug/L	1
Acetone	ND		25.0	ug/L	1
Methylene chloride	ND		5.00	ug/L	1
trans-1,2-Dichloroethene	ND		1.00	ug/L	1
tert-Butyl methyl ether (MTBE)	ND		1.00	ug/L	1
1,1-Dichloroethane	ND		1.00	ug/L	1
Diisopropyl Ether	ND		1.00	ug/L	1
2,2-Dichloropropane	ND		1.00	ug/L	1
cis-1,2-Dichloroethene	ND		1.00	ug/L	1
2-Butanone	ND		25.0	ug/L	1
Bromochloromethane	ND		1.00	ug/L	1
Chloroform	ND		1.00	ug/L	1
1,1,1-Trichloroethane	ND		1.00	ug/L	1
Carbon tetrachloride	ND		1.00	ug/L	1
1,1-Dichloropropene	ND		1.00	ug/L	1
Benzene	ND		1.00	ug/L	1
1,2-Dichloroethane	ND		1.00	ug/L	1
Trichloroethene	ND		1.00	ug/L	1
1,2-Dichloropropane	ND		1.00	ug/L	1
Dibromomethane	ND		1.00	ug/L	1
Bromodichloromethane	ND		1.00	ug/L	1
cis-1,3-Dichloropropene	ND		1.00	ug/L	1
4-Methyl-2-pentanone	ND		5.00	ug/L	1
Toluene	ND		1.00	ug/L	1
Methyl iodide	**1.66**		1.00	ug/L	1
trans-1,3-Dichloropropene	ND		1.00	ug/L	1
Carbon disulfide	ND		1.00	ug/L	1
1,1,2-Trichloroethane	ND		1.00	ug/L	1
Tetrachloroethene	ND		1.00	ug/L	1
1,3-Dichloropropane	ND		1.00	ug/L	1
2-Hexanone	ND		5.00	ug/L	1
Dibromochloromethane	ND		1.00	ug/L	1
1,2-Dibromoethane	ND		1.00	ug/L	1
Chlorobenzene	ND		1.00	ug/L	1
1,1,1,2-Tetrachloroethane	ND		1.00	ug/L	1

Print Date: 02/28/2012 N.C. Certification # 481

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Method Blank

Blank ID: MB for HBN 19950 [VXX/2788] Matrix: Water
Blank Lab ID: 58167
QC for Samples:
31200399001, 31200399002, 31200399003, 31200399004, 31200399005, 31200399006

Results by **SW-846 8260B**

Parameter	Result	Qual	LOQ/CL	Units	DF
Bromoform	ND		1.00	ug/L	1
Bromobenzene	ND		1.00	ug/L	1
1,1,2,2-Tetrachloroethane	ND		1.00	ug/L	1
1,2,3-Trichloropropane	ND		1.00	ug/L	1
Ethyl Benzene	ND		1.00	ug/L	1
m,p-Xylene	ND		2.00	ug/L	1
Styrene	ND		1.00	ug/L	1
o-Xylene	ND		1.00	ug/L	1
Isopropylbenzene (Cumene)	ND		1.00	ug/L	1
n-Propylbenzene	ND		1.00	ug/L	1
2-Chlorotoluene	ND		1.00	ug/L	1
4-Chlorotoluene	ND		1.00	ug/L	1
1,3,5-Trimethylbenzene	ND		1.00	ug/L	1
tert-Butylbenzene	ND		1.00	ug/L	1
1,2,4-Trimethylbenzene	ND		1.00	ug/L	1
sec-Butylbenzene	ND		1.00	ug/L	1
1,3-Dichlorobenzene	ND		1.00	ug/L	1
4-Isopropyltoluene	ND		1.00	ug/L	1
1,4-Dichlorobenzene	ND		1.00	ug/L	1
1,2-Dichlorobenzene	ND		1.00	ug/L	1
n-Butylbenzene	ND		1.00	ug/L	1
1,2-Dibromo-3-chloropropane	ND		5.00	ug/L	1
1,2,4-Trichlorobenzene	ND		1.00	ug/L	1
Hexachlorobutadiene	ND		1.00	ug/L	1
Naphthalene	ND		1.00	ug/L	1
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L	1
1,2,3-Trichlorobenzene	ND		1.00	ug/L	1
Surrogates					
1,2-Dichloroethane-d4	103		64.0-140	%	1
Toluene d8	100		82.0-117	%	1
4-Bromofluorobenzene	99.0		85.0-115	%	1

Batch Information

Analytical Batch: VMS1926
Analytical Method: SW-846 8260B
Instrument: MSD4
Analyst: DVO
Analytical Date/Time: 2/17/2012 3:06:00PM

Prep Batch: VXX2788
Prep Method: SW-846 5030B
Prep Date/Time: 2/16/2012 7:57:26AM
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 19950 [VXX/2788]
Blank Spike Lab ID: 58165
Date Analyzed: 02/17/2012 13:00

Spike Duplicate ID: LCSD for HBN 19950 [VXX/2788]
Spike Duplicate Lab ID: 58166
Date Analyzed: 02/17/2012 13:25
Matrix: Water

QC for Samples: 31200399001, 31200399002, 31200399003, 31200399004, 31200399005, 31200399006

Results by **SW-846 8260B**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Dichlorodifluoromethane	5.00	ND	74	5.00	ND	85	33.0-170	13	30.00
Chloromethane	5.00	4.80	96	5.00	5.32	106	57.0-132	10	30.00
Vinyl chloride	5.00	4.33	87	5.00	4.89	98	59.0-138	12	30.00
Bromomethane	5.00	6.04	121	5.00	6.85	**137***	51.0-134	13	30.00
Chloroethane	5.00	4.83	97	5.00	6.06	121	64.0-145	23	30.00
Trichlorofluoromethane	5.00	4.60	92	5.00	5.32	106	64.0-133	15	30.00
1,1-Dichloroethene	5.00	4.08	82	5.00	4.33	87	71.0-128	5.9	30.00
Acetone	25.0	ND	95	25.0	ND	98	52.0-140	2.5	30.00
Methylene chloride	5.00	ND	93	5.00	ND	92	70.0-113	1.3	30.00
trans-1,2-Dichloroethene	5.00	4.60	92	5.00	4.62	92	57.0-138	0.43	30.00
tert-Butyl methyl ether (MTBE)	5.00	4.87	97	5.00	4.93	99	47.0-142	1.2	30.00
1,1-Dichloroethane	5.00	4.70	94	5.00	4.69	94	68.0-133	0.21	30.00
Diisopropyl Ether	5.00	4.99	100	5.00	4.92	98	66.0-132	1.4	30.00
2,2-Dichloropropane	5.00	4.83	97	5.00	4.80	96	74.0-125	0.62	30.00
cis-1,2-Dichloroethene	5.00	4.92	98	5.00	4.91	98	73.0-128	0.20	30.00
2-Butanone	25.0	ND	85	25.0	ND	89	58.0-134	4.6	30.00
Bromochloromethane	5.00	4.94	99	5.00	4.97	99	73.0-128	0.61	30.00
Chloroform	5.00	4.89	98	5.00	4.91	98	74.0-124	0.41	30.00
1,1,1-Trichloroethane	5.00	4.89	98	5.00	4.88	98	76.0-119	0.20	30.00
Carbon tetrachloride	5.00	4.22	84	5.00	4.31	86	75.0-120	2.1	30.00
1,1-Dichloropropene	5.00	5.19	104	5.00	5.25	105	76.0-124	1.1	30.00
Benzene	5.00	4.93	99	5.00	4.93	99	76.0-124	0.0	30.00
1,2-Dichloroethane	5.00	4.85	97	5.00	4.79	96	76.0-119	1.2	30.00
Trichloroethene	5.00	4.82	96	5.00	4.83	97	74.0-121	0.21	30.00
1,2-Dichloropropane	5.00	4.95	99	5.00	4.78	96	74.0-124	3.5	30.00
Dibromomethane	5.00	4.79	96	5.00	4.60	92	71.0-128	4.0	30.00
Bromodichloromethane	5.00	4.74	95	5.00	4.68	94	72.0-120	1.3	30.00
cis-1,3-Dichloropropene	5.00	4.95	99	5.00	4.99	100	73.0-122	0.80	30.00
4-Methyl-2-pentanone	25.0	24.2	97	25.0	24.2	97	65.0-124	0.0	30.00
Toluene	5.00	5.08	102	5.00	4.97	99	75.0-123	2.2	30.00
Methyl iodide	5.00	5.49	110	5.00	5.69	114	55.0-123	3.6	30.00
trans-1,3-Dichloropropene	5.00	4.78	96	5.00	4.72	94	70.0-125	1.3	30.00
Carbon disulfide	5.00	5.09	102	5.00	5.04	101	65.0-132	0.99	30.00
1,1,2-Trichloroethane	5.00	4.65	93	5.00	4.74	95	76.0-121	1.9	30.00

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Blank Spike Summary

Blank Spike ID: LCS for HBN 19950 [VXX/2788]
Blank Spike Lab ID: 58165
Date Analyzed: 02/17/2012 13:00

Spike Duplicate ID: LCSD for HBN 19950 [VXX/2788]
Spike Duplicate Lab ID: 58166
Date Analyzed: 02/17/2012 13:25
Matrix: Water

QC for Samples: 31200399001, 31200399002, 31200399003, 31200399004, 31200399005, 31200399006

Results by **SW-846 8260B**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Tetrachloroethene	5.00	4.91	98	5.00	4.92	98	59.0-112	0.20	30.00
1,3-Dichloropropane	5.00	4.79	96	5.00	4.82	96	74.0-120	0.62	30.00
2-Hexanone	25.0	21.7	87	25.0	22.6	90	56.0-133	4.1	30.00
Dibromochloromethane	5.00	4.91	98	5.00	4.84	97	67.0-122	1.4	30.00
1,2-Dibromoethane	5.00	4.84	97	5.00	4.93	99	74.0-119	1.8	30.00
Chlorobenzene	5.00	4.90	98	5.00	4.90	98	74.0-120	0.0	30.00
1,1,1,2-Tetrachloroethane	5.00	4.64	93	5.00	4.67	93	73.0-119	0.64	30.00
Bromoform	5.00	5.25	105	5.00	5.29	106	62.0-127	0.76	30.00
Bromobenzene	5.00	4.78	96	5.00	4.84	97	75.0-120	1.2	30.00
1,1,2,2-Tetrachloroethane	5.00	4.99	100	5.00	5.00	100	68.0-129	0.20	30.00
1,2,3-Trichloropropane	5.00	4.85	97	5.00	4.91	98	67.0-126	1.2	30.00
Ethyl Benzene	5.00	4.87	97	5.00	4.93	99	76.0-123	1.2	30.00
m,p-Xylene	10.0	9.90	99	10.0	9.86	99	76.0-124	0.40	30.00
Styrene	5.00	4.81	96	5.00	4.78	96	76.0-121	0.63	30.00
o-Xylene	5.00	4.87	97	5.00	4.91	98	75.0-124	0.82	30.00
Isopropylbenzene (Cumene)	5.00	4.87	97	5.00	4.93	99	77.0-120	1.2	30.00
n-Propylbenzene	5.00	4.89	98	5.00	4.94	99	77.0-123	1.0	30.00
2-Chlorotoluene	5.00	4.91	98	5.00	4.96	99	74.0-127	1.0	30.00
4-Chlorotoluene	5.00	4.81	96	5.00	4.81	96	77.0-123	0.0	30.00
1,3,5-Trimethylbenzene	5.00	4.90	98	5.00	5.01	100	76.0-122	2.2	30.00
tert-Butylbenzene	5.00	4.86	97	5.00	4.95	99	67.0-122	1.8	30.00
1,2,4-Trimethylbenzene	5.00	4.86	97	5.00	4.89	98	76.0-124	0.62	30.00
sec-Butylbenzene	5.00	4.92	98	5.00	4.94	99	78.0-121	0.41	30.00
1,3-Dichlorobenzene	5.00	4.85	97	5.00	4.82	96	75.0-120	0.62	30.00
4-Isopropyltoluene	5.00	4.82	96	5.00	4.80	96	77.0-120	0.42	30.00
1,4-Dichlorobenzene	5.00	4.83	97	5.00	4.89	98	70.0-125	1.2	30.00
1,2-Dichlorobenzene	5.00	4.89	98	5.00	4.92	98	76.0-118	0.61	30.00
n-Butylbenzene	5.00	4.92	98	5.00	4.92	98	78.0-118	0.0	30.00
1,2-Dibromo-3-chloropropane	30.0	28.7	96	30.0	29.2	97	62.0-130	1.7	30.00
1,2,4-Trichlorobenzene	5.00	4.59	92	5.00	4.56	91	72.0-119	0.66	30.00
Hexachlorobutadiene	5.00	4.95	99	5.00	4.93	99	69.0-121	0.40	30.00
Naphthalene	5.00	4.87	97	5.00	4.79	96	67.0-122	1.7	30.00
trans-1,4-Dichloro-2-butene	25.0	23.5	94	25.0	23.8	95	61.0-132	1.3	30.00
1,2,3-Trichlorobenzene	5.00	4.87	97	5.00	4.84	97	68.0-123	0.62	30.00

Print Date: 02/28/2012

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Blank Spike Summary

Blank Spike ID: LCS for HBN 19950 [VXX/2788]
Blank Spike Lab ID: 58165
Date Analyzed: 02/17/2012 13:00

Spike Duplicate ID: LCSD for HBN 19950 [VXX/2788]
Spike Duplicate Lab ID: 58166
Date Analyzed: 02/17/2012 13:25
Matrix: Water

QC for Samples: 31200399001, 31200399002, 31200399003, 31200399004, 31200399005, 31200399006

Results by **SW-846 8260B**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Surrogates									
1,2-Dichloroethane-d4			99			99	64.0-140		
Toluene d8			101			101	82.0-117		
4-Bromofluorobenzene			101			101	85.0-115		

Batch Information

Analytical Batch: **VMS1926**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**

Prep Batch: **VXX2788**
Prep Method: **SW-846 5030B**
Prep Date/Time: **02/16/2012 07:57**
Spike Init Wt./Vol.: **40 mL** Extract Vol: **40 mL**
Dupe Init Wt./Vol.: **40 mL** Extract Vol: **40 mL**

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Batch Summary

Analytical Method: SW-846 6010C

Prep Method: SW-846 3010A
Prep Batch: MXX1807
Prep Date: 02/17/2012 10:47

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 19977 [MXX/1807]	58278	02/20/2012 12:20	MIP1429	ICP1	PSW
LCS for HBN 19977 [MXX/1807]	58279	02/20/2012 12:26	MIP1429	ICP1	PSW
LCSD for HBN 19977 [MXX/1807]	58280	02/20/2012 12:33	MIP1429	ICP1	PSW
MW-1	31200399001	02/20/2012 12:40	MIP1429	ICP1	PSW
MW-1(58004MS)	58281	02/20/2012 12:47	MIP1429	ICP1	PSW
MW-1(58004MSD)	58282	02/20/2012 12:54	MIP1429	ICP1	PSW
MW-2	31200399002	02/20/2012 13:01	MIP1429	ICP1	PSW
MW-3	31200399003	02/20/2012 13:07	MIP1429	ICP1	PSW
MW-4	31200399004	02/20/2012 13:14	MIP1429	ICP1	PSW
DUP	31200399005	02/20/2012 13:34	MIP1429	ICP1	PSW
DUP(58008DUP)	58283	02/20/2012 13:41	MIP1429	ICP1	PSW
DUP(58008DUP)	58283	02/20/2012 13:48	MIP1429	ICP1	PSW

Print Date: 02/28/2012

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Method Blank

Blank ID: MB for HBN 19977 [MXX/1807]
Matrix: Water
Blank Lab ID: 58278
QC for Samples:
31200399001, 31200399002, 31200399003, 31200399004, 31200399005

Results by **SW-846 6010C**

Parameter	Result	Qual	LOQ/CL	Units	DF
Arsenic	ND		0.0100	mg/L	1
Selenium	ND		0.0200	mg/L	1
Zinc	ND		0.0200	mg/L	1
Lead	ND		0.0100	mg/L	1
Nickel	ND		0.0100	mg/L	1
Chromium	ND		0.0100	mg/L	1
Copper	ND		0.0100	mg/L	1

Batch Information

Analytical Batch: MIP1429
Analytical Method: SW-846 6010C
Instrument: ICP1
Analyst: PSW
Analytical Date/Time: 2/20/2012 12:20:07PM

Prep Batch: MXX1807
Prep Method: SW-846 3010A
Prep Date/Time: 2/17/2012 10:47:15AM
Prep Initial Wt./Vol.: 50 mL
Prep Extract Vol: 50 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 19977 [MXX/1807]
Blank Spike Lab ID: 58279
Date Analyzed: 02/20/2012 12:26

Spike Duplicate ID: LCSD for HBN 19977 [MXX/1807]
Spike Duplicate Lab ID: 58280
Date Analyzed: 02/20/2012 12:33
Matrix: Water

QC for Samples: 31200399001, 31200399002, 31200399003, 31200399004, 31200399005

Results by **SW-846 6010C**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Arsenic	0.400	0.401	100	0.400	0.406	102	80.0-120	1.2	20.00
Selenium	0.400	0.393	98	0.400	0.396	99	80.0-120	0.76	20.00
Zinc	0.400	0.398	100	0.400	0.398	100	80.0-120	0.0	20.00
Lead	0.400	0.398	100	0.400	0.393	98	80.0-120	1.3	20.00
Nickel	0.400	0.408	102	0.400	0.410	103	80.0-120	0.49	20.00
Chromium	0.400	0.411	103	0.400	0.412	103	80.0-120	0.24	20.00
Copper	0.400	0.412	103	0.400	0.411	103	80.0-120	0.24	20.00

Batch Information

Analytical Batch: **MIP1429**
Analytical Method: **SW-846 6010C**
Instrument: **ICP1**
Analyst: **PSW**

Prep Batch: **MXX1807**
Prep Method: **SW-846 3010A**
Prep Date/Time: **02/17/2012 10:47**
Spike Init Wt./Vol.: **50 mL** Extract Vol: **50 mL**
Dupe Init Wt./Vol.: **50 mL** Extract Vol: **50 mL**

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Matrix Spike Summary

Original Sample ID: 31200399001 (MW-1) — Analysis Date: 02/20/2012 12:40
MS Sample ID: 58281 — Analysis Date: 02/20/2012 12:47
MSD Sample ID: 58282 — Analysis Date: 02/20/2012 12:54
Matrix: Water

QC for Samples: 31200399001, 31200399002, 31200399003, 31200399004, 31200399005

Results by **SW-846 6010C**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Arsenic	ND	0.400	0.405	101	0.400	0.400	100	75.0-125	1.2	20.00
Chromium	0.0542	0.400	0.464	102	0.400	0.448	99	75.0-125	3.5	20.00
Copper	0.0812	0.400	0.517	109	0.400	0.508	107	75.0-125	1.8	20.00
Lead	0.0560	0.400	0.451	99	0.400	0.440	96	75.0-125	2.5	20.00
Nickel	0.0248	0.400	0.439	103	0.400	0.423	100	75.0-125	3.7	20.00
Selenium	ND	0.400	0.395	99	0.400	0.391	98	75.0-125	1.0	20.00
Zinc	0.175	0.400	0.587	103	0.400	0.569	98	75.0-125	3.1	20.00

Batch Information

Analytical Batch: **MIP1429**
Analytical Method: **SW-846 6010C**
Instrument: **ICP1**
Analyst: **PSW**

Prep Batch: **MXX1807**
Prep Method: **SW-846 3010A**
Prep Date/Time: **02/17/2012 10:47**
MS Init Wt./Vol.: **50 mL** Extract Vol.: **50 mL**
MSD Init Wt./Vol.: **50 mL** Extract Vol.: **50 mL**

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Duplicate Sample Summary

Original Sample ID: 31200399005-F
Duplicate Sample ID: 58283

Analysis Date: 02/20/2012 13:34
Analysis Date: 02/20/2012 13:41
Matrix: Water

QC for Samples: 31200399001, 31200399002, 31200399003, 31200399004, 31200399005

Results by **SW-846 6010C**

PARAMETER	Original (mg/L)	Qual	Duplicate (mg/L)	Qual	RPD (%)	RPD CL
Arsenic	ND		ND			20.00
Arsenic	ND		ND			20.00
Chromium	0.107		0.105		1.9	20.00
Chromium	0.107		0.128		18	20.00
Copper	0.0572		0.0570		0.35	20.00
Copper	0.0572		0.0719		**23***	20.00
Lead	0.0241		0.0224		7.3	20.00
Lead	0.0241		ND			20.00
Nickel	0.0444		0.0441		0.68	20.00
Nickel	0.0444		0.0560		**23***	20.00
Selenium	ND		ND			20.00
Selenium	ND		ND			20.00
Zinc	0.0547		0.0547		0.0	20.00
Zinc	0.0547		ND			20.00

Batch Information

Analytical Batch: MIP1429
Analytical Method: SW-846 6010C
Instrument: ICP1
Analyst: PSW

Prep Batch: MXX1807
Prep Method: SW-846 3010A
Prep Date/Time: 02/17/2012 10:47

Print Date: 02/28/2012

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Batch Summary

Analytical Method: EPA 300.0

Prep Method: EPA 300.0
Prep Batch: INO1482
Prep Date: 02/17/2012 00:36

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 19972 [INO/1482]	58238	02/17/2012 00:36	INO1482	IC1	PSW
LCS for HBN 19972 [INO/1482]	58239	02/17/2012 00:57	INO1482	IC1	PSW
MW-1	31200399001	02/17/2012 13:17	INO1482	IC1	PSW
MW-1(58004MS)	58240	02/17/2012 13:37	INO1482	IC1	PSW
MW-1(58004MSD)	58241	02/17/2012 13:58	INO1482	IC1	PSW
MW-4	31200399004	02/17/2012 14:58	INO1482	IC1	PSW

Print Date: 02/28/2012

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Method Blank

Blank ID: MB for HBN 19972 [INO/1482]
Blank Lab ID: 58238
QC for Samples:
31200399001, 31200399004

Matrix: Water

Results by **EPA 300.0**

Parameter	Result	Qual	LOQ/CL	Units	DF
Chloride	ND		0.300	mg/L	1

Batch Information

Analytical Batch: INO1482
Analytical Method: EPA 300.0
Instrument: IC1
Analyst: PSW
Analytical Date/Time: 2/17/2012 12:36:44AM

Prep Batch: INO1482
Prep Method: EPA 300.0
Prep Date/Time: 2/17/2012 12:36:44AM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Print Date: 02/28/2012

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Blank Spike Summary

Blank Spike ID: LCS for HBN 19972 [INO/1482]
Blank Spike Lab ID: 58239
Date Analyzed: 02/17/2012 00:57

Matrix: Water

QC for Samples: 31200399001, 31200399004

Results by **EPA 300.0**

	Blank Spike (mg/L)			
Parameter	Spike	Result	Rec (%)	CL
Chloride	10.0	9.06	91	90.0-110

Batch Information

Analytical Batch: **INO1482**
Analytical Method: **EPA 300.0**
Instrument: **IC1**
Analyst: **PSW**

Prep Batch: **INO1482**
Prep Method: **EPA 300.0**
Prep Date/Time: **02/17/2012 00:57**
Spike Init Wt./Vol.: **10 mL** Extract Vol: **10 mL**
Dupe Init Wt./Vol.: Extract Vol:

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Matrix Spike Summary

Original Sample ID: 31200399001 (MW-1)
MS Sample ID: 58240
MSD Sample ID: 58241

Analysis Date: 02/17/2012 13:17
Analysis Date: 02/17/2012 13:37
Analysis Date: 02/17/2012 13:58
Matrix: Water

QC for Samples: 31200399001, 31200399004

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Chloride	5.86	10.0	15.0	91	10.0	15.1	93	90.0-110	0.66	20.00

Batch Information

Analytical Batch: **INO1482**
Analytical Method: **EPA 300.0**
Instrument: **IC1**
Analyst: **PSW**

Prep Batch: **INO1482**
Prep Method: **EPA 300.0**
Prep Date/Time: **02/17/2012 13:17**
MS Init Wt./Vol.: **10 mL** Extract Vol.: **10 mL**
MSD Init Wt./Vol.: **10 mL** Extract Vol.: **10 mL**

Print Date: 02/28/2012

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Batch Summary

Analytical Method: EPA 300.0

Prep Method: EPA 300.0
Prep Batch: INO1493
Prep Date: 02/27/2012 13:57

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 20231 [INO/1493]	59290	02/27/2012 13:57	INO1493	IC1	PSW
LCS for HBN 20231 [INO/1493]	59291	02/27/2012 14:18	INO1493	IC1	PSW
MW-2	31200399002	02/27/2012 14:38	INO1493	IC1	PSW
MW-2(58005MS)	59292	02/27/2012 15:39	INO1493	IC1	PSW
MW-2(58005MSD)	59293	02/27/2012 15:59	INO1493	IC1	PSW
MW-3	31200399003	02/27/2012 16:19	INO1493	IC1	PSW
DUP	31200399005	02/27/2012 16:40	INO1493	IC1	PSW
DUP(58008DUP)	59294	02/27/2012 17:00	INO1493	IC1	PSW

Print Date: 02/28/2012

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Method Blank

Blank ID: MB for HBN 20231 [INO/1493]
Blank Lab ID: 59290
QC for Samples:
31200399002, 31200399003, 31200399005

Matrix: Water

Results by EPA 300.0

Parameter	Result	Qual	LOQ/CL	Units	DF
Chloride	ND		0.300	mg/L	1

Batch Information

Analytical Batch: INO1493
Analytical Method: EPA 300.0
Instrument: IC1
Analyst: PSW
Analytical Date/Time: 2/27/2012 1:57:43PM

Prep Batch: INO1493
Prep Method: EPA 300.0
Prep Date/Time: 2/27/2012 1:57:43PM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Print Date: 02/28/2012

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Blank Spike Summary

Blank Spike ID: LCS for HBN 20231 [INO/1493]
Blank Spike Lab ID: 59291
Date Analyzed: 02/27/2012 14:18

Matrix: Water

QC for Samples: 31200399002, 31200399003, 31200399005

Results by **EPA 300.0**

	Blank Spike (mg/L)			
Parameter	Spike	Result	Rec (%)	CL
Chloride	10.0	9.35	93	90.0-110

Batch Information

Analytical Batch: **INO1493**
Analytical Method: **EPA 300.0**
Instrument: **IC1**
Analyst: **PSW**

Prep Batch: **INO1493**
Prep Method: **EPA 300.0**
Prep Date/Time: **02/27/2012 14:18**
Spike Init Wt./Vol.: **10 mL** Extract Vol: **10 mL**
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 02/28/2012

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Matrix Spike Summary

Original Sample ID: 31200399002 (MW-2)
MS Sample ID: 59292
MSD Sample ID: 59293

Analysis Date: 02/27/2012 14:38
Analysis Date: 02/27/2012 15:39
Analysis Date: 02/27/2012 15:59
Matrix: Water

QC for Samples: 31200399002, 31200399003, 31200399005

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Chloride	117	100	209	91	100	210	93	90.0-110	0.48	20.00

Batch Information

Analytical Batch: **INO1493**
Analytical Method: **EPA 300.0**
Instrument: **IC1**
Analyst: **PSW**

Prep Batch: **INO1493**
Prep Method: **EPA 300.0**
Prep Date/Time: **02/27/2012 14:38**
MS Init Wt./Vol.: **10 mL** Extract Vol.: **10 mL**
MSD Init Wt./Vol.: **10 mL** Extract Vol.: **10 mL**

Print Date: 02/28/2012

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Duplicate Sample Summary

Original Sample ID: 31200399005-I
Duplicate Sample ID: 59294

Analysis Date: 02/27/2012 16:40
Analysis Date: 02/27/2012 17:00
Matrix: Water

QC for Samples: 31200399002, 31200399003, 31200399005

Results by **EPA 300.0**

PARAMETER	Original (mg/L)	Qual	Duplicate (mg/L)	Qual	RPD (%)	RPD CL
Chloride	122		123		0.82	10.00

Batch Information

Analytical Batch: INO1493
Analytical Method: EPA 300.0
Instrument: IC1
Analyst: PSW

Print Date: 02/28/2012

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Batch Summary

Analytical Method: SM 5310-B

Prep Method: SM 5310-B
Prep Batch: INO1496
Prep Date: 02/27/2012 16:40

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS for HBN 20247 [INO/1496]	59351	02/27/2012 16:40	INO1496	TOC1	NTM
MW-1	31200399001	02/27/2012 17:02	INO1496	TOC1	NTM
MW-1(58004MS)	59352	02/27/2012 17:22	INO1496	TOC1	NTM
MW-1(58004MSD)	59353	02/27/2012 17:42	INO1496	TOC1	NTM
MW-2	31200399002	02/27/2012 18:01	INO1496	TOC1	NTM
MW-3	31200399003	02/27/2012 18:19	INO1496	TOC1	NTM
MW-4	31200399004	02/27/2012 18:38	INO1496	TOC1	NTM
DUP	31200399005	02/27/2012 18:57	INO1496	TOC1	NTM
MB for HBN 20247 [INO/1496]	59350	02/27/2012 19:15	INO1496	TOC1	NTM

Print Date: 02/28/2012

N.C. Certification # 481

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Method Blank

Blank ID: MB for HBN 20247 [INO/1496]
Matrix: Water
Blank Lab ID: 59350
QC for Samples:
31200399001, 31200399002, 31200399003, 31200399004, 31200399005

Results by **SM 5310-B**

Parameter	Result	Qual	LOQ/CL	Units	DF
Total Organic Carbon	ND		0.500	mg/L	1

Batch Information

Analytical Batch: INO1496
Analytical Method: SM 5310-B
Instrument: TOC1
Analyst: NTM
Analytical Date/Time: 2/27/2012 7:15:15PM

Prep Batch: INO1496
Prep Method: SM 5310-B
Prep Date/Time: 2/27/2012 7:15:15PM
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Print Date: 02/28/2012

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Blank Spike Summary

Blank Spike ID: LCS for HBN 20247 [INO/1496]
Blank Spike Lab ID: 59351
Date Analyzed: 02/27/2012 16:40

Matrix: Water

QC for Samples: 31200399001, 31200399002, 31200399003, 31200399004, 31200399005

Results by **SM 5310-B**

	Blank Spike (mg/L)			
Parameter	Spike	Result	Rec (%)	CL
Total Organic Carbon	50.0	49.3	99	90.0-110

Batch Information

Analytical Batch: **INO1496**
Analytical Method: **SM 5310-B**
Instrument: **TOC1**
Analyst: **NTM**

Prep Batch: **INO1496**
Prep Method: **SM 5310-B**
Prep Date/Time: **02/27/2012 16:40**
Spike Init Wt./Vol.: **40 mL** Extract Vol: **40 mL**
Dupe Init Wt./Vol.: Extract Vol:

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Laboratory Report

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Project No.: **01**
Project ID: **31200399**

Report Date: **2/27/2012**
Date Received: **2/16/2012**

--- Prepared for ---
MICHAEL PAGE
SGS NORTH AMERICA
5500 BUSINESS DRIVE
WILMINGTON, NC 28405

Work Order #: **1202-00927**
Cust. Code: **SGSNA**
Cust. P.O.#:

No.	Sample ID	Date Sampled	Time Sampled	Matrix	Sample Type	Condition
001	31200399001	2/15/2012	9:15	WW	Grab	4 +/- 2 deg C

Test Performed	Method	Results	Analyzed Lab Loc	Analyzed Date	Analyzed Time	Qualifier
Nitrate-Nitrite	EPA 353.2	0.41 mg/L as N	R	2/23/12	13:47	
Ammonia	EPA 350.1	<0.02 mg/L as N	R	2/23/12	13:45	
Chemical Oxygen Demand	EPA 410.4	140 mg/L	R	2/21/12	8:41	

No.	Sample ID	Date Sampled	Time Sampled	Matrix	Sample Type	Condition
002	31200399002	2/15/2012	10:49	WW	Grab	4 +/- 2 deg C

Test Performed	Method	Results	Analyzed Lab Loc	Analyzed Date	Analyzed Time	Qualifier
Nitrate-Nitrite	EPA 353.2	<0.02 mg/L as N	R	2/23/12	13:47	
Ammonia	EPA 350.1	2.25 mg/L as N	R	2/23/12	13:45	
Chemical Oxygen Demand	EPA 410.4	81.0 mg/L	R	2/21/12	8:41	

No.	Sample ID	Date Sampled	Time Sampled	Matrix	Sample Type	Condition
003	31200399003	2/15/2012	11:59	WW	Grab	4 +/- 2 deg C

Test Performed	Method	Results	Analyzed Lab Loc	Analyzed Date	Analyzed Time	Qualifier
Nitrate-Nitrite	EPA 353.2	<0.02 mg/L as N	R	2/23/12	13:47	
Ammonia	EPA 350.1	59.7 mg/L as N	R	2/23/12	13:45	
Chemical Oxygen Demand	EPA 410.4	221 mg/L	R	2/21/12	8:41	

No.	Sample ID	Date Sampled	Time Sampled	Matrix	Sample Type	Condition
004	31200399004	2/15/2012	12:58	WW	Grab	4 +/- 2 deg C

Test Performed	Method	Results	Analyzed Lab Loc	Analyzed Date	Analyzed Time	Qualifier
Nitrate-Nitrite	EPA 353.2	0.02 mg/L as N	R	2/23/12	13:47	
Ammonia	EPA 350.1	10.9 mg/L as N	R	2/23/12	13:45	
Chemical Oxygen Demand	EPA 410.4	70.2 mg/L	R	2/21/12	8:41	

TRiTEST

6701 Conference Drive
Raleigh, NC 27607
Telephone: (919) 834-4984
Fax: (919) 834-6497

Telephone: (919) 834-4984
Fax: (919) 834-6497

NC/WW Cert. #: 067
NC/DW Cert. #: 37731

Laboratory Report

Work Order #: **1202-00927**

No.	Sample ID	Date Sampled	Time Sampled	Matrix	Sample Type	Condition
005	31200399005	2/15/2012	13:00	WW	Grab	4 +/- 2 deg C

Test Performed	Method	Results	Analyzed Lab Loc	Analyzed Date	Analyzed Time	Qualifier
Nitrate-Nitrite	EPA 353.2	0.04 mg/L as N	R	2/23/12	13:47	
Ammonia	EPA 350.1	2.15 mg/L as N	R	2/23/12	13:45	
Chemical Oxygen Demand	EPA 410.4	59.0 mg/L	R	2/21/12	8:41	

Reviewed by:

Maryanne Sima

for Tritest, Inc.

1202-00927

SGS

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- New York
- North Carolina
- Ohio

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TriTest

(1)

CLIENT: SGS Wilmington

CONTACT: Michael Page PHONE NO (910) 350-1903

PROJECT: 31200399 SITE/PWSID#

REPORTS TO: michael.page@sgs.com FAX NO ( )

INVOICE TO QUOTE #

PO NUMBER

SGS Reference: 31200399

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(2)

LAB NO	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	Nitrate+Nitrite (3)	Ammonia	COD	REMARKS
	31200399001	2/15/12	0715	W.G	3	G	X	X	X	
	002		1049							
	003		1159							
	004		12.58							
	005		—							

(5)

Collected/Relinquished By (1)	Date	Time	Received By
[signature]	2-16-12	1545	[signature]
Relinquished By (2)	Date	Time	Received By
Relinquished By (3)	Date	Time	Received By
Relinquished By (4)	Date	Time	Received By

(4)

Shipping Carrier

Shipping Ticket No

Samples Received Cold? (Circle) YES NO

Temperature°C _____ . _____

Special Deliverable Requirements

Chain of Custody Seal (Circle)

INTACT BROKEN ABSENT

Special Instructions

Requested Turnaround Time

☐ RUSH _____ Date Needed ☒ STD

☐ 200 W Potter Drive Anchorage, AK 99518 Tel (907) 562-2343 Fax (907) 561-5301
☐ 5500 Business Drive Wilmington, NC 28405 Tel (910) 350-1903 Fax (910) 350-1557

NL 2-16-12

White - Retained by Lab
Pink - Retained by Client

TRiTEST

SAMPLE PRESERVATION CHECK-IN SHEET							
WO#	1202-00927						
Checked in by	NLC						
Date	2-16-12						
Time	1640						
Temp (°C)	4						
Route	CD	TTS	TTPU	USM	FEDX	GC	UPS

Sample No.	Analysis Requested	Chlorine	Samples Preserved Properly?			Comments
1	NH_3	Pos / neg	Yes	No	N/A	
	COD	Pos / neg	Yes	No	N/A	
	NOx	Pos / neg	Yes	No	N/A	
2	NH_3	Pos / neg	Yes	No	N/A	
	COD	Pos / neg	Yes	No	N/A	
	NOx	Pos / neg	Yes	No	N/A	
3	NH_3	Pos / neg	Yes	No	N/A	
	COD	Pos / neg	Yes	No	N/A	
	NOx	Pos / neg	Yes	No	N/A	
4	NH_3	Pos / neg	Yes	No	N/A	
	COD	Pos / neg	Yes	No	N/A	
	NOx	Pos / neg	Yes	No	N/A	
5	NH_3	Pos / neg	Yes	No	N/A	
	COD	Pos / neg	Yes	No	N/A	
	NOx	Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	
		Pos / neg	Yes	No	N/A	

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Matrix Spike Summary

Original Sample ID: 31200399001 (MW-1) — Analysis Date: 02/27/2012 17:02
MS Sample ID: 59352 — Analysis Date: 02/27/2012 17:22
MSD Sample ID: 59353 — Analysis Date: 02/27/2012 17:42
Matrix: Water

QC for Samples: 31200399001, 31200399002, 31200399003, 31200399004, 31200399005

Results by **SM 5310-B**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Organic Carbon	2.96	50.0	51.7	98	50.0	52.6	99	75.0-125	1.7	25.00

Batch Information

Analytical Batch: **INO1496**
Analytical Method: **SM 5310-B**
Instrument: **TOC1**
Analyst: **NTM**

Prep Batch: **INO1496**
Prep Method: **SM 5310-B**
Prep Date/Time: **02/27/2012 17:02**
MS Init Wt./Vol.: **40 mL** Extract Vol.: **40 mL**
MSD Init Wt./Vol.: **40 mL** Extract Vol.: **40 mL**

Print Date: 02/28/2012 — N.C. Certification # 481

SGS

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Locations Nationwide
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- New Jersey
- New York
- North Carolina
- Ohio

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106451

(1)
CLIENT: Altamont Environmental
CONTACT: Evan Yurkovich PHONE NO: (828) 281-3350
PROJECT: Elk Mountain Landfill SITE/PWSID#: 2408.01
REPORTS TO: Paul Dow
pdow@altamontenvironmental.com FAX NO.: (828) 281-3351
INVOICE TO: Altamont Environmental QUOTE #:
P.O. NUMBER: 2408

SGS Reference: 31200399

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	VOCs 8260	Metals	Nitrate+Nitrite	Ammonia	Chloride	COD	TOC			REMARKS
Preservatives Used							HCL	HNO_3	H_2SO_4	H_2SO_4		H_2SO_4	HCL			
							(3)									
	MW-1	2/15/2012	915	WT	10	G	X	X	X	X	X	X	X			
	MW-2	2/15/2012	1049	WT	10	G	X	X	X	X	X	X	X			
	MW-3	2/15/2012	1159	WT	10	G	X	X	X	X	X	X	X			
	MW-4	2/15/2012	1258	WT	10	G	X	X	X	X	X	X	X			
	DUP	2/15/2012	—	WT	10	G	X	X	X	X	X	X	X			
	TRIP BLANK LAB →				2		X									

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:
Evan Yurkovich	2/15/12	1500	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:
	2/16/12	945	Matt Beauchamp

(4)

Shipping Carrier:
Shipping Ticket No:
Samples Received Cold? (Circle) YES NO
Temperature°C: 1.2
Special Deliverable Requirements:
Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT
Special Instructions:
Requested Turnaround Time:
☐ RUSH _____ Date Needed ☑ STD

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

White - Retained by Lab
Pink - Retained by Client

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **Altamont Environmental** Work Order No.: **31200399**

1. X Shipped
   ___ Hand Delivered

2. X COC Present on Receipt
   ___ No COC
   ___ Additional Transmittal Forms

3. X Custody Tape on Container
   ___ No Custody Tape

4. X Samples Intact
   ___ Samples Broken / Leaking

5. X Chilled on Receipt Actual Temp.(s) in °C: 1.2
   ___ Ambient on Receipt
   ___ Walk-in on Ice; Coming down to temp.
   ___ Received Outside of Temperature Specifications

6. X Sufficient Sample Submitted
   ___ Insufficient Sample Submitted

7. ___ Chlorine absent
   X HNO3 < 2
   ___ HCL < 2
   X Additional Preservatives verified (see notes) H2SO4

8. X Received Within Holding Time
   ___ Not Received Within Holding Time

9. X No Discrepancies Noted
   ___ Discrepancies Noted
   ___ NCDENR notified of Descrepancies*

10. X No Headspace present in VOC vials
    ___ Headspace present in VOC vials >6mm

Notes:

Comments:

Inspected and Logged in by: JJ
Date: Thu-2/16/12 00:00

*NCDENR must be notified when collection, holding time or preservation requirements are not met. MI_11.6