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Waste Section

December 2007 Ground Water Sampling and Analysis Report
Third Creek Monofill
The City of Statesville
Statesville, North Carolina
February 20, 2008

NCR 000 001 602

Prepared for

The City of Statesville
Statesville, North Carolina

Prepared by

Waters Edge Environmental, LLC
Raleigh, North Carolina

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Mr. L.F. (Joe) Hudson, Jr., Director
Water/Wastewater Treatment Department
The City of Statesville
Post Office Box 1111
Statesville, North Carolina 28687-1111

Reference: December 2007 Ground Water Sampling and Analysis Report
Third Creek Monofill
City of Statesville
Statesville, North Carolina
Waters Edge Job No. R4-01

Dear Mr. Hudson:

Waters Edge Environmental, LLC (Waters Edge) is pleased to submit this report regarding ground water quality assessment activities performed at the City of Statesville Third Creek Monofill site. The report discusses the technical services Waters Edge has provided, describes the field procedures, and presents the results of the ground water analytical testing.

Waters Edge appreciates the opportunity to be of service to the City of Statesville. If you require additional information, please contact us at (919) 859-9987.

Sincerely,

WATERS EDGE ENVIRONMENTAL, LLC

Phillip L. Rahn, P.G.
Senior Project Manager

cc: Mr. Bud McCarty, NCDENR, DWM – Hazardous Waste Section (3 copies)
Mr. Steve Levitas Esq.- Kilpatrick Stockton

08-014/PLR/aht

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December 2007 Ground Water Sampling and Analysis Report
Third Creek Monofill
The City of Statesville
Statesville, North Carolina
February 20, 2008

1 Introduction

The City of Statesville operates a wastewater treatment plant at its Third Creek Facility located in Statesville, North Carolina (see Figure 1). The site operates under a NPDES permit (Permit No. 0020591) and a non-discharge permit (Permit No. WQ0004040). Concerns of elevated concentrations of cadmium in the treatment system were raised in 1993. The non-discharge permit was modified to allow the removal and landfilling of over 20 years of accumulated solids from Aeration Basins 1 and 2 and the Digester in an effort to reduce the amount of cadmium in the wastewater treatment system. The sludge was placed in eight landfill trenches on property near the wastewater treatment plant. Subsequent sampling of the landfilled sludge identified cadmium levels in excess of the regulatory limit for cadmium according to the toxicity characteristic leaching procedure (TCLP) in seven of the eight trenches.

Based upon this investigation and the laboratory analytical results, the North Carolina Department of Environment and Natural Resources, (NCDENR) Division of Waste Management (DWM) issued an Administrative Order of Consent (AOC) Docket #94-191 that was signed by the City of Statesville on March 8, 1995. Following the signing of the AOC, the City of Statesville contracted Aquaterra Engineering, Inc., (Aquaterra) to prepare, submit, and implement a *Phase I Subsurface Characterization Work Plan* to address the requirements of the AOC.

The landfilled sludges were remediated by excavating and stabilizing the sludge and installing a capping system. The sludges were stabilized by adding a fixation chemical in pre-determined percentages to the sludge material. The treated material was staged, covered, and allowed to cure. Following the curing time for the stabilized material, the media was tested for leachable cadmium, placed back into the trenches, and covered with an impermeable cap system.

The primary objective of the subsurface characterization activities was to determine the subsurface conditions at the site, including determining the ground water flow direction. The characterization activities included the drilling of four soil borings in the shallow regolith aquifer, and one soil boring advanced to auger refusal. In addition, four additional shallow ground water monitoring wells (MW-5 through MW-8) were installed. Aquaterra completed the subsurface characterization activities in mid-April 1995 and submitted a *Phase I Subsurface Characterization Report* and a *Ground Water Sampling and Analysis Plan* in May 1995. The four wells were initially sampled in June 1995, and were sampled along with three existing monitoring wells on a quarterly monitoring schedule until June 1998.

On September 3, 1996, the DWM approved a request by the City of Statesville to reduce the analytical parameters of the detection monitoring program. Consequently, Aquaterra submitted a *Revised Sampling and Analysis Plan* (SAP) on September 11, 1996. In the winter/spring of 1997, the Third Creek Monofill unit was closed in accordance with the July 12, 1996, *Revised Closure Plan.* On August 27, 1997, Aquaterra submitted a *Closure Certification.* The DWM, in a letter dated June 22, 1998, accepted this certification and the post-closure care period began, including semi-annual monitoring of wells MW-2 through MW-8. In a July 7, 1998 correspondence, the DWM recommended the installation of an additional monitoring well (MW-9) as shown in Figure 2 of the *Post-Closure Care Plan.* This well was installed on August 19, 1998. Monitoring well MW-9 and existing monitoring well MW-2 were sampled on a quarterly basis for a period of one year and were subsequently included in the semi-annual sampling events.

On November 8, 2000, the DWM approved a request by the City of Statesville to reduce the analytical parameters and frequency of the detection monitoring program. Consequently, Waters Edge Environmental, LLC (Waters Edge) submitted a *Revised Ground Water Sampling and Analysis Plan* on December 13, 2000. In a March 28, 2007 correspondence, NCDENR also accepted another parameter reduction request to eliminate volatile organic compounds (VOCs) since they had not been below detection limits (BDL) for several years. The following report summarizes the December 2007 annual ground water sampling event of monitoring wells MW-2 through MW-9.

2 Ground Water Assessment

As specified in the November 8, 2000 correspondence from the DWM addressing the *Revised Groundwater Sampling Program*, the monitoring wells are currently sampled on an annual basis.

2.1 Ground Water Level Monitoring and Sampling

Static ground water levels were measured to the nearest 0.01 foot using a decontaminated electronic water level probe in monitoring wells MW-2 through MW-9 on December 11, 2007 (see Figure 2 and Table 1). Prior to sample collection, a minimum of three well volumes of ground water was bailed from each well to remove stagnant water so that a representative ground water sample could be obtained. The samples were collected within one hour of purging to minimize the loss of any volatile organic compounds (VOCs) present. Disposable Teflon® bailers were used to withdraw the samples. Field measurements of pH, specific conductivity and temperature were also collected from each monitoring well location (see Table 1). The ground water samples were collected in decontaminated, laboratory-provided containers according to EPA protocols.

The ground water samples collected for laboratory analysis were labeled with a tag identifying the sample number, job number, job name, date, time, sampler's initials, and the analysis to be conducted. The sample information was logged onto a chain-of-custody form, and the samples were stored and transported in an insulated cooler filled with ice. Waters Edge maintained custody of the water samples until delivery to the analytical laboratory. The samples were analyzed by Pace Analytical Services, Inc., located in Huntersville, North Carolina.

2.2 Laboratory Analysis

2.2.1 Wells MW-2, MW-5, MW-6, MW-7 and MW-9

Ground water samples from wells MW-2, MW-7 and MW-9 were analyzed for arsenic, barium, cadmium, chromium, lead, nickel, selenium, and silver according to EPA Method 200.7, mercury according to EPA Method 245.1, and for semivolatile organic compounds (SVOCs) according to EPA Method 8270C. Well MW-2 was also sampled for total dissolved solids (TDS) according to EPA Method 160.1, total organic carbon (TOC) according to Standard Method 5310B, and nitrate according to EPA Method 353.2 as required under the non-discharge permit. MW-5 and MW-6 could not be sampled due to insufficient ground water in the wells. VOCs have been removed from the analyte list since they have been BDL for several years which was accepted by NCDENR prior to this sampling effort.

2.2.2 Wells MW-3, MW-4, and MW-8

Ground water samples from wells MW-3, MW-4, and MW-8 were analyzed for arsenic, barium, cadmium, chromium, lead, nickel, selenium, and silver according to Method 200.7, and mercury according to EPA Method 245.1. The wells were also sampled for TDS according to EPA Method 160.1, TOC according to Standard Method 5310B and nitrate according to EPA Method 353.2 as required under the non-discharge permit. VOCs have been removed from the analyte list since they have been BDL for several years which was accepted by NCDENR prior to this sampling effort.

3 Results

3.1 Aquifer Characteristics

Based upon the December 11, 2007 ground water levels, the direction of ground water flow appears to be to the south/southwest, responding to an approximate horizontal hydraulic gradient of 0.023 foot per foot (see Figure 2). This is consistent with previous ground water sampling events.

3.2 Analytical Results

The recent laboratory analytical results along with the corresponding 15A NCAC 2L.0202 North Carolina Groundwater Standards (NCGS or 2L Standards) are summarized in Table 2. Historical laboratory analytical results are presented in Table 3. No compounds were detected in any of the ground water samples above 2L Standards, with the exception of the following:

- MW-9 detected lead at 0.031 mg/L versus a NCGS at 0.015 mg/L

The trihalomethanes detected in the 2005 sampling round are now below detection limits (BDL). Therefore, during the 2005 sampling event, such compounds could have been introduced via the sampling equipment or laboratory. The laboratory report is included in Appendix A.

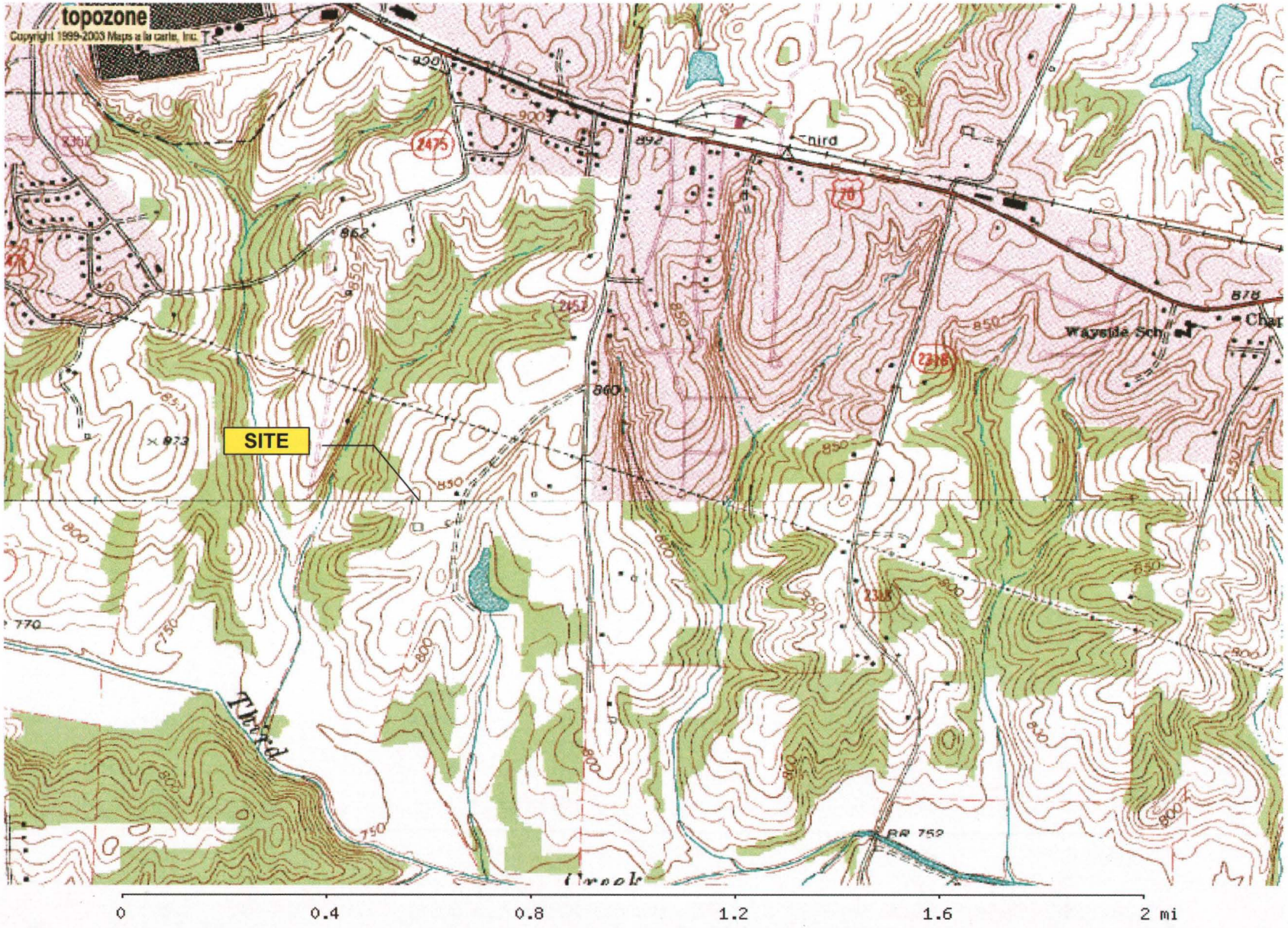
TDS was detected in the four wells sampled ranging from 42 mg/L (MW-4) to 100 mg/L (MW-3); however, none exceeded the NCGS of 500 mg/L. TOC was detected in the four wells sampled ranging from 1.6 mg/L (MW-4) to 11.4 mg/L (MW-8); however, there is no NCGS. USEPA has a secondary drinking water regulatory level at 500 mg/L. Nitrate was detected in the four wells sampled ranging from 0.25 mg/L (MW-4) to 4.7 mg/L (MW-2); however, none exceeded the NCGS of 10 mg/L.

4 Conclusions

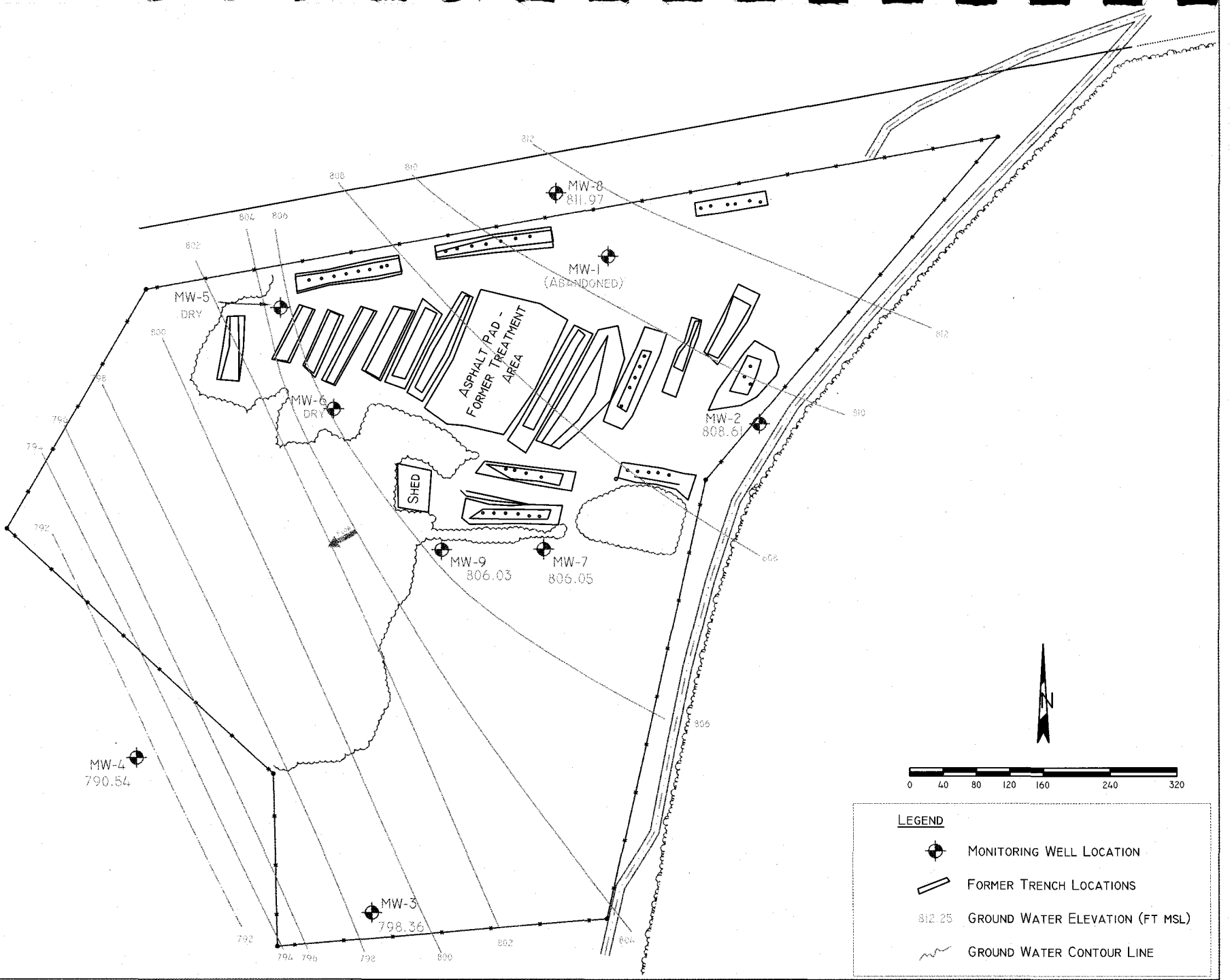
Lead had one slight NCGS exceedances in MW-9. There were no other compounds detected above 2L Standards. The trihalomethanes detected in the 2005 sampling round are now BDL; therefore, during the 2005 sampling event, they could have been introduced by the sampling equipment or laboratory.

TDS and nitrates are also well below NCGS. TOC was well below USEPA secondary drinking water standards.

Based on a review of the ongoing monitoring program results and the August 27, 1997, *Closure Certification* submitted by Aquaterra, the landfilled sludge does not appear to have significantly impacted the ground water at the Third Creek Monofill site. To comply with the November 8, 2000 DWM correspondence, the next annual sampling event is scheduled for December 2008. SVOCs have not been detected above detection limits for several years. We therefore request that SVOCs be eliminated in future sampling efforts. If NCDENR concurs, we will modify the SAP for your review and approval prior to the next sampling event in December 2008.



WATERS EDGE ENVIRONMENTAL, LLC	*Author* jme	*Drawing* R4-01.xls	*Quad* Statesville East	*Quad Date* 1993	*Title* Project Location Map
	Job No. R4-01	*Date*	*Figure* 1	*Scale* as shown	*Project* Third Creek Monofill Statesville, North Carolina



WATERS EDGE ENVIRONMENTAL, LLC	Author mbb/jme	Drawing 08-014 F02	Layers	Date 6-19-90	Title	Ground Water Contour Map (Data collected December 11, 2007)
	Job No. R4-01	Revision 2-20-08	Figure 2	Scale 1" = 160'	Project	Third Creek Monofill Facility Statesville, North Carolina

Table 1. Ground Water Elevations and Field Parameters for December 11, 2007 Sampling Event

Sample	Top of Casing Elevation (ft)	Depth to Ground Water (ft)	Ground Water Elevation (ft)	pH	Conductivity (umhos/cm)	Temperature (°C)
MW-1	860.08	Well Abandoned	NA	NA	NA	NA
MW-2	847.94	39.33	808.61	5.62	73.3	17.1
MW-3	823.85	25.49	798.36	5.97	183.3	17.1
MW-4	814.68	24.14	790.54	5.74	69.3	16.9
MW-5	847.16	Dry			Well Not Sampled	
MW-6	850.21	Dry			Well Not Sampled	
MW-7	847.7	41.65	806.05	6.38	148.3	17.1
MW-8	861.44	49.47	811.97	6.34	144.3	16.9
MW-9	846.48	40.45	806.03	6.59	100.8	17.1

Notes:

Elevations are referenced to previously determined MW-1 elevation
pH reported in standard units
NM = Not Measured.
NR = Not recorded due to limited quantity of water present
NA = Not Applicable

Waters Edge Job No. R4-01

Table 2 Laboratory Analytical Results for December 11, 2007 Ground Water Sampling Event

Parameter	NCAC 2L	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
Arsenic	0.05	*0.0058*	*<0.005*	*<0.005*	NC	NC	<0.005	0.0054	0.014
Barium	2	1.1	0.18	0.06	NC	NC	0.64	1.1	1.4
Cadmium	0.00175	*<0.001*	*<0.001*	*<0.001*	NC	NC	<0.001	<0.001	<0.001
Chromium	0.05	*<0.0005*	*<0.0005*	*<0.005*	NC	NC	<0.005	<0.005	<0.005
Lead	0.015	*0.0074*	*<0.005*	*<0.005*	NC	NC	0.0069	0.014	**0.031**
Nickel	0.1	*0.0088*	*<0.005*	*<0.005*	NC	NC	0.0076	0.011	0.007
Mercury	0.00105	*<0.0002*	*<0.0002*	*<0.0002*	NC	NC	*<0.0002*	*<0.0002*	*<0.0002*
Nitrogen (as Nitrate)	10	4.7	4.6	0.25	NC	NC	NA	1.6	NA
Selenium	0.05	*<0.01*	*<0.005*	*<0.0050*	NC	NC	*<0.005*	*<0.005*	*0.018*
Silver	0.0175	*<0.005*	*<0.002*	*<0.0020*	NC	NC	*<0.002*	*<0.002*	*<0.002*
TOC	NS	3.2	2.3	1.6	NC	NC	NA	11.4	NA
TDS	500	74	100	42	NC	NC	NA	50	NA
SVOCs	---	ND	NA	NA	NC	NC	ND	NA	ND

NOTES:

All units are in mg/L unless otherwise specified

NA = Not Analyzed- VOCs have been removed from analyte list and accepted by NCDENR

NS = No Standard

NC = No sample collected due to limited sample volume

ND = Not Detected

Levels shown in boldface exceed NCAC 2L Standards

DL= Detection Limit

Waters Edge Job No. R4-01

Table 3. Historical Results Metals and Inorganic Parameters

MW-2

Parameter	NCAC 2L	9/29/98	12/15/98	3/2/99	6/29/99	12/13/99	6/29/00	12/19/00	12/13/01	12/3/02	12/16/03	12/27/04
Arsenic	0.05	<0.0017	<0.005	<0.005	<0.005	<0.0053	<0.005	**0.069**	<0.005	<0.005	<0.005	<0.005
Barium	2	0.36	0.48	0.66	0.36	0.88	0.46	**12**	1	0.39	0.49	0.42
Cadmium	0.00175	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chloride	250	2.3	3	1.3	1.2	<5	<5	NA	NA	NA	NA	NA
Chromium	0.05	0.01	0.011	0.02	0.0059	0.024	0.0083	**0.42**	0.019	0.013	0.0074	0.0041
Fluoride, Total	2	<0.2	<0.2	<0.2	<0.2	0.2	<0.20	NA	NA	NA	NA	NA
Iron	0.3	**11**	**23**	**29**	**9.5**	**33**	**12**	NA	NA	NA	NA	NA
Lead	0.015	0.012	0.0093	**0.021**	0.0059	**0.018**	<0.005	**0.27**	**0.017**	0.011	0.0079	<0.005
Manganese	0.05	**0.23**	**0.42**	**0.71**	**0.22**	**0.65**	**0.25**	NA	NA	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	0.00079	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	0.0055
Nitrogen, Nitrate	10	6.8	6.2	9.6	7.2	6.3	5.4	4.8	4	3.4	6.6	6.6
Phenol, Low Level	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.0175	<0.05	<0.05	<0.05	<0.002	<0.002	0.0028	<0.002	0.0062	<0.002	<0.002	<0.002
Sodium	NS	4.4	3.7	4.8	4.9	4.1	4.3	NA	NA	NA	NA	NA
Sulfate	250	<5	<5.0	<5.0	<5.0	<5	<5	NA	NA	NA	NA	NA
Total Organic Carbon	NS	3.3	1.1	IQR	IQR	IQR	IQR	IQR	<2.0	<2.0	2.8	1.6
Total Organic Halides	NS	0.0011	<0.03	IQR	IQR	IQR	IQR	NA	NA	NA	NA	NA
Gross Alpha[a]	15	2	3.2	4.2	2.9	14.1	1.8	NA	NA	NA	NA	NA
Gross Beta[a]	NS	4.1	6.2	7	6	10.8	5.5	NA	NA	NA	NA	NA
Radium 226[a]	**	0.3	0.6	1.6	1.9	1.3	0.2	NA	NA	NA	NA	NA
Radium 228[a]	**	<0.9	<1.0	0.7	2.6	2.6	1.6	NA	NA	NA	NA	NA

NOTES:
All units are in mg/L unless otherwise specified
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] *Units are in pCi/L*

Table 3. Historical Results Metals and Inorganic Parameters

MW-2 (Continued)

Parameter	NCAC 2L	12/7/05	12/20/06	12/11/07
Arsenic	0.05	<0.005	<0.005	0.0058
Barium	2	0.3	0.49	1.1
Cadmium	0.00175	<0.001	<0.001	<0.001
Chloride	250	NA	NA	NA
Chromium	0.05	0.0088	<0.005	<0.005
Fluoride, Total	2	NA	NA	NA
Iron	0.3	NA	NA	NA
Lead	0.015	<0.005	<0.005	0.0074
Manganese	0.05	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002
Nickel	0.1	<0.005	<0.005	0.0088
Nitrogen, Nitrate	10	6.5	5.1	4.7
Phenol, Low Level	0.3	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.005
Silver	0.0175	<0.002	<0.002	<0.002
Sodium	NS	NA	NA	NA
Sulfate	250	NA	NA	NA
Total Organic Carbon	NS	6.8	ND	3.2
Total Organic Halides	NS	NA	NA	NA
Gross Alpha[a]	15	NA	NA	NA
Gross Beta[a]	NS	NA	NA	NA
Radium 226[a]	**	NA	NA	NA
Radium 228[a]	**	NA	NA	NA

NOTES:
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NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] *Units are in pCi/L*

Table 3. Historical Results Metals and Inorganic Parameters

MW-4

Parameter	NCAC 2L	12/3/02	12/16/03	12/27/04	12/7/05	12/20/06	12/11/07
Arsenic	0.05	<0.005	0.0057	<0.005	<0.005	<0.005	<0.005
Barium	2	0.028	0.37	0.16	0.091	0.14	0.06
Cadmium	0.00175	<0.001	<0.001	**0.0032**	<0.001	<0.001	<0.001
Chloride	250	NA	NA	NA	NA	NA	NA
Chromium	0.05	<0.002	0.012	0.0064	0.0045	<0.005	<0.005
Fluoride, Total	2	NA	NA	NA	NA	NA	NA
Iron	0.3	NA	NA	NA	NA	NA	NA
Lead	0.015	<0.005	**0.025**	0.0095	0.0074	<0.005	<0.005
Manganese	0.05	NA	NA	NA	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	IQR	IQR	0.0084	<0.005	<0.005	<0.005
Nitrogen, Nitrate	10	0.61	0.37	0.5	0.42	0.48	0.25
Phenol, Low Level	0.3	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	<0.005	0.0066	<0.005	<0.005	<0.005
Silver	0.0175	<0.002	<0.002	0.0034	<0.002	<0.002	<0.002
Sodium	NS	NA	NA	NA	NA	NA	NA
Sulfate	250	NA	NA	NA	NA	NA	NA
Total Organic Carbon	NS	1.0	1.5	0.59	3.80	ND	1.6
Total Organic Halides	NS	NA	NA	NA	NA	NA	NA
Gross Alpha[a]	15	NA	NA	NA	NA	NA	NA
Gross Beta[a]	NS	NA	NA	NA	NA	NA	NA
Radium 226[a]	**	NA	NA	NA	NA	NA	NA
Radium 228[a]	**	NA	NA	NA	NA	NA	NA

NOTES:
All units are in mg/L unless otherwise specified
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] *Units are in pCi/L*

Table 3. Historical Results Metals and Inorganic Parameters

MW-3

Parameter	NCAC 2L	12/3/02	12/16/03	12/27/04	12/7/05	12/20/06	12/11/07
Arsenic	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Barium	2	0.33	0.18	0.17	0.14	0.16	0.18
Cadmium	0.00175	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chloride	250	NA	NA	NA	NA	NA	NA
Chromium	0.05	0.024	<0.002	<0.002	0.0042	<0.005	<0.005
Fluoride, Total	2	NA	NA	NA	NA	NA	NA
Iron	0.3	NA	NA	NA	NA	NA	NA
Lead	0.015	**0.029**	0.0064	<0.005	0.005	<0.005	<0.005
Manganese	0.05	NA	NA	NA	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	IQR	IQR	<0.005	<0.005	<0.005	<0.005
Nitrogen, Nitrate	10	4.2	1.8	2.3	3.9	4.2	4.6
Phenol, Low Level	0.3	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.0175	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Sodium	NS	NA	NA	NA	NA	NA	NA
Sulfate	250	NA	NA	NA	NA	NA	NA
Total Organic Carbon	NS	4.8	2.2	<0.5	4.2	ND	2.3
Total Organic Halides	NS	NA	NA	NA	NA	NA	NA
Gross Alpha[a]	15	NA	NA	NA	NA	NA	NA
Gross Beta[a]	NS	NA	NA	NA	NA	NA	NA
Radium 226[a]	**	NA	NA	NA	NA	NA	NA
Radium 228[a]	**	NA	NA	NA	NA	NA	NA

NOTES:
All units are in mg/L unless otherwise specified
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] *Units are in pCi/L*

Table 3. Historical Results Metals and Inorganic Parameters

MW-5

Parameter	NCAC 2L	6/2/95	9/19/95	12/18/95	3/19/96	6/27/96	9/17/96	12/4/96	3/27/97	6/6/97	9/15/97	12/16/97
Arsenic	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007
Barium	2	1.99	0.61	0.21	0.039	0.39	0.29	0.43	0.28	0.21	0.31	0.42
Cadmium	0.00175	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	250	4	6	3.2	3.4	4.9	3.7	4	3.7	3.9	4.8	5
Chromium	0.05	<0.010	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Fluoride, Total	2	0.14	0.14	<0.10	<0.10	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2
Iron	0.3	**61**	**16**	**2.5**	**18**	**3.5**	**6.4**	**0.84**	0.16	**8.4**	**8.3**	**14**
Lead	0.015	**0.1**	<0.10	0.005	0.008	0.007	0.006	<0.005	<0.005	<0.005	0.007	0.011
Manganese	0.05	**7.4**	**14**	**1.7**	**1.3**	**1.9**	**1.1**	**1.2**	**0.85**	**1.5**	**1.4**	**1.4**
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR
Nitrogen, Nitrate	10	0.6	<0.1	0.49	0.5	0.42	0.3	0.39	0.34	0.31	0.38	0.36
Phenol, Low Level	0.3	<0.002	NC	<0.005	<0.005	0.005	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.0175	<0.005	<0.010	<0.005	0.014	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sodium	NS	4.2	8.4	2.5	3.1	3.4	2.3	2.3	1.9	3.1	3.4	4.3
Sulfate	250	2	<1.0	<1.0	2.7	<5	<5	<5	<5	<5	<10	<10
Total Organic Carbon	NS	6	6	3.5	3	3.3	<1	<1	6	3	<1	1.09
Total Organic Halides	NS	0.021	0.14	0.009	0.012	0.0481	0.016	0.019	0.033	0.01	0.014	0.007
Gross Alpha[a]	15	1.2	NC	1.2	11.3	3.7	3.2	4.1	2.9	2	2	2.8
Gross Beta[a]	NS	3	NC	3.5	10.2	4.8	5.3	5.8	4.1	2.8	3.2	4.9
Radium 226[a]	**	1.3	<0.2	1.2	2.8	1.9	1.7	0.6	0.7	1.2	0.4	1.2
Radium 228[a]	**	1.6	<0.9	1.1	2.5	1.2	3	2	0.8	1.2	<0.9	1.8

NOTES: Pesticide, heptachlor at a concentration of 0.20 ug/L was identified during the 6/27/96 sampling event
All units are in mg/L unless otherwise specified.
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] Units are in pCi/L

Table 3. Historical Results Metals and Inorganic Parameters

MW-5 (Continued)

Parameter	NCAC 2L	3/4/98	6/17/98	12/15/98	12/16/03	12/27/04	12/7/05	12/20/06
Arsenic	0.05	<0.005	<0.005	<0.005	<0.005	NC	NC	NC
Barium	2	0.23	0.23	0.2	0.12	NC	NC	NC
Cadmium	0.00175	<0.010	<0.010	<0.01	**0.0024**	NC	NC	NC
Chloride	250	4	2	NC	NA	NC	NC	NC
Chromium	0.05	<0.010	<0.010	<0.01	<0.002	NC	NC	NC
Fluoride, Total	2	<0.2	<0.2	NC	NA	NC	NC	NC
Iron	0.3	**2.9**	**4.1**	**5.3**	NA	NC	NC	NC
Lead	0.015	<0.005	<0.005	<0.005	<0.005	NC	NC	NC
Manganese	0.05	**0.74**	**1.1**	NC	NA	NC	NC	NC
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	NC	NC	NC
Nickel	0.1	IQR	IQR	IQR	IQR	NC	NC	NC
Nitrogen, Nitrate	10	0.35	0.15	NC	NA	NC	NC	NC
Phenol, Low Level	0.3	NA	NA	NA	NA	NC	NC	NC
Selenium	0.05	<0.005	<0.005	<0.005	<0.005	NC	NC	NC
Silver	0.0175	<0.050	<0.050	<0.05	<0.002	NC	NC	NC
Sodium	NS	3.3	2.5	2.7	NA	NC	NC	NC
Sulfate	250	<5	<10	NC	NA	NC	NC	NC
Total Organic Carbon	NS	2.4	2.2	NC	NA	NC	NC	NC
Total Organic Halides	NS	<0.005	<0.005	NC	NA	NC	NC	NC
Gross Alpha[a]	15	1.6	1.8	NC	NA	NC	NC	NC
Gross Beta[a]	NS	3.3	3	NC	NA	NC	NC	NC
Radium 226[a]	**	0.5	0.7	NC	NA	NC	NC	NC
Radium 228[a]	**	<0.9	1.1	NC	NA	NC	NC	NC

NOTES: Pesticide, heptachlor at a concentration of 0.20 ug/L was identified during the 6/27/96 sampling event
All units are in mg/L unless otherwise specified.
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] Units are in pCi/L

Table 3. Historical Results Metals and Inorganic Parameters

MW-6

Parameter	NCAC 2L	6/2/95	9/19/95	12/18/95	3/19/96	6/27/96	9/17/96	12/4/96	3/27/97	6/6/97	9/15/97	12/16/97
Arsenic	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Barium	2	0.405	0.192	0.17	0.22	0.23	0.3	0.21	0.23	0.44	0.2	0.27
Cadmium	0.00175	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	250	3.5	2.5	2.2	3.6	4.8	3.2	2	3.7	5.1	3	2
Chromium	0.05	<0.010	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.031	<0.010	<0.010
Fluoride, Total	2	0.12	0.14	<0.1	<0.10	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2
Iron	0.3	**22**	**2.1**	**0.65**	**6.3**	**6**	**7.5**	0.22	**0.47**	**21**	**3.8**	**8.6**
Lead	0.015	<0.10	<0.10	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	0.01	<0.005	0.008
Manganese	0.05	**0.796**	**0.13**	**0.07**	**0.21**	**0.22**	**0.3**	0.044	**0.093**	**0.66**	**0.18**	**0.3**
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	**0.003**	0.0003	0.0002	0.00033	**0.0013**	0.0007	0.0003
Nickel	0.1	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR
Nitrogen, Nitrate	10	2.2	3.1	2.1	4.7	4.6	2.4	1.8	2.8	2.4	1.8	1.7
Phenol, Low Level	0.3	<0.002	<0.002	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.0175	<0.005	<0.010	<0.005	<0.005	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sodium	NS	5.9	5	6.8	5.2	5	5	5	4.8	5.3	5.5	6.5
Sulfate	250	2	2	<1.0	<1.0	<5	<5	<50	<5	<5	<10	<10
Total Organic Carbon	NS	1	<1	2.4	1	2.9	<1	<1	3	1	1	1
Total Organic Halides	NS	0.007	0.018	NC	0.009	0.0311	0.012	0.0272	0.013	0.019	<0.005	0.017
Gross Alpha[a]	15	<1.0	1.7	1.4	2.1	3.7	2.1	1.5	3.5	3.4	2.7	5.1
Gross Beta[a]	NS	3.9	3.5	2.8	4.1	3.4	2.6	3.4	4	3.5	2.3	3.7
Radium 226[a]	**	1.2	0.5	0.5	0.4	0.6	0.2	0.6	0.3	1.7	0.3	1.5
Radium 228[a]	**	1.3	<0.9	1	0.8	1.1	<1.1	0.9	<0.8	1.1	<1.0	<0.8

NOTES: Pesticide, heptachlor at a concentration of 0.33 ug/L was identified during the 6/27/96 sampling event.
All units are in mg/L unless otherwise specified.
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] Units are in pCi/L

Table 3. Historical Results Metals and Inorganic Parameters

MW-6 (Continued)

Parameter	NCAC 2L	3/4/98	6/16/98	12/16/98	12/16/03	12/27/04	12/7/05	12/20/06
Arsenic	0.05	<0.005	<0.005	<0.005	<0.005	NC	NC	NC
Barium	2	0.21	0.38	0.17	0.32	NC	NC	NC
Cadmium	0.00175	<0.010	<0.010	<0.010	<0.010	NC	NC	NC
Chloride	250	2	3	3	NA	NC	NC	NC
Chromium	0.05	<0.010	0.025	<0.010	0.0043	NC	NC	NC
Fluoride, Total	2	<0.2	<0.2	<0.2	NA	NC	NC	NC
Iron	0.3	**4.7**	**17**	**0.8**	NA	NC	NC	NC
Lead	0.015	<0.005	0.01	<0.005	0.0079	NC	NC	NC
Manganese	0.05	**0.17**	**0.57**	**0.072**	NA	NC	NC	NC
Mercury	0.00105	0.0009	**0.0034**	<0.0002	<0.0002	NC	NC	NC
Nickel	0.1	IQR	IQR	IQR	IQR	NC	NC	NC
Nitrogen, Nitrate	10	1.9	2	1.8	NA	NC	NC	NC
Phenol, Low Level	0.3	NA	NA	NA	NA	NC	NC	NC
Selenium	0.05	<0.005	<0.005	<0.005	<0.005	NC	NC	NC
Silver	0.0175	<0.050	<0.050	<0.050	<0.002	NC	NC	NC
Sodium	NS	5.3	4.7	4.2	NA	NC	NC	NC
Sulfate	250	<5	<10	<5.0	NA	NC	NC	NC
Total Organic Carbon	NS	6.6	2.8	2.2	NA	NC	NC	NC
Total Organic Halides	NS	<0.005	<0.005	<0.030	NA	NC	NC	NC
Gross Alpha[a]	15	1.5	3.2	2.1	NA	NC	NC	NC
Gross Beta[a]	NS	2.3	4	4.5	NA	NC	NC	NC
Radium 226[a]	**	0.3	1	0.5	NA	NC	NC	NC
Radium 228[a]	**	<0.8	1.2	<1.0	NA	NC	NC	NC

NOTES: Pesticide, heptachlor at a concentration of 0.33 ug/L was identified during the 6/27/96 sampling event
All units are in mg/L unless otherwise specified.
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] *Units are in pCi/L*

Table 3. Historical Results Metals and Inorganic Parameters

MW-7

Parameter	NCAC 2L	6/2/95	9/19/95	12/18/95	3/19/96	6/27/96	9/17/96	12/4/96	3/27/97	6/5/97	9/16/97	12/16/97
Arsenic	0.05	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Barium	2	**2.43**	**2.6**	1.2	0.7	0.21	0.21	0.13	0.11	0.14	0.33	0.59
Cadmium	0.00175	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	250	3.5	1.5	<2.7	2.4	2.4	2.7	2	2.9	3.2	3	2
Chromium	0.05	**0.143**	**0.185**	**0.063**	0.048	<0.010	<0.010	<0.010	<0.010	<0.010	0.021	0.039
Fluoride, Total	2	0.12	0.16	0.14	<0.10	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2
Iron	0.3	**210**	**190**	**64**	**54**	**13**	**12**	0.21	**0.63**	**8**	**23**	**42**
Lead	0.015	**0.13**	**0.12**	**0.034**	**0.025**	0.006	0.007	<0.005	<0.005	<0.005	0.012	**0.021**
Manganese	0.05	**5.59**	**6.6**	**2.68**	**1.4**	**0.39**	**0.44**	**0.06**	**0.07**	**0.21**	**0.63**	**1.2**
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR
Nitrogen, Nitrate	10	1.1	2.8	1.4	1.3	1.3	1.7	1.5	1.2	1.6	1.3	1.3
Phenol, Low Level	0.3	<0.002	<0.002	<0.005	<0.005	0.008	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.0175	<0.005	<0.010	<0.005	<0.005	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sodium	NS	6.4	6.4	6.3	5.7	5.5	5.9	6.1	6.3	7.4	7.2	8.4
Sulfate	250	<1	<1	<1	<1.0	<5	<5	<5	<5	<5	<10	<10
Total Organic Carbon	NS	2	1	3.2	1	1.3	<1	<1	1.9	<1	<1	<1
Total Organic Halides	NS	0.013	0.012	0.019	<0.005	0.0291	<0.005	0.0326	0.026	<0.005	<0.005	0.009
Gross Alpha[a]	15	10.4	12	8	5.3	2.9	1.7	1.4	<0.9	1	2.6	4.1
Gross Beta[a]	NS	14.1	11.3	6.6	6.6	3.9	2.5	2.6	3.4	2.1	2.8	4.7
Radium 226[a]	**	3.3	0.8	3	0.8	0.5	0.3	0.5	0.2	0.7	1	0.8
Radium 228[a]	**	4.1	<0.9	2.5	1.2	1	<1.2	0.8	<0.8	<0.8	<0.9	<0.8

NOTES: All units are in mg/L unless otherwise specified
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] Units are in pCi/L

Table 3. Historical Results Metals and Inorganic Parameters

MW-7 (Continued)

Parameter	NCAC 2L	3/6/98	6/17/98	12/16/98	6/29/99	12/14/99	6/29/00	12/19/00	12/13/01	12/3/02	12/16/03	12/27/04
Arsenic	0.05	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	0.0055	<0.005	<0.005	<0.005	<0.005
Barium	2	0.16	0.14	0.63	0.31	0.48	0.35	0.56	1.4	0.061	0.56	0.44
Cadmium	0.00175	<0.010	<0.010	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chloride	250	2	2	0.042	<1.0	6.3	5.8	NA	NA	NA	NA	NA
Chromium	0.05	<0.010	<0.010	<0.2	0.02	0.019	0.021	0.035	0.026	0.0035	0.014	0.0091
Fluoride, Total	2	<0.2	<0.2	<0.2	<0.2	0.24	<0.2	NA	NA	NA	NA	NA
Iron	0.3	**9.7**	**7.3**	**51**	**22**	**20**	**26**	NA	NA	NA	NA	NA
Lead	0.015	0.005	<0.005	**0.022**	0.014	0.014	0.0086	**0.017**	**0.016**	<0.005	0.011	<0.005
Manganese	0.05	**0.26**	**0.19**	**1.3**	**0.6**	**0.7**	**0.72**	NA	NA	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	0.0065
Nitrogen, Nitrate	10	1.5	1.2	1	0.97	0.012	0.079	NA	NA	NA	NA	NA
Phenol, Low Level	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.0175	<0.050	<0.050	<0.05	<0.002	<0.002	0.0027	<0.002	<0.002	<0.002	<0.002	<0.002
Sodium	NS	7.7	7.1	5.6	6.8	6.9	6.9	NA	NA	NA	NA	NA
Sulfate	250	<5	<10	<5.0	<5.0	<5	5.5	NA	NA	NA	NA	NA
Total Organic Carbon	NS	1.1	0.97	0.7	IQR	IQR	IQR	NA	NA	NA	NA	NA
Total Organic Halides	NS	<0.005	<0.005	<0.030	IQR	IQR	IQR	NA	NA	NA	NA	NA
Gross Alpha[a]	15	1.5	1.3	3.9	3.3	6.5	3.9	NA	NA	NA	NA	NA
Gross Beta[a]	NS	3.4	1.5	0.8	5.1	7.2	6	NA	NA	NA	NA	NA
Radium 226[a]	**	0.2	0.7	<1.0	1.2	1.3	0.7	NA	NA	NA	NA	NA
Radium 228[a]	**	<0.8	<0.9	<1.0	1.3	<1.0	3.6	NA	NA	NA	NA	NA

NOTES: All units are in mg/L unless otherwise specified
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] Units are in pCi/L

Table 3. Historical Results Metals and Inorganic Parameters

MW-7 (Continued)

Parameter	NCAC 2L	12/7/05	12/20/06	12/11/07
Arsenic	0.05	<0.005	0.0064	<0.005
Barium	2	0.55	0.94	0.64
Cadmium	0.00175	<0.001	**0.0027**	<0.001
Chloride	250	NA	NA	NA
Chromium	0.05	0.026	0.039	<0.05
Fluoride, Total	2	NA	NA	NA
Iron	0.3	NA	NA	NA
Lead	0.015	0.014	**0.025**	0.0069
Manganese	0.05	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002
Nickel	0.1	0.013	0.016	0.0076
Nitrogen, Nitrate	10	NA	NA	NA
Phenol, Low Level	0.3	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.005
Silver	0.0175	<0.002	<0.002	<0.002
Sodium	NS	NA	NA	NA
Sulfate	250	NA	NA	NA
Total Organic Carbon	NS	NA	NA	NA
Total Organic Halides	NS	NA	NA	NA
Gross Alpha[a]	15	NA	NA	NA
Gross Beta[a]	NS	NA	NA	NA
Radium 226[a]	**	NA	NA	NA
Radium 228[a]	**	NA	NA	NA

NOTES: All units are in mg/L unless otherwise specified
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] Units are in pCi/L

Table 3. Historical Results Metals and Inorganic Parameters

MW-8

Parameter	NCAC 2L	6/2/95	9/19/95	12/18/95	3/20/96	6/27/96	9/17/96	12/4/96	3/27/97	6/5/97	9/16/97	12/15/97
Arsenic	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Barium	2	0.8	0.73	0.74	0.88	0.28	0.17	0.15	0.12	0.11	0.11	0.24
Cadmium	0.00175	<0.010	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloride	250	2.5	2.5	5	2.2	2.9	3.5	2.2	2.7	3.2	2.3	3
Chromium	0.05	<0.010	0.022	0.017	0.024	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Fluoride, Total	2	0.21	0.14	<0.1	<0.10	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2
Iron	0.3	**26**	**27**	**27**	**35**	**9.9**	**3**	0.11	0.12	**2.8**	**2.7**	**8.3**
Lead	0.015	<0.10	<0.10	**0.035**	**0.046**	0.013	<0.005	<0.005	<0.005	<0.005	0.006	<0.10
Manganese	0.05	**1.07**	**1.34**	**1.26**	**1.2**	**0.32**	**0.11**	0.026	0.024	**0.077**	**0.07**	**0.23**
Mercury	0.00105	0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR
Nitrogen, Nitrate	10	1.4	3.4	1.2	1.2	1.6	1.4	1.4	1.3	1.4	1.5	1.4
Phenol, Low Level	0.3	<0.002	<0.002	<0.005	<0.005	0.007	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.0175	<0.005	<0.010	<0.005	<0.005	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sodium	NS	2.3	2.6	2.5	2.3	5	3.3	2.3	2.5	5.5	4.9	3.8
Sulfate	250	1	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5	<10	<10
Total Organic Carbon	NS	2	<1.0	2.3	2	1.5	<1	<1	1.1	<1	4	<1
Total Organic Halides	NS	<0.005	0.027	<0.005	<0.005	0.0181	0.023	0.0134	0.01	<0.005	<0.005	<0.005
Gross Alpha[a]	15	4.9	6.3	6.1	5.4	2	1	2	2.3	0.8	1	1.7
Gross Beta[a]	NS	5.6	7.2	5.4	5.7	3.6	2.2	4.3	3.7	2.1	2.9	2.9
Radium 226[a]	**	3.6	0.4	2.4	0.7	0.3	1.1	1.4	1	0.5	0.5	0.6
Radium 228[a]	**	1.8	<0.9	1.2	1.1	0.9	1.2	0.9	<0.8	<0.8	<0.9	<0.8

NOTES: All units are in mg/L unless otherwise specified
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] *Units are in pCi/L*

Table 3. Historical Results Metals and Inorganic Parameters

MW-8 (Continued)

Parameter	NCAC 2L	3/5/98	6/17/98	12/15/98	6/30/99	12/14/99	6/29/00	12/19/00	12/13/01	12/3/02	12/16/03	12/27/04
Arsenic	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005
Barium	2	0.29	0.16	0.41	0.034	0.22	1.1	0.26	0.14	0.06	0.26	0.19
Cadmium	0.00175	<0.010	<0.010	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chloride	250	2	2	3.3	1.4	<5	<5	NA	NA	NA	NA	NA
Chromium	0.05	<0.010	<0.010	<0.01	<0.0037	0.0067	0.027	0.0076	0.017	0.0031	0.0034	0.0029
Fluoride, Total	2	<0.2	<0.2	<0.2	<0.2	0.28	<0.2	NA	NA	NA	NA	NA
Iron	0.3	**8.3**	**3.9**	**13**	**6.8**	**5.6**	**42**	NA	NA	NA	NA	NA
Lead	0.015	**0.015**	0.007	**0.019**	**0.017**	0.014	**0.61**	0.01	0.0051	<0.005	0.0074	0.006
Manganese	0.05	**0.23**	**0.12**	**0.33**	**0.26**	**0.15**	**1**	NA	NA	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	<0.005
Nitrogen, Nitrate	10	1.4	1.4	1.3	1.3	1.1	0.5	1	1.2	1.2	1.1	1.4
Phenol, Low Level	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.0175	<0.050	<0.050	**2**	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Sodium	NS	3	6.2	<5.0	2.7	3.8	3.3	NA	NA	NA	NA	NA
Sulfate	250	<5	<10	1	<5	<5	5.5	NA	NA	NA	NA	NA
Total Organic Carbon	NS	0.66	0.78	1	IQR	IQR	IQR	2	<2.0	NA	1.8	<0.5
Total Organic Halides	NS	<0.005	7.1	<0.03	NA	NA	NA	NA	NA	NA	NA	NA
Gross Alpha[a]	15	0.9	1.4	2.4	2.4	1.9	**17.7**	NA	NA	NA	NA	NA
Gross Beta[a]	NS	3.1	4.6	3.6	3.6	3.1	19.5	NA	NA	NA	NA	NA
Radium 226[a]	**	0.4	0.8	0.6	1	<0.2	3.7	NA	NA	NA	NA	NA
Radium 228[a]	**	1.3	<0.9	<1.0	1.1	<1.0	6.3	NA	NA	NA	NA	NA

NOTES: All units are in mg/L unless otherwise specified
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] Units are in pCi/L

Table 3. Historical Results Metals and Inorganic Parameters

MW-8 (Continued)

Parameter	NCAC 2L	12/7/05	12/20/06	12/11/07
Arsenic	0.05	<0.005	0.027	0.0054
Barium	2	0.28	1.4	1.1
Cadmium	0.00175	<0.001	**0.0036**	<0.001
Chloride	250	NA	NA	NA
Chromium	0.05	0.0058	0.028	<0.005
Fluoride, Total	2	NA	NA	NA
Iron	0.3	NA	NA	NA
Lead	0.015	0.01	**0.079**	0.014
Manganese	0.05	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002
Nickel	0.1	0.0052	0.026	0.011
Nitrogen, Nitrate	10	1.1	1.3	1.6
Phenol, Low Level	0.3	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.005
Silver	0.0175	<0.002	<0.002	<0.002
Sodium	NS	NA	NA	NA
Sulfate	250	NA	NA	NA
Total Organic Carbon	NS	2.6	ND	11.4
Total Organic Halides	NS	NA	NA	NA
Gross Alpha[a]	15	NA	NA	NA
Gross Beta[a]	NS	NA	NA	NA
Radium 226[a]	**	NA	NA	NA
Radium 228[a]	**	NA	NA	NA

NOTES: All units are in mg/L unless otherwise specified
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] *Units are in pCi/L*

Table 3. Historical Results Metals and Inorganic Parameters

MW-9

Parameter	NCAC 2L	9/29/98	12/15/98	3/2/99	6/30/99	12/14/99	6/29/00	12/19/00	12/13/01	12/5/02	12/16/03	12/27/04
Arsenic	0.05	<0.0017	0.0096	<0.005	0.0056	<0.005	0.011	0.0098	<0.005	0.013	<0.005	<0.005
Barium	2	1.2	**6**	**2.5**	0.83	1.5	1.1	0.91	1.8	1.9	1.1	1.5
Cadmium	0.00175	<0.05	<0.1	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chloride	250	2.6	4.3	1	<1.0	<5	<5	NA	NA	NA	NA	NA
Chromium	0.05	<0.05	<0.1	0.039	0.04	0.0094	0.022	0.016	0.017	0.036	0.0025	0.014
Fluoride, Total	2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	NA	NA	NA	NA	NA
Iron	0.3	**170**	**600**	**220**	**69**	**37**	**120**	NA	NA	NA	NA	NA
Lead	0.015	0.0095	**0.068**	**0.097**	**0.03**	**0.016**	**0.038**	**0.024**	**0.028**	**0.068**	0.014	**0.024**
Manganese	0.05	**5.9**	**20**	**8.4**	**2.7**	**1.3**	**3.5**	NA	NA	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	IQR	0.011
Nitrogen, Nitrate	10	0.55	0.77	1.2	0.57	1.1	0.63	NA	NA	NA	NA	NA
Phenol, Low Level	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.0175	<0.25	<0.5	<0.5	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Sodium	NS	5	7.4	5.5	5.2	5.1	4.9	NA	NA	NA	NA	NA
Sulfate	250	<5.0	<5.0	<5.0	<5.0	<5	<5	NA	NA	NA	NA	NA
Total Organic Carbon	NS	3	1.6	IQR	IQR	IQR	IQR	NA	NA	NA	NA	NA
Total Organic Halides	NS	0.004	<0.03	IQR	IQR	IQR	IQR	NA	NA	NA	NA	NA
Gross Alpha[a]	15	11.4	**21.7**	14	12	**16.3**	11	NA	NA	NA	NA	NA
Gross Beta[a]	NS	8	17	11.8	9.5	12.8	9.3	NA	NA	NA	NA	NA
Radium 226[a]	**	1.1	4	2.1	3.4	2.3	2	NA	NA	NA	NA	NA
Radium 228[a]	**	2.3	3.1	2	2.9	3.2	2.5	NA	NA	NA	NA	NA

NOTES: Bis(2-ethylhexyl)phthalate at a concentration of 0.031 ug/L was identified during the 9/29/98 sampling event
All units are in mg/L unless otherwise specified.
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
[a] Units are in pCi/L

Table 3. Historical Results Metals and Inorganic Parameters

MW-9 (Continued)

Parameter	NCAC 2L	12/7/05	12/20/06	12/11/07
Arsenic	0.05	<0.005	0.0095	0.014
Barium	2	0.7	1.2	1.4
Cadmium	0.00175	<0.001	**0.086**	<0.001
Chloride	250	NA	NA	NA
Chromium	0.05	0.0064	0.03	<0.005
Fluoride, Total	2	NA	NA	NA
Iron	0.3	NA	NA	NA
Lead	0.015	0.012	**0.053**	**0.031**
Manganese	0.05	NA	NA	NA
Mercury	0.00105	<0.0002	<0.0002	<0.0002
Nickel	0.1	<0.005	0.011	0.007
Nitrogen, Nitrate	10	NA	NA	NA
Phenol, Low Level	0.3	NA	NA	NA
Selenium	0.05	<0.005	<0.005	0.018
Silver	0.0175	<0.002	<0.002	<0.002
Sodium	NS	NA	NA	NA
Sulfate	250	NA	NA	NA
Total Organic Carbon	NS	NA	NA	NA
Total Organic Halides	NS	NA	NA	NA
Gross Alpha[a]	15	NA	NA	NA
Gross Beta[a]	NS	NA	NA	NA
Radium 226[a]	**	NA	NA	NA
Radium 228[a]	**	NA	NA	NA

NOTES: Bis(2-ethylhexyl)phthalate at a concentration of 0.031 ug/L was identified during the 9/29/98 sampling event
All units are in mg/L unless otherwise specified.
NA = Not Analyzed, NS = No Standard
***Bold** Text indicates NCAC 2L Standard exceedance.*
NC = No sample collected due to limited sample volume
IQR = Data Included in Quarterly Report - Table 4
[a] Units are in pCi/L

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370 West Meadow Road
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December 26, 2007

Mr. Phil Rahn
Waters Edge Environmental
4901 Waters's Edge Drive
Raleigh, NC 27606

RE: Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Dear Mr. Rahn:
Enclosed are the analytical results for sample(s) received by the laboratory on December 11, 2007. The results relate only to the samples included in this report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tammie Easter

Tammie Easter

tammie.easter@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Charlotte Certification IDs

North Carolina Drinking Water Certification Number: 37706
North Carolina Wastewater Certification Number: 12
North Carolina Field Services Certification Number: 5342
South Carolina Certification Number: 990060001
South Carolina Bioassay Certification Number: 990060003
Tennessee Certification Number: 04010
Virginia Certification Number: 00213
Florida/NELAP Certification Number: E87627
Kansas Certification Number: E-10364
Louisiana/LELAP Certification Number: 04034

Asheville Certification IDs

Florida/NELAP Certification Number: E87648
Louisiana/LELAP Certification Number: 03095
New Jersey Certification Number: NC011
North Carolina Drinking Water Certification Number: 37712
North Carolina Wastewater Certification Number: 40
North Carolina Bioassay Certification Number: 9
Pennsylvania Certification Number: 68-03578
South Carolina Certification Number: 99030001
South Carolina Bioassay Certification Number: 99030002
Tennessee Certification Number: 2980
Virginia Certification Number: 00072

Eden Certification IDs

North Carolina Drinking Water Certification Number: 37738
Virginia Drinking Water Certification Number: 00424
North Carolina Wastewater Certification Number: 633

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SAMPLE SUMMARY

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Lab ID	Sample ID	Matrix	Date Collected	Date Received
929593001	MW-4	Water	12/11/07 11:15	12/11/07 16:30
929593002	MW3	Water	12/11/07 11:45	12/11/07 16:30
929593003	MW2	Water	12/11/07 12:30	12/11/07 16:30
929593004	MW8	Water	12/11/07 13:15	12/11/07 16:30
929593005	MW7	Water	12/11/07 14:00	12/11/07 16:30
929593006	MW9	Water	12/11/07 14:45	12/11/07 16:30

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SAMPLE ANALYTE COUNT

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Lab ID	Sample ID	Method	Analytes Reported
929593001	MW-4	EPA 200.7	8
		EPA 245.1	1
		EPA 353.2	1
		SM 2540C	1
		SM 5310B	1
929593002	MW3	EPA 200.7	8
		EPA 245.1	1
		EPA 353.2	1
		SM 2540C	1
		SM 5310B	1
929593003	MW2	EPA 200.7	8
		EPA 245.1	1
		EPA 353.2	1
		EPA 8270	75
		SM 2540C	1
		SM 5310B	1
929593004	MW8	EPA 200.7	8
		EPA 245.1	1
		EPA 353.2	1
		SM 2540C	1
		SM 5310B	1
929593005	MW7	EPA 200.7	8
		EPA 245.1	1
		EPA 8270	75
929593006	MW9	EPA 200.7	8
		EPA 245.1	1
		EPA 8270	75

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ANALYTICAL RESULTS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Sample: MW-4 **Lab ID: 929593001** Collected: 12/11/07 11:15 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Arsenic	ND	mg/L	0.0050	0.0027	1	12/17/07 16:10	12/20/07 22:09	7440-38-2	
Barium	**0.060**	mg/L	0.0050	0.00020	1	12/17/07 16:10	12/20/07 22:09	7440-39-3	
Cadmium	ND	mg/L	0.0010	0.00050	1	12/17/07 16:10	12/20/07 22:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00040	1	12/17/07 16:10	12/20/07 22:09	7440-47-3	
Lead	ND	mg/L	0.0050	0.0040	1	12/17/07 16:10	12/20/07 22:09	7439-92-1	
Nickel	ND	mg/L	0.0050	0.0017	1	12/17/07 16:10	12/20/07 22:09	7440-02-0	
Silver	ND	mg/L	0.0050	0.00010	1	12/17/07 16:10	12/20/07 22:09	7440-22-4	
Selenium	ND	mg/L	0.010	0.0038	1	12/17/07 16:10	12/20/07 22:09	7782-49-2	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1								
Mercury	ND	mg/L	0.00020	0.00020	1	12/14/07 08:44	12/14/07 14:09	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**42.0**	mg/L	1.0		1		12/13/07 17:55		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**0.25**	mg/L	0.10	0.10	1		12/21/07 10:05		
5310B TOC	Analytical Method: SM 5310B								
Total Organic Carbon	**1.6**	mg/L	1.0	1.0	1		12/17/07 15:11	7440-44-0	

Sample: MW3 **Lab ID: 929593002** Collected: 12/11/07 11:45 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Arsenic	ND	mg/L	0.0050	0.0027	1	12/17/07 16:10	12/20/07 22:16	7440-38-2	
Barium	**0.18**	mg/L	0.0050	0.00020	1	12/17/07 16:10	12/20/07 22:16	7440-39-3	
Cadmium	ND	mg/L	0.0010	0.00050	1	12/17/07 16:10	12/20/07 22:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00040	1	12/17/07 16:10	12/20/07 22:16	7440-47-3	
Lead	ND	mg/L	0.0050	0.0040	1	12/17/07 16:10	12/20/07 22:16	7439-92-1	
Nickel	ND	mg/L	0.0050	0.0017	1	12/17/07 16:10	12/20/07 22:16	7440-02-0	
Silver	ND	mg/L	0.0050	0.00010	1	12/17/07 16:10	12/20/07 22:16	7440-22-4	
Selenium	ND	mg/L	0.010	0.0038	1	12/17/07 16:10	12/20/07 22:16	7782-49-2	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1								
Mercury	ND	mg/L	0.00020	0.00020	1	12/14/07 08:44	12/14/07 14:11	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**100**	mg/L	1.0		1		12/13/07 17:56		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**4.6**	mg/L	0.10	0.10	1		12/21/07 10:05		

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ANALYTICAL RESULTS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Sample: MW3 **Lab ID: 929593002** Collected: 12/11/07 11:45 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
5310B TOC	Analytical Method: SM 5310B								
Total Organic Carbon	**2.3**	mg/L	1.0	1.0	1		12/17/07 15:11	7440-44-0	

Sample: MW2 **Lab ID: 929593003** Collected: 12/11/07 12:30 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Arsenic	**0.0058**	mg/L	0.0050	0.0027	1	12/15/07 12:05	12/20/07 21:24	7440-38-2	
Barium	**1.1**	mg/L	0.0050	0.00020	1	12/15/07 12:05	12/20/07 21:24	7440-39-3	
Cadmium	ND	mg/L	0.0010	0.00050	1	12/15/07 12:05	12/20/07 21:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00040	1	12/15/07 12:05	12/20/07 21:24	7440-47-3	
Lead	**0.0074**	mg/L	0.0050	0.0040	1	12/15/07 12:05	12/20/07 21:24	7439-92-1	
Nickel	**0.0088**	mg/L	0.0050	0.0017	1	12/15/07 12:05	12/20/07 21:24	7440-02-0	
Silver	ND	mg/L	0.0050	0.00010	1	12/15/07 12:05	12/20/07 21:24	7440-22-4	
Selenium	ND	mg/L	0.010	0.0038	1	12/15/07 12:05	12/20/07 21:24	7782-49-2	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1								
Mercury	ND	mg/L	0.00020	0.00020	1	12/20/07 08:05	12/20/07 13:44	7439-97-6	
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Acenaphthene	ND	mg/L	0.011	0.0031	1	12/18/07 00:00	12/20/07 04:20	83-32-9	
Acenaphthylene	ND	mg/L	0.011	0.0031	1	12/18/07 00:00	12/20/07 04:20	208-96-8	
Aniline	ND	mg/L	0.011	0.0057	1	12/18/07 00:00	12/20/07 04:20	62-53-3	
Anthracene	ND	mg/L	0.011	0.0033	1	12/18/07 00:00	12/20/07 04:20	120-12-7	
Benzo(a)anthracene	ND	mg/L	0.011	0.0031	1	12/18/07 00:00	12/20/07 04:20	56-55-3	
Benzo(a)pyrene	ND	mg/L	0.011	0.0035	1	12/18/07 00:00	12/20/07 04:20	50-32-8	
Benzo(b)fluoranthene	ND	mg/L	0.011	0.0040	1	12/18/07 00:00	12/20/07 04:20	205-99-2	
Benzo(g,h,i)perylene	ND	mg/L	0.011	0.0035	1	12/18/07 00:00	12/20/07 04:20	191-24-2	
Benzo(k)fluoranthene	ND	mg/L	0.011	0.0034	1	12/18/07 00:00	12/20/07 04:20	207-08-9	
Benzoic acid	ND	mg/L	0.056	0.056	1	12/18/07 00:00	12/20/07 04:20	65-85-0	
Benzyl alcohol	ND	mg/L	0.022	0.0040	1	12/18/07 00:00	12/20/07 04:20	100-51-6	
4-Bromophenylphenyl ether	ND	mg/L	0.011	0.0027	1	12/18/07 00:00	12/20/07 04:20	101-55-3	
Butylbenzylphthalate	ND	mg/L	0.011	0.0033	1	12/18/07 00:00	12/20/07 04:20	85-68-7	
4-Chloro-3-methylphenol	ND	mg/L	0.022	0.0031	1	12/18/07 00:00	12/20/07 04:20	59-50-7	
4-Chloroaniline	ND	mg/L	0.056	0.0060	1	12/18/07 00:00	12/20/07 04:20	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/L	0.011	0.0065	1	12/18/07 00:00	12/20/07 04:20	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/L	0.011	0.0054	1	12/18/07 00:00	12/20/07 04:20	111-44-4	
bis(2-Chloroisopropyl) ether	ND	mg/L	0.011	0.0045	1	12/18/07 00:00	12/20/07 04:20	108-60-1	
2-Chloronaphthalene	ND	mg/L	0.011	0.0040	1	12/18/07 00:00	12/20/07 04:20	91-58-7	
2-Chlorophenol	ND	mg/L	0.011	0.0049	1	12/18/07 00:00	12/20/07 04:20	95-57-8	
4-Chlorophenylphenyl ether	ND	mg/L	0.011	0.0030	1	12/18/07 00:00	12/20/07 04:20	7005-72-3	
Chrysene	ND	mg/L	0.011	0.0030	1	12/18/07 00:00	12/20/07 04:20	218-01-9	
Dibenz(a,h)anthracene	ND	mg/L	0.011	0.0033	1	12/18/07 00:00	12/20/07 04:20	53-70-3	
Dibenzofuran	ND	mg/L	0.011	0.0029	1	12/18/07 00:00	12/20/07 04:20	132-64-9	

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ANALYTICAL RESULTS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Sample: MW2 **Lab ID: 929593003** Collected: 12/11/07 12:30 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
1,2-Dichlorobenzene	ND	mg/L	0.011	0.0038	1	12/18/07 00:00	12/20/07 04:20	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.011	0.0037	1	12/18/07 00:00	12/20/07 04:20	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.011	0.0040	1	12/18/07 00:00	12/20/07 04:20	106-46-7	
3,3'-Dichlorobenzidine	ND	mg/L	0.056	0.0038	1	12/18/07 00:00	12/20/07 04:20	91-94-1	
2,4-Dichlorophenol	ND	mg/L	0.011	0.0065	1	12/18/07 00:00	12/20/07 04:20	120-83-2	
Diethylphthalate	ND	mg/L	0.011	0.0027	1	12/18/07 00:00	12/20/07 04:20	84-66-2	
2,4-Dimethylphenol	ND	mg/L	0.011	0.0063	1	12/18/07 00:00	12/20/07 04:20	105-67-9	
Dimethylphthalate	ND	mg/L	0.011	0.0027	1	12/18/07 00:00	12/20/07 04:20	131-11-3	
Di-n-butylphthalate	ND	mg/L	0.011	0.0033	1	12/18/07 00:00	12/20/07 04:20	84-74-2	
4,6-Dinitro-2-methylphenol	ND	mg/L	0.022	0.0088	1	12/18/07 00:00	12/20/07 04:20	534-52-1	
2,4-Dinitrophenol	ND	mg/L	0.056	0.011	1	12/18/07 00:00	12/20/07 04:20	51-28-5	
2,4-Dinitrotoluene	ND	mg/L	0.011	0.0029	1	12/18/07 00:00	12/20/07 04:20	121-14-2	
2,6-Dinitrotoluene	ND	mg/L	0.011	0.0031	1	12/18/07 00:00	12/20/07 04:20	606-20-2	
Di-n-octylphthalate	ND	mg/L	0.011	0.0033	1	12/18/07 00:00	12/20/07 04:20	117-84-0	
1,2-Diphenylhydrazine	ND	mg/L	0.011	0.0025	1	12/18/07 00:00	12/20/07 04:20	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	mg/L	0.011	0.0031	1	12/18/07 00:00	12/20/07 04:20	117-81-7	
Fluoranthene	ND	mg/L	0.011	0.0033	1	12/18/07 00:00	12/20/07 04:20	206-44-0	
Fluorene	ND	mg/L	0.011	0.0029	1	12/18/07 00:00	12/20/07 04:20	86-73-7	
Hexachloro-1,3-butadiene	ND	mg/L	0.011	0.0037	1	12/18/07 00:00	12/20/07 04:20	87-68-3	
Hexachlorobenzene	ND	mg/L	0.011	0.0029	1	12/18/07 00:00	12/20/07 04:20	118-74-1	
Hexachlorocyclopentadiene	ND	mg/L	0.011	0.0042	1	12/18/07 00:00	12/20/07 04:20	77-47-4	
Hexachloroethane	ND	mg/L	0.011	0.0037	1	12/18/07 00:00	12/20/07 04:20	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/L	0.011	0.0034	1	12/18/07 00:00	12/20/07 04:20	193-39-5	
Isophorone	ND	mg/L	0.011	0.0073	1	12/18/07 00:00	12/20/07 04:20	78-59-1	
1-Methylnaphthalene	ND	mg/L	0.011	0.0040	1	12/18/07 00:00	12/20/07 04:20	90-12-0	
2-Methylnaphthalene	ND	mg/L	0.011	0.0038	1	12/18/07 00:00	12/20/07 04:20	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/L	0.011	0.0042	1	12/18/07 00:00	12/20/07 04:20	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/L	0.011	0.0034	1	12/18/07 00:00	12/20/07 04:20		
Naphthalene	ND	mg/L	0.011	0.0043	1	12/18/07 00:00	12/20/07 04:20	91-20-3	
2-Nitroaniline	ND	mg/L	0.056	0.0030	1	12/18/07 00:00	12/20/07 04:20	88-74-4	
3-Nitroaniline	ND	mg/L	0.056	0.0034	1	12/18/07 00:00	12/20/07 04:20	99-09-2	
4-Nitroaniline	ND	mg/L	0.056	0.0045	1	12/18/07 00:00	12/20/07 04:20	100-01-6	
Nitrobenzene	ND	mg/L	0.011	0.0049	1	12/18/07 00:00	12/20/07 04:20	98-95-3	
2-Nitrophenol	ND	mg/L	0.011	0.0052	1	12/18/07 00:00	12/20/07 04:20	88-75-5	
4-Nitrophenol	ND	mg/L	0.056	0.0020	1	12/18/07 00:00	12/20/07 04:20	100-02-7	
N-Nitrosodimethylamine	ND	mg/L	0.011	0.0035	1	12/18/07 00:00	12/20/07 04:20	62-75-9	
N-Nitroso-di-n-propylamine	ND	mg/L	0.011	0.0042	1	12/18/07 00:00	12/20/07 04:20	621-64-7	
N-Nitrosodiphenylamine	ND	mg/L	0.011	0.0074	1	12/18/07 00:00	12/20/07 04:20	86-30-6	
Pentachlorophenol	ND	mg/L	0.056	0.015	1	12/18/07 00:00	12/20/07 04:20	87-86-5	
Phenanthrene	ND	mg/L	0.011	0.0030	1	12/18/07 00:00	12/20/07 04:20	85-01-8	
Phenol	ND	mg/L	0.011	0.0020	1	12/18/07 00:00	12/20/07 04:20	108-95-2	
Pyrene	ND	mg/L	0.011	0.0033	1	12/18/07 00:00	12/20/07 04:20	129-00-0	
1,2,4-Trichlorobenzene	ND	mg/L	0.011	0.0038	1	12/18/07 00:00	12/20/07 04:20	120-82-1	
2,4,5-Trichlorophenol	ND	mg/L	0.011	0.0063	1	12/18/07 00:00	12/20/07 04:20	95-95-4	
2,4,6-Trichlorophenol	ND	mg/L	0.011	0.0069	1	12/18/07 00:00	12/20/07 04:20	88-06-2	
Nitrobenzene-d5 (S)	83	%	30-150		1	12/18/07 00:00	12/20/07 04:20	4165-60-0	

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ANALYTICAL RESULTS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Sample: MW2 **Lab ID: 929593003** Collected: 12/11/07 12:30 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
2-Fluorobiphenyl (S)	76	%	30-150		1	12/18/07 00:00	12/20/07 04:20	321-60-8	
Terphenyl-d14 (S)	83	%	30-150		1	12/18/07 00:00	12/20/07 04:20	1718-51-0	
Phenol-d6 (S)	17	%	25-150		1	12/18/07 00:00	12/20/07 04:20	13127-88-3	S0
2-Fluorophenol (S)	37	%	25-150		1	12/18/07 00:00	12/20/07 04:20	367-12-4	
2,4,6-Tribromophenol (S)	59	%	25-150		1	12/18/07 00:00	12/20/07 04:20	118-79-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**74.0**	mg/L	1.0		1		12/13/07 17:58		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**4.7**	mg/L	0.10	0.10	1		12/21/07 10:05		
5310B TOC	Analytical Method: SM 5310B								
Total Organic Carbon	**3.2**	mg/L	1.0	1.0	1		12/17/07 15:11	7440-44-0	

Sample: MW8 **Lab ID: 929593004** Collected: 12/11/07 13:15 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Arsenic	**0.0054**	mg/L	0.0050	0.0027	1	12/15/07 12:05	12/20/07 21:27	7440-38-2	
Barium	**1.1**	mg/L	0.0050	0.00020	1	12/15/07 12:05	12/20/07 21:27	7440-39-3	
Cadmium	ND	mg/L	0.0010	0.00050	1	12/15/07 12:05	12/20/07 21:27	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00040	1	12/15/07 12:05	12/20/07 21:27	7440-47-3	
Lead	**0.014**	mg/L	0.0050	0.0040	1	12/15/07 12:05	12/20/07 21:27	7439-92-1	
Nickel	**0.011**	mg/L	0.0050	0.0017	1	12/15/07 12:05	12/20/07 21:27	7440-02-0	
Silver	ND	mg/L	0.0050	0.00010	1	12/15/07 12:05	12/20/07 21:27	7440-22-4	
Selenium	ND	mg/L	0.010	0.0038	1	12/15/07 12:05	12/20/07 21:27	7782-49-2	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1								
Mercury	ND	mg/L	0.00020	0.00020	1	12/20/07 08:05	12/20/07 13:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**50.0**	mg/L	1.0		1		12/13/07 18:01		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.10	1		12/21/07 10:05		
5310B TOC	Analytical Method: SM 5310B								
Total Organic Carbon	**11.4**	mg/L	1.0	1.0	1		12/17/07 15:25	7440-44-0	

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ANALYTICAL RESULTS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Sample: MW7 **Lab ID: 929593005** Collected: 12/11/07 14:00 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Arsenic	ND	mg/L	0.0050	0.0027	1	12/15/07 12:05	12/20/07 21:31	7440-38-2	
Barium	**0.64**	mg/L	0.0050	0.00020	1	12/15/07 12:05	12/20/07 21:31	7440-39-3	
Cadmium	ND	mg/L	0.0010	0.00050	1	12/15/07 12:05	12/20/07 21:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00040	1	12/15/07 12:05	12/20/07 21:31	7440-47-3	
Lead	**0.0069**	mg/L	0.0050	0.0040	1	12/15/07 12:05	12/20/07 21:31	7439-92-1	
Nickel	**0.0076**	mg/L	0.0050	0.0017	1	12/15/07 12:05	12/20/07 21:31	7440-02-0	
Silver	ND	mg/L	0.0050	0.00010	1	12/15/07 12:05	12/20/07 21:31	7440-22-4	
Selenium	ND	mg/L	0.010	0.0038	1	12/15/07 12:05	12/20/07 21:31	7782-49-2	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1								
Mercury	ND	mg/L	0.00020	0.00020	1	12/20/07 08:05	12/20/07 13:49	7439-97-6	
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Acenaphthene	ND	mg/L	0.010	0.0028	1	12/18/07 00:00	12/20/07 04:47	83-32-9	
Acenaphthylene	ND	mg/L	0.010	0.0028	1	12/18/07 00:00	12/20/07 04:47	208-96-8	
Aniline	ND	mg/L	0.010	0.0051	1	12/18/07 00:00	12/20/07 04:47	62-53-3	
Anthracene	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 04:47	120-12-7	
Benzo(a)anthracene	ND	mg/L	0.010	0.0028	1	12/18/07 00:00	12/20/07 04:47	56-55-3	
Benzo(a)pyrene	ND	mg/L	0.010	0.0031	1	12/18/07 00:00	12/20/07 04:47	50-32-8	
Benzo(b)fluoranthene	ND	mg/L	0.010	0.0036	1	12/18/07 00:00	12/20/07 04:47	205-99-2	
Benzo(g,h,i)perylene	ND	mg/L	0.010	0.0031	1	12/18/07 00:00	12/20/07 04:47	191-24-2	
Benzo(k)fluoranthene	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 04:47	207-08-9	
Benzoic acid	ND	mg/L	0.050	0.050	1	12/18/07 00:00	12/20/07 04:47	65-85-0	
Benzyl alcohol	ND	mg/L	0.020	0.0036	1	12/18/07 00:00	12/20/07 04:47	100-51-6	
4-Bromophenylphenyl ether	ND	mg/L	0.010	0.0024	1	12/18/07 00:00	12/20/07 04:47	101-55-3	
Butylbenzylphthalate	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 04:47	85-68-7	
4-Chloro-3-methylphenol	ND	mg/L	0.020	0.0028	1	12/18/07 00:00	12/20/07 04:47	59-50-7	
4-Chloroaniline	ND	mg/L	0.050	0.0053	1	12/18/07 00:00	12/20/07 04:47	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/L	0.010	0.0058	1	12/18/07 00:00	12/20/07 04:47	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/L	0.010	0.0048	1	12/18/07 00:00	12/20/07 04:47	111-44-4	
bis(2-Chloroisopropyl) ether	ND	mg/L	0.010	0.0040	1	12/18/07 00:00	12/20/07 04:47	108-60-1	
2-Chloronaphthalene	ND	mg/L	0.010	0.0036	1	12/18/07 00:00	12/20/07 04:47	91-58-7	
2-Chlorophenol	ND	mg/L	0.010	0.0044	1	12/18/07 00:00	12/20/07 04:47	95-57-8	
4-Chlorophenylphenyl ether	ND	mg/L	0.010	0.0027	1	12/18/07 00:00	12/20/07 04:47	7005-72-3	
Chrysene	ND	mg/L	0.010	0.0027	1	12/18/07 00:00	12/20/07 04:47	218-01-9	
Dibenz(a,h)anthracene	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 04:47	53-70-3	
Dibenzofuran	ND	mg/L	0.010	0.0026	1	12/18/07 00:00	12/20/07 04:47	132-64-9	
1,2-Dichlorobenzene	ND	mg/L	0.010	0.0034	1	12/18/07 00:00	12/20/07 04:47	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.010	0.0033	1	12/18/07 00:00	12/20/07 04:47	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.010	0.0036	1	12/18/07 00:00	12/20/07 04:47	106-46-7	
3,3'-Dichlorobenzidine	ND	mg/L	0.050	0.0034	1	12/18/07 00:00	12/20/07 04:47	91-94-1	
2,4-Dichlorophenol	ND	mg/L	0.010	0.0058	1	12/18/07 00:00	12/20/07 04:47	120-83-2	
Diethylphthalate	ND	mg/L	0.010	0.0024	1	12/18/07 00:00	12/20/07 04:47	84-66-2	
2,4-Dimethylphenol	ND	mg/L	0.010	0.0056	1	12/18/07 00:00	12/20/07 04:47	105-67-9	
Dimethylphthalate	ND	mg/L	0.010	0.0024	1	12/18/07 00:00	12/20/07 04:47	131-11-3	
Di-n-butylphthalate	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 04:47	84-74-2	

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ANALYTICAL RESULTS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Sample: MW7 **Lab ID: 929593005** Collected: 12/11/07 14:00 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
4,6-Dinitro-2-methylphenol	ND	mg/L	0.020	0.0078	1	12/18/07 00:00	12/20/07 04:47	534-52-1	
2,4-Dinitrophenol	ND	mg/L	0.050	0.010	1	12/18/07 00:00	12/20/07 04:47	51-28-5	
2,4-Dinitrotoluene	ND	mg/L	0.010	0.0026	1	12/18/07 00:00	12/20/07 04:47	121-14-2	
2,6-Dinitrotoluene	ND	mg/L	0.010	0.0028	1	12/18/07 00:00	12/20/07 04:47	606-20-2	
Di-n-octylphthalate	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 04:47	117-84-0	
1,2-Diphenylhydrazine	ND	mg/L	0.010	0.0022	1	12/18/07 00:00	12/20/07 04:47	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	mg/L	0.010	0.0028	1	12/18/07 00:00	12/20/07 04:47	117-81-7	
Fluoranthene	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 04:47	206-44-0	
Fluorene	ND	mg/L	0.010	0.0026	1	12/18/07 00:00	12/20/07 04:47	86-73-7	
Hexachloro-1,3-butadiene	ND	mg/L	0.010	0.0033	1	12/18/07 00:00	12/20/07 04:47	87-68-3	
Hexachlorobenzene	ND	mg/L	0.010	0.0026	1	12/18/07 00:00	12/20/07 04:47	118-74-1	
Hexachlorocyclopentadiene	ND	mg/L	0.010	0.0037	1	12/18/07 00:00	12/20/07 04:47	77-47-4	
Hexachloroethane	ND	mg/L	0.010	0.0033	1	12/18/07 00:00	12/20/07 04:47	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 04:47	193-39-5	
Isophorone	ND	mg/L	0.010	0.0065	1	12/18/07 00:00	12/20/07 04:47	78-59-1	
1-Methylnaphthalene	ND	mg/L	0.010	0.0036	1	12/18/07 00:00	12/20/07 04:47	90-12-0	
2-Methylnaphthalene	ND	mg/L	0.010	0.0034	1	12/18/07 00:00	12/20/07 04:47	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/L	0.010	0.0037	1	12/18/07 00:00	12/20/07 04:47	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 04:47		
Naphthalene	ND	mg/L	0.010	0.0038	1	12/18/07 00:00	12/20/07 04:47	91-20-3	
2-Nitroaniline	ND	mg/L	0.050	0.0027	1	12/18/07 00:00	12/20/07 04:47	88-74-4	
3-Nitroaniline	ND	mg/L	0.050	0.0030	1	12/18/07 00:00	12/20/07 04:47	99-09-2	
4-Nitroaniline	ND	mg/L	0.050	0.0040	1	12/18/07 00:00	12/20/07 04:47	100-01-6	
Nitrobenzene	ND	mg/L	0.010	0.0044	1	12/18/07 00:00	12/20/07 04:47	98-95-3	
2-Nitrophenol	ND	mg/L	0.010	0.0046	1	12/18/07 00:00	12/20/07 04:47	88-75-5	
4-Nitrophenol	ND	mg/L	0.050	0.0018	1	12/18/07 00:00	12/20/07 04:47	100-02-7	
N-Nitrosodimethylamine	ND	mg/L	0.010	0.0031	1	12/18/07 00:00	12/20/07 04:47	62-75-9	
N-Nitroso-di-n-propylamine	ND	mg/L	0.010	0.0037	1	12/18/07 00:00	12/20/07 04:47	621-64-7	
N-Nitrosodiphenylamine	ND	mg/L	0.010	0.0066	1	12/18/07 00:00	12/20/07 04:47	86-30-6	
Pentachlorophenol	ND	mg/L	0.050	0.013	1	12/18/07 00:00	12/20/07 04:47	87-86-5	
Phenanthrene	ND	mg/L	0.010	0.0027	1	12/18/07 00:00	12/20/07 04:47	85-01-8	
Phenol	ND	mg/L	0.010	0.0018	1	12/18/07 00:00	12/20/07 04:47	108-95-2	
Pyrene	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 04:47	129-00-0	
1,2,4-Trichlorobenzene	ND	mg/L	0.010	0.0034	1	12/18/07 00:00	12/20/07 04:47	120-82-1	
2,4,5-Trichlorophenol	ND	mg/L	0.010	0.0056	1	12/18/07 00:00	12/20/07 04:47	95-95-4	
2,4,6-Trichlorophenol	ND	mg/L	0.010	0.0061	1	12/18/07 00:00	12/20/07 04:47	88-06-2	
Nitrobenzene-d5 (S)	96	%	30-150		1	12/18/07 00:00	12/20/07 04:47	4165-60-0	
2-Fluorobiphenyl (S)	86	%	30-150		1	12/18/07 00:00	12/20/07 04:47	321-60-8	
Terphenyl-d14 (S)	104	%	30-150		1	12/18/07 00:00	12/20/07 04:47	1718-51-0	
Phenol-d6 (S)	18	%	25-150		1	12/18/07 00:00	12/20/07 04:47	13127-88-3	S0
2-Fluorophenol (S)	37	%	25-150		1	12/18/07 00:00	12/20/07 04:47	367-12-4	
2,4,6-Tribromophenol (S)	64	%	25-150		1	12/18/07 00:00	12/20/07 04:47	118-79-6	

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ANALYTICAL RESULTS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Sample: MW9 **Lab ID: 929593006** Collected: 12/11/07 14:45 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Arsenic	**0.014**	mg/L	0.0050	0.0027	1	12/15/07 12:05	12/20/07 21:38	7440-38-2	
Barium	**1.4**	mg/L	0.0050	0.00020	1	12/15/07 12:05	12/20/07 21:38	7440-39-3	
Cadmium	ND	mg/L	0.0010	0.00050	1	12/15/07 12:05	12/20/07 21:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00040	1	12/15/07 12:05	12/20/07 21:38	7440-47-3	
Lead	**0.031**	mg/L	0.0050	0.0040	1	12/15/07 12:05	12/20/07 21:38	7439-92-1	
Nickel	**0.0070**	mg/L	0.0050	0.0017	1	12/15/07 12:05	12/20/07 21:38	7440-02-0	
Silver	ND	mg/L	0.0050	0.00010	1	12/15/07 12:05	12/20/07 21:38	7440-22-4	
Selenium	**0.018**	mg/L	0.010	0.0038	1	12/15/07 12:05	12/20/07 21:38	7782-49-2	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1								
Mercury	ND	mg/L	0.00020	0.00020	1	12/20/07 08:05	12/20/07 13:52	7439-97-6	
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Acenaphthene	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 05:14	83-32-9	
Acenaphthylene	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 05:14	208-96-8	
Aniline	ND	mg/L	0.010	0.0052	1	12/18/07 00:00	12/20/07 05:14	62-53-3	
Anthracene	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 05:14	120-12-7	
Benzo(a)anthracene	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 05:14	56-55-3	
Benzo(a)pyrene	ND	mg/L	0.010	0.0032	1	12/18/07 00:00	12/20/07 05:14	50-32-8	
Benzo(b)fluoranthene	ND	mg/L	0.010	0.0037	1	12/18/07 00:00	12/20/07 05:14	205-99-2	
Benzo(g,h,i)perylene	ND	mg/L	0.010	0.0032	1	12/18/07 00:00	12/20/07 05:14	191-24-2	
Benzo(k)fluoranthene	ND	mg/L	0.010	0.0031	1	12/18/07 00:00	12/20/07 05:14	207-08-9	
Benzoic acid	ND	mg/L	0.051	0.051	1	12/18/07 00:00	12/20/07 05:14	65-85-0	
Benzyl alcohol	ND	mg/L	0.020	0.0037	1	12/18/07 00:00	12/20/07 05:14	100-51-6	
4-Bromophenylphenyl ether	ND	mg/L	0.010	0.0024	1	12/18/07 00:00	12/20/07 05:14	101-55-3	
Butylbenzylphthalate	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 05:14	85-68-7	
4-Chloro-3-methylphenol	ND	mg/L	0.020	0.0029	1	12/18/07 00:00	12/20/07 05:14	59-50-7	
4-Chloroaniline	ND	mg/L	0.051	0.0054	1	12/18/07 00:00	12/20/07 05:14	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/L	0.010	0.0059	1	12/18/07 00:00	12/20/07 05:14	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/L	0.010	0.0049	1	12/18/07 00:00	12/20/07 05:14	111-44-4	
bis(2-Chloroisopropyl) ether	ND	mg/L	0.010	0.0041	1	12/18/07 00:00	12/20/07 05:14	108-60-1	
2-Chloronaphthalene	ND	mg/L	0.010	0.0037	1	12/18/07 00:00	12/20/07 05:14	91-58-7	
2-Chlorophenol	ND	mg/L	0.010	0.0045	1	12/18/07 00:00	12/20/07 05:14	95-57-8	
4-Chlorophenylphenyl ether	ND	mg/L	0.010	0.0028	1	12/18/07 00:00	12/20/07 05:14	7005-72-3	
Chrysene	ND	mg/L	0.010	0.0028	1	12/18/07 00:00	12/20/07 05:14	218-01-9	
Dibenz(a,h)anthracene	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 05:14	53-70-3	
Dibenzofuran	ND	mg/L	0.010	0.0027	1	12/18/07 00:00	12/20/07 05:14	132-64-9	
1,2-Dichlorobenzene	ND	mg/L	0.010	0.0035	1	12/18/07 00:00	12/20/07 05:14	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.010	0.0034	1	12/18/07 00:00	12/20/07 05:14	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.010	0.0037	1	12/18/07 00:00	12/20/07 05:14	106-46-7	
3,3'-Dichlorobenzidine	ND	mg/L	0.051	0.0035	1	12/18/07 00:00	12/20/07 05:14	91-94-1	
2,4-Dichlorophenol	ND	mg/L	0.010	0.0059	1	12/18/07 00:00	12/20/07 05:14	120-83-2	
Diethylphthalate	ND	mg/L	0.010	0.0024	1	12/18/07 00:00	12/20/07 05:14	84-66-2	
2,4-Dimethylphenol	ND	mg/L	0.010	0.0057	1	12/18/07 00:00	12/20/07 05:14	105-67-9	
Dimethylphthalate	ND	mg/L	0.010	0.0024	1	12/18/07 00:00	12/20/07 05:14	131-11-3	
Di-n-butylphthalate	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 05:14	84-74-2	

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ANALYTICAL RESULTS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

Sample: MW9 **Lab ID: 929593006** Collected: 12/11/07 14:45 Received: 12/11/07 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
4,6-Dinitro-2-methylphenol	ND	mg/L	0.020	0.0080	1	12/18/07 00:00	12/20/07 05:14	534-52-1	
2,4-Dinitrophenol	ND	mg/L	0.051	0.010	1	12/18/07 00:00	12/20/07 05:14	51-28-5	
2,4-Dinitrotoluene	ND	mg/L	0.010	0.0027	1	12/18/07 00:00	12/20/07 05:14	121-14-2	
2,6-Dinitrotoluene	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 05:14	606-20-2	
Di-n-octylphthalate	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 05:14	117-84-0	
1,2-Diphenylhydrazine	ND	mg/L	0.010	0.0022	1	12/18/07 00:00	12/20/07 05:14	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	mg/L	0.010	0.0029	1	12/18/07 00:00	12/20/07 05:14	117-81-7	
Fluoranthene	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 05:14	206-44-0	
Fluorene	ND	mg/L	0.010	0.0027	1	12/18/07 00:00	12/20/07 05:14	86-73-7	
Hexachloro-1,3-butadiene	ND	mg/L	0.010	0.0034	1	12/18/07 00:00	12/20/07 05:14	87-68-3	
Hexachlorobenzene	ND	mg/L	0.010	0.0027	1	12/18/07 00:00	12/20/07 05:14	118-74-1	
Hexachlorocyclopentadiene	ND	mg/L	0.010	0.0038	1	12/18/07 00:00	12/20/07 05:14	77-47-4	
Hexachloroethane	ND	mg/L	0.010	0.0034	1	12/18/07 00:00	12/20/07 05:14	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/L	0.010	0.0031	1	12/18/07 00:00	12/20/07 05:14	193-39-5	
Isophorone	ND	mg/L	0.010	0.0066	1	12/18/07 00:00	12/20/07 05:14	78-59-1	
1-Methylnaphthalene	ND	mg/L	0.010	0.0037	1	12/18/07 00:00	12/20/07 05:14	90-12-0	
2-Methylnaphthalene	ND	mg/L	0.010	0.0035	1	12/18/07 00:00	12/20/07 05:14	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/L	0.010	0.0038	1	12/18/07 00:00	12/20/07 05:14	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/L	0.010	0.0031	1	12/18/07 00:00	12/20/07 05:14		
Naphthalene	ND	mg/L	0.010	0.0039	1	12/18/07 00:00	12/20/07 05:14	91-20-3	
2-Nitroaniline	ND	mg/L	0.051	0.0028	1	12/18/07 00:00	12/20/07 05:14	88-74-4	
3-Nitroaniline	ND	mg/L	0.051	0.0031	1	12/18/07 00:00	12/20/07 05:14	99-09-2	
4-Nitroaniline	ND	mg/L	0.051	0.0041	1	12/18/07 00:00	12/20/07 05:14	100-01-6	
Nitrobenzene	ND	mg/L	0.010	0.0045	1	12/18/07 00:00	12/20/07 05:14	98-95-3	
2-Nitrophenol	ND	mg/L	0.010	0.0047	1	12/18/07 00:00	12/20/07 05:14	88-75-5	
4-Nitrophenol	ND	mg/L	0.051	0.0018	1	12/18/07 00:00	12/20/07 05:14	100-02-7	
N-Nitrosodimethylamine	ND	mg/L	0.010	0.0032	1	12/18/07 00:00	12/20/07 05:14	62-75-9	
N-Nitroso-di-n-propylamine	ND	mg/L	0.010	0.0038	1	12/18/07 00:00	12/20/07 05:14	621-64-7	
N-Nitrosodiphenylamine	ND	mg/L	0.010	0.0067	1	12/18/07 00:00	12/20/07 05:14	86-30-6	
Pentachlorophenol	ND	mg/L	0.051	0.013	1	12/18/07 00:00	12/20/07 05:14	87-86-5	
Phenanthrene	ND	mg/L	0.010	0.0028	1	12/18/07 00:00	12/20/07 05:14	85-01-8	
Phenol	ND	mg/L	0.010	0.0018	1	12/18/07 00:00	12/20/07 05:14	108-95-2	
Pyrene	ND	mg/L	0.010	0.0030	1	12/18/07 00:00	12/20/07 05:14	129-00-0	
1,2,4-Trichlorobenzene	ND	mg/L	0.010	0.0035	1	12/18/07 00:00	12/20/07 05:14	120-82-1	
2,4,5-Trichlorophenol	ND	mg/L	0.010	0.0057	1	12/18/07 00:00	12/20/07 05:14	95-95-4	
2,4,6-Trichlorophenol	ND	mg/L	0.010	0.0062	1	12/18/07 00:00	12/20/07 05:14	88-06-2	
Nitrobenzene-d5 (S)	100	%	30-150		1	12/18/07 00:00	12/20/07 05:14	4165-60-0	
2-Fluorobiphenyl (S)	93	%	30-150		1	12/18/07 00:00	12/20/07 05:14	321-60-8	
Terphenyl-d14 (S)	99	%	30-150		1	12/18/07 00:00	12/20/07 05:14	1718-51-0	
Phenol-d6 (S)	17	%	25-150		1	12/18/07 00:00	12/20/07 05:14	13127-88-3	S0
2-Fluorophenol (S)	38	%	25-150		1	12/18/07 00:00	12/20/07 05:14	367-12-4	
2,4,6-Tribromophenol (S)	67	%	25-150		1	12/18/07 00:00	12/20/07 05:14	118-79-6	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

QC Batch: MERP/1228 | Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 | Analysis Description: 245.1 Mercury
Associated Lab Samples: 929593001, 929593002

METHOD BLANK: 53015
Associated Lab Samples: 929593001, 929593002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	mg/L	ND	0.00020	

LABORATORY CONTROL SAMPLE: 53016

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	.0025	0.0023	93	85-115	

MATRIX SPIKE SAMPLE: 53017

Parameter	Units	929398001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.0025	0.0025	102	70-130	

SAMPLE DUPLICATE: 53018

Parameter	Units	929398002 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

QC Batch: WETA/1768 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 929593001, 929593002, 929593003, 929593004

METHOD BLANK: 53223
Associated Lab Samples: 929593001, 929593002, 929593003, 929593004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	

LABORATORY CONTROL SAMPLE: 53224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	5	4.9	99	90-110	

MATRIX SPIKE SAMPLE: 53225

Parameter	Units	929423001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	5	4.5	90	75-125	

SAMPLE DUPLICATE: 53226

Parameter	Units	929758001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	120	125	4	20	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

QC Batch: WET/2398 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 929593001, 929593002, 929593003, 929593004

METHOD BLANK: 53508
Associated Lab Samples: 929593001, 929593002, 929593003, 929593004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Total Dissolved Solids	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 53509

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	236	94	80-120	

SAMPLE DUPLICATE: 53510

Parameter	Units	929504001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	288	284	1	20	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

QC Batch: MPRP/1619 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 MET
Associated Lab Samples: 929593003, 929593004, 929593005, 929593006

METHOD BLANK: 54299
Associated Lab Samples: 929593003, 929593004, 929593005, 929593006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Arsenic	mg/L	ND	0.0050	
Barium	mg/L	ND	0.0050	
Cadmium	mg/L	ND	0.0010	
Chromium	mg/L	ND	0.0050	
Lead	mg/L	ND	0.0050	
Nickel	mg/L	ND	0.0050	
Selenium	mg/L	ND	0.010	
Silver	mg/L	ND	0.0050	

LABORATORY CONTROL SAMPLE: 54300

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	.5	0.52	103	85-115	
Barium	mg/L	.5	0.50	100	85-115	
Cadmium	mg/L	.5	0.52	104	85-115	
Chromium	mg/L	.5	0.51	102	85-115	
Lead	mg/L	.5	0.52	103	85-115	
Nickel	mg/L	.5	0.52	104	85-115	
Selenium	mg/L	.5	0.52	103	85-115	
Silver	mg/L	.25	0.25	101	85-115	

MATRIX SPIKE SAMPLE: 54303

Parameter	Units	929535002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	.5	0.56	112	70-130	
Barium	mg/L	60.9 ug/L	.5	0.56	99	70-130	
Cadmium	mg/L	ND	.5	0.54	109	70-130	
Chromium	mg/L	ND	.5	0.56	113	70-130	
Lead	mg/L	ND	.5	0.55	110	70-130	
Nickel	mg/L	6.3 ug/L	.5	0.54	107	70-130	
Selenium	mg/L	ND	.5	0.53	106	70-130	
Silver	mg/L	5.8 ug/L	.25	0.072	26	70-130	M3

SAMPLE DUPLICATE: 54302

Parameter	Units	929535001 Result	Dup Result	RPD	Max RPD	Qualifiers
Arsenic	mg/L	ND	ND	199	20	
Barium	mg/L	61.4 ug/L	0.052	17	20	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

SAMPLE DUPLICATE: 54302

Parameter	Units	929535001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cadmium	mg/L	ND	ND		20	
Chromium	mg/L	ND	ND		20	
Lead	mg/L	6.1 ug/L	0.0056	8	20	
Nickel	mg/L	10.9 ug/L	0.010	6	20	
Selenium	mg/L	ND	ND		20	
Silver	mg/L	ND	.0009J	16	20	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

QC Batch: WETA/1785 Analysis Method: SM 5310B
QC Batch Method: SM 5310B Analysis Description: 5310B TOC
Associated Lab Samples: 929593001, 929593002, 929593003

METHOD BLANK: 54459
Associated Lab Samples: 929593001, 929593002, 929593003

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 54460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10	9.5	95	90-110	

MATRIX SPIKE SAMPLE: 54461

Parameter	Units	929604001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	15.8	20	8.4	-37	75-125	M0

SAMPLE DUPLICATE: 54462

Parameter	Units	929604002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	114	109	4	20	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

QC Batch: WETA/1786
QC Batch Method: SM 5310B
Analysis Method: SM 5310B
Analysis Description: 5310B TOC
Associated Lab Samples: 929593004

METHOD BLANK: 54463
Associated Lab Samples: 929593004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 54464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10	9.6	96	90-110	

MATRIX SPIKE SAMPLE: 54465

Parameter	Units	929593004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	11.4	10	16.6	52	75-125	M0

SAMPLE DUPLICATE: 54466

Parameter	Units	929600004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	3.0	3.3	12	20	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

QC Batch: MPRP/1628 | Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 | Analysis Description: 200.7 MET
Associated Lab Samples: 929593001, 929593002

METHOD BLANK: 54658
Associated Lab Samples: 929593001, 929593002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Arsenic	mg/L	ND	0.0050	
Barium	mg/L	ND	0.0050	
Cadmium	mg/L	ND	0.0010	
Chromium	mg/L	ND	0.0050	
Lead	mg/L	ND	0.0050	
Nickel	mg/L	ND	0.0050	
Selenium	mg/L	ND	0.010	
Silver	mg/L	ND	0.0050	

LABORATORY CONTROL SAMPLE: 54659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	.5	0.55	111	85-115	
Barium	mg/L	.5	0.51	103	85-115	
Cadmium	mg/L	.5	0.56	112	85-115	
Chromium	mg/L	.5	0.56	112	85-115	
Lead	mg/L	.5	0.56	111	85-115	
Nickel	mg/L	.5	0.55	111	85-115	
Selenium	mg/L	.5	0.53	107	85-115	
Silver	mg/L	.25	0.25	101	85-115	

MATRIX SPIKE SAMPLE: 54662

Parameter	Units	929593002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	.5	0.53	106	70-130	
Barium	mg/L	0.18	.5	0.67	98	70-130	
Cadmium	mg/L	ND	.5	0.52	105	70-130	
Chromium	mg/L	ND	.5	0.53	107	70-130	
Lead	mg/L	ND	.5	0.52	104	70-130	
Nickel	mg/L	ND	.5	0.51	102	70-130	
Selenium	mg/L	ND	.5	0.52	103	70-130	
Silver	mg/L	ND	.25	0.24	95	70-130	

SAMPLE DUPLICATE: 54661

Parameter	Units	929593001 Result	Dup Result	RPD	Max RPD	Qualifiers
Arsenic	mg/L	ND	ND	43	20	
Barium	mg/L	0.060	0.059	2	20	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

SAMPLE DUPLICATE: 54661

Parameter	Units	929593001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cadmium	mg/L	ND	ND		20	
Chromium	mg/L	ND	ND		20	
Lead	mg/L	ND	ND		20	
Nickel	mg/L	ND	ND	9	20	
Selenium	mg/L	ND	ND		20	
Silver	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

QC Batch: OEXT/1996 Analysis Method: EPA 8270
QC Batch Method: EPA 3510 Analysis Description: 8270 Water MSSV
Associated Lab Samples: 929593003, 929593005, 929593006

METHOD BLANK: 54947
Associated Lab Samples: 929593003, 929593005, 929593006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,2,4-Trichlorobenzene	mg/L	ND	0.010	
1,2-Dichlorobenzene	mg/L	ND	0.010	
1,2-Diphenylhydrazine	mg/L	ND	0.010	
1,3-Dichlorobenzene	mg/L	ND	0.010	
1,4-Dichlorobenzene	mg/L	ND	0.010	
1-Methylnaphthalene	mg/L	ND	0.010	
2,4,5-Trichlorophenol	mg/L	ND	0.010	
2,4,6-Trichlorophenol	mg/L	ND	0.010	
2,4-Dichlorophenol	mg/L	ND	0.010	
2,4-Dimethylphenol	mg/L	ND	0.010	
2,4-Dinitrophenol	mg/L	ND	0.050	
2,4-Dinitrotoluene	mg/L	ND	0.010	
2,6-Dinitrotoluene	mg/L	ND	0.010	
2-Chloronaphthalene	mg/L	ND	0.010	
2-Chlorophenol	mg/L	ND	0.010	
2-Methylnaphthalene	mg/L	ND	0.010	
2-Methylphenol(o-Cresol)	mg/L	ND	0.010	
2-Nitroaniline	mg/L	ND	0.050	
2-Nitrophenol	mg/L	ND	0.010	
3&4-Methylphenol(m&p Cresol)	mg/L	ND	0.010	
3,3'-Dichlorobenzidine	mg/L	ND	0.050	
3-Nitroaniline	mg/L	ND	0.050	
4,6-Dinitro-2-methylphenol	mg/L	ND	0.020	
4-Bromophenylphenyl ether	mg/L	ND	0.010	
4-Chloro-3-methylphenol	mg/L	ND	0.020	
4-Chloroaniline	mg/L	ND	0.050	
4-Chlorophenylphenyl ether	mg/L	ND	0.010	
4-Nitroaniline	mg/L	ND	0.050	
4-Nitrophenol	mg/L	ND	0.050	
Acenaphthene	mg/L	ND	0.010	
Acenaphthylene	mg/L	ND	0.010	
Aniline	mg/L	ND	0.010	
Anthracene	mg/L	ND	0.010	
Benzo(a)anthracene	mg/L	ND	0.010	
Benzo(a)pyrene	mg/L	ND	0.010	
Benzo(b)fluoranthene	mg/L	ND	0.010	
Benzo(g,h,i)perylene	mg/L	ND	0.010	
Benzo(k)fluoranthene	mg/L	ND	0.010	
Benzoic acid	mg/L	ND	0.050	
Benzyl alcohol	mg/L	ND	0.020	
bis(2-Chloroethoxy)methane	mg/L	ND	0.010	
bis(2-Chloroethyl) ether	mg/L	ND	0.010	
bis(2-Chloroisopropyl) ether	mg/L	ND	0.010	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

METHOD BLANK: 54947
Associated Lab Samples: 929593003, 929593005, 929593006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
bis(2-Ethylhexyl)phthalate	mg/L	ND	0.010	
Butylbenzylphthalate	mg/L	ND	0.010	
Chrysene	mg/L	ND	0.010	
Di-n-butylphthalate	mg/L	ND	0.010	
Di-n-octylphthalate	mg/L	ND	0.010	
Dibenz(a,h)anthracene	mg/L	ND	0.010	
Dibenzofuran	mg/L	ND	0.010	
Diethylphthalate	mg/L	ND	0.010	
Dimethylphthalate	mg/L	ND	0.010	
Fluoranthene	mg/L	ND	0.010	
Fluorene	mg/L	ND	0.010	
Hexachloro-1,3-butadiene	mg/L	ND	0.010	
Hexachlorobenzene	mg/L	ND	0.010	
Hexachlorocyclopentadiene	mg/L	ND	0.010	
Hexachloroethane	mg/L	ND	0.010	
Indeno(1,2,3-cd)pyrene	mg/L	ND	0.010	
Isophorone	mg/L	ND	0.010	
N-Nitroso-di-n-propylamine	mg/L	ND	0.010	
N-Nitrosodimethylamine	mg/L	ND	0.010	
N-Nitrosodiphenylamine	mg/L	ND	0.010	
Naphthalene	mg/L	ND	0.010	
Nitrobenzene	mg/L	ND	0.010	
Pentachlorophenol	mg/L	ND	0.050	
Phenanthrene	mg/L	ND	0.010	
Phenol	mg/L	ND	0.010	
Pyrene	mg/L	ND	0.010	
2,4,6-Tribromophenol (S)	%	34	25-150	
2-Fluorobiphenyl (S)	%	47	30-150	
2-Fluorophenol (S)	%	27	25-150	
Nitrobenzene-d5 (S)	%	48	30-150	
Phenol-d6 (S)	%	15	25-150	S0
Terphenyl-d14 (S)	%	55	30-150	

LABORATORY CONTROL SAMPLE: 54948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	mg/L	.05	0.021	42	19-120	
1,2-Dichlorobenzene	mg/L	.05	0.020	41	19-120	
1,2-Diphenylhydrazine	mg/L	.05	0.031	61	50-150	
1,3-Dichlorobenzene	mg/L	.05	0.019	39	15-120	
1,4-Dichlorobenzene	mg/L	.05	0.020	40	15-120	
1-Methylnaphthalene	mg/L	.05	0.034	68	21-120	
2,4,5-Trichlorophenol	mg/L	.05	0.023	46	23-113	
2,4,6-Trichlorophenol	mg/L	.05	0.022	45	21-113	
2,4-Dichlorophenol	mg/L	.05	0.024	48	12-127	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

LABORATORY CONTROL SAMPLE: 54948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dimethylphenol	mg/L	.05	0.030	59	24-120	
2,4-Dinitrophenol	mg/L	.05	ND	19	10-127	
2,4-Dinitrotoluene	mg/L	.05	0.023	46	36-115	
2,6-Dinitrotoluene	mg/L	.05	0.025	50	37-114	
2-Chloronaphthalene	mg/L	.05	0.022	44	36-101	
2-Chlorophenol	mg/L	.05	0.024	47	24-120	
2-Methylnaphthalene	mg/L	.05	0.029	58	19-120	
2-Methylphenol(o-Cresol)	mg/L	.05	0.021	43	25-120	
2-Nitroaniline	mg/L	.05	.027J	55	30-109	
2-Nitrophenol	mg/L	.05	0.025	50	24-120	
3&4-Methylphenol(m&p Cresol)	mg/L	.05	0.023	47	24-120	
3,3'-Dichlorobenzidine	mg/L	.05	.025J	49	14-120	
3-Nitroaniline	mg/L	.05	.027J	54	23-133	
4,6-Dinitro-2-methylphenol	mg/L	.05	.015J	31	10-128	
4-Bromophenylphenyl ether	mg/L	.05	0.022	45	35-113	
4-Chloro-3-methylphenol	mg/L	.05	0.029	58	32-107	
4-Chloroaniline	mg/L	.05	.035J	70	12-150	
4-Chlorophenylphenyl ether	mg/L	.05	0.026	52	36-110	
4-Nitroaniline	mg/L	.05	.025J	50	12-150	
4-Nitrophenol	mg/L	.05	.0088J	18	10-120	
Acenaphthene	mg/L	.05	0.026	53	27-102	
Acenaphthylene	mg/L	.05	0.027	55	25-105	
Aniline	mg/L	.05	0.017	34	10-150	
Anthracene	mg/L	.05	0.029	57	30-113	
Benzo(a)anthracene	mg/L	.05	0.026	53	27-113	
Benzo(a)pyrene	mg/L	.05	0.027	54	27-119	
Benzo(b)fluoranthene	mg/L	.05	0.017	34	22-114	
Benzo(g,h,i)perylene	mg/L	.05	0.019	39	10-129	
Benzo(k)fluoranthene	mg/L	.05	0.030	59	24-111	
Benzoic acid	mg/L	.05	ND	11	24-120	L2
Benzyl alcohol	mg/L	.05	.014J	29	24-120	
bis(2-Chloroethoxy)methane	mg/L	.05	0.028	56	32-120	
bis(2-Chloroethyl) ether	mg/L	.05	0.027	54	29-120	
bis(2-Chloroisopropyl) ether	mg/L	.05	0.026	51	22-120	
bis(2-Ethylhexyl)phthalate	mg/L	.05	0.032	65	29-125	
Butylbenzylphthalate	mg/L	.05	0.033	66	33-120	
Chrysene	mg/L	.05	0.029	59	23-112	
Di-n-butylphthalate	mg/L	.05	0.027	54	38-116	
Di-n-octylphthalate	mg/L	.05	0.030	59	32-122	
Dibenz(a,h)anthracene	mg/L	.05	0.021	42	10-129	
Dibenzofuran	mg/L	.05	0.024	48	37-107	
Diethylphthalate	mg/L	.05	0.028	56	40-111	
Dimethylphthalate	mg/L	.05	0.027	53	39-108	
Fluoranthene	mg/L	.05	0.024	48	27-112	
Fluorene	mg/L	.05	0.027	54	29-107	
Hexachloro-1,3-butadiene	mg/L	.05	0.021	41	10-113	
Hexachlorobenzene	mg/L	.05	0.021	41	29-119	
Hexachlorocyclopentadiene	mg/L	.05	0.015	31	10-113	

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

LABORATORY CONTROL SAMPLE: 54948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachloroethane	mg/L	.05	0.021	43	10-120	
Indeno(1,2,3-cd)pyrene	mg/L	.05	0.021	42	14-123	
Isophorone	mg/L	.05	0.032	63	23-150	
N-Nitroso-di-n-propylamine	mg/L	.05	0.025	50	31-104	
N-Nitrosodimethylamine	mg/L	.05	0.017	34	10-120	
N-Nitrosodiphenylamine	mg/L	.05	0.026	53	27-139	
Naphthalene	mg/L	.05	0.025	51	17-120	
Nitrobenzene	mg/L	.05	0.029	58	27-120	
Pentachlorophenol	mg/L	.05	ND	15	10-135	
Phenanthrene	mg/L	.05	0.024	48	28-111	
Phenol	mg/L	.05	0.011	22	10-120	
Pyrene	mg/L	.05	0.030	61	27-113	
2,4,6-Tribromophenol (S)	%			42	25-150	
2-Fluorobiphenyl (S)	%			54	30-150	
2-Fluorophenol (S)	%			32	25-150	
Nitrobenzene-d5 (S)	%			59	30-150	
Phenol-d6 (S)	%			20	25-150	S0
Terphenyl-d14 (S)	%			60	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54949 54950

Parameter	Units	929623015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	mg/L	ND	.1	.1	0.062	0.029	62	29	13-120	73	30	R1
1,4-Dichlorobenzene	mg/L	ND	.1	.1	0.068	0.027	68	27	19-120	86	30	R1
2,4-Dinitrotoluene	mg/L	ND	.1	.1	0.079	0.031	79	31	41-109	87	30	M0,R1
2-Chlorophenol	mg/L	ND	.1	.1	0.075	0.028	75	28	33-120	91	30	M0,R1
4-Chloro-3-methylphenol	mg/L	ND	.1	.1	0.072	.033J	72	33	30-108		30	R1
4-Nitrophenol	mg/L	ND	.1	.1	.042J	.02J	42	20	10-120		30	R1
Acenaphthene	mg/L	ND	.1	.1	0.082	0.036	82	36	27-101	79	30	R1
N-Nitroso-di-n-propylamine	mg/L	ND	.1	.1	0.081	0.028	81	28	34-120	96	30	M0,R1
Pentachlorophenol	mg/L	ND	.1	.1	.065J	ND	65	25	10-138		30	R1
Phenol	mg/L	ND	.1	.1	0.038	.014J	38	14	10-120		30	
Pyrene	mg/L	ND	.1	.1	0.088	0.035	88	35	31-110	86	30	R1
2,4,6-Tribromophenol (S)	%						75	28	25-150			
2-Fluorobiphenyl (S)	%						86	37	30-150			
2-Fluorophenol (S)	%						50	22	25-150			S0
Nitrobenzene-d5 (S)	%						70	31	30-150			
Phenol-d6 (S)	%						32	11	25-150			S0
Terphenyl-d14 (S)	%						89	33	30-150			

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QUALITY CONTROL DATA

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

QC Batch: MERP/1240 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Analysis Description: 245.1 Mercury
Associated Lab Samples: 929593003, 929593004, 929593005, 929593006

METHOD BLANK: 55212
Associated Lab Samples: 929593003, 929593004, 929593005, 929593006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	mg/L	ND	0.00020	

LABORATORY CONTROL SAMPLE: 55213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	.0025	0.0028	112	85-115	

MATRIX SPIKE SAMPLE: 55214

Parameter	Units	929829001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.0025	0.0028	114	70-130	

SAMPLE DUPLICATE: 55215

Parameter	Units	929829002 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	ND	ND		20	

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www.pacelabs.com

Pace Analytical Services, Inc.
370 West Meadow Road
Eden, NC 27288
(336)623-8921

QUALIFIERS

Project: R4-01 Statesville 3rd Creek
Pace Project No.: 929593

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1112972

Section A Required Client Information:

Company: WATERS EAST ENV.
Address: Raleigh, N.C.
Email To: Phil Rahn
Phone: 919-859998 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Phil Rahn
Copy To: Phil Rahn
Purchase Order No.: R4-01
Project Name: City of Statesville - 3rd Creek
Project Number: R4-01 929593 TE

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☑ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Section D Required Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): 8270	TOC	TDS	8 RCRA + Ni	Nitrate-Nitrogen	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-4	WT	G	12-11-07	1115				5	1	3	1							✓	✓	✓	✓		
2	MW-3	WT	G	12-11-07	1145				5	1	3	1							✓	✓	✓	✓		
3	MW-2	WT	G	12-11-07	1230				7	3	3	1						✓	✓	✓	✓	✓		
4	MW-8	WT	G	12-11-07	1315				5	1	3	1							✓	✓	✓	✓		
5	MW-7	WT	G	12-11-07	1400				3	2		1						✓			✓	✓		
6	MW-9	WT	G	12-11-07	1445				3	2		1						✓			✓	✓		
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Thomas F. Haynes WATERS EAST	12-11-07		Jerome Cooke	12/11/07	1630

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
4	✓		✓

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Haynes

SIGNATURE of SAMPLER: Thomas F. Haynes

DATE Signed (MM/DD/YY): 12-11-07

[redacted] Note: [redacted] this for [redacted] accep[redacted]s NET 3[redacted]ment t[redacted] agreein[redacted]harges [redacted]r month [redacted]voices [redacted]thin 30 [redacted] ALL-Q[redacted].07, 15[redacted]007 [redacted]