

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica St. Louis  
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Tel: (314)298-8566

TestAmerica Job ID: 160-4643-1

Client Project/Site: Clinch River

For:

AMEC Environment & Infrastructure, Inc.  
4021 Stirrup Creek Drive  
Suite 100  
Durham, North Carolina 27703

Attn: Mr. Allan Tice



Authorized for release by:  
2/17/2014 4:53:36 AM

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## Case Narrative

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

**Job ID: 160-4643-1**

**Laboratory: TestAmerica St. Louis**

**Narrative**

### CASE NARRATIVE

**Client: AMEC Environment & Infrastructure, Inc.**

**Project: Clinch River**

**Report Number: 160-4643-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

#### RECEIPT

The samples were received on 11/23/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

#### METALS (ICPMS)

Samples OW 420-L (160-4643-1), OW 421-L (160-4643-2), OW 202-L (160-4643-3) and DUP-1 (160-4643-4) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 12/02/2013 and analyzed on 12/07/2013 and 12/09/2013.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Preparation Batch 88861, Analytica. Batch 90379:

The following samples were diluted to bring the concentration of target analytes within the calibration range: (160-4625-3 MS), (160-4625-3 MSD), (160-4625-3 SD), OW 202-L (160-4643-3), OW 417-L-C (160-4625-3), OW 421-L (160-4643-2). Elevated reporting



## Case Narrative

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

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#### Laboratory: TestAmerica St. Louis (Continued)

limits (RLs) are provided.

Due to the high concentration of calcium, the matrix spike / matrix spike duplicate (MS/MSD) could not be evaluated for accuracy and precision. (160-4625-3 MS), (160-4625-3 MSD) The associated laboratory control sample (LCS) met acceptance criteria.

Preparation Batch 88861, Analytical Batch 90921:

The following sample was diluted to bring the concentration of target analytes within the calibration range: OW 202-L (160-4643-3).  
Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

#### TOTAL DISSOLVED SOLIDS

Samples OW 420-L (160-4643-1), OW 421-L (160-4643-2), OW 202-L (160-4643-3) and DUP-1 (160-4643-4) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 11/27/2013.

No difficulties were encountered during the TDS analysis. All quality control parameters were within the acceptance limits.

#### ANIONS

Samples OW 420-L (160-4643-1), OW 421-L (160-4643-2), OW 202-L (160-4643-3) and DUP-1 (160-4643-4) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 11/23/2013.

Batch 91006:

The following samples were diluted to bring the concentrations of Fluoride, Chloride, and Sulfate within the calibration range in IC batch 91006: OW 202-L (160-4643-3), OW 421-L (160-4643-2). Elevated reporting limits (RLs) are provided.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries were outside control limits for Fluoride and Nitrite in IC batch 91006. (160-4643-1 MS), (160-4643-1 MSD) The associated laboratory control sample (LCS) recovery met acceptance criteria, as did the recoveries for the other reported anions in this batch.

The initial calibration verification (ICV) failed low (89%) for Nitrite in IC batch 91006. The following samples in this batch were all ND for Nitrite: DUP-1 (160-4643-4), OW 202-L (160-4643-3), OW 420-L (160-4643-1), OW 421-L (160-4643-2). By the time this excursion was discovered, the samples were out of 2x hold for Nitrite. Thus, a reanalysis of the samples was performed on 12/06/13, which verified the original ND status of the samples. These samples are reported for Nitrite from the original run, with the reanalysis data provided in the data package.

No other difficulties were encountered during the anions analysis. All other quality control parameters were within the acceptance limits.

#### ALKALINITY

Samples OW 420-L (160-4643-1), OW 421-L (160-4643-2), OW 202-L (160-4643-3) and DUP-1 (160-4643-4) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 12/03/2013.

No other difficulties were encountered during the alkalinity analysis. All other quality control parameters were within the acceptance limits.

#### AMMONIA

Samples OW 420-L (160-4643-1), OW 421-L (160-4643-2), OW 202-L (160-4643-3) and DUP-1 (160-4643-4) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 01/07/2014 and 12/23/2013.

Batch 94338:

The samples were analyzed outside of holding time, but within 2X hold: DUP-1 (160-4643-4), OW 202-L (160-4643-3), OW 420-L (160-4643-1)

The matrix spike (MS) recoveries for NH<sub>3</sub> batch 94338 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The continuing calibration verification (CCV) for analytical batch 94338 recovered outside control limits (111.6%) for NH<sub>3</sub>, due to



## Case Narrative

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

### Job ID: 160-4643-1 (Continued)

#### Laboratory: TestAmerica St. Louis (Continued)

suspected matrix interference after analyzing the samples several times. The data have been qualified and reported. (160-4643-1 MS), DUP-1 (160-4643-4), OW 202-L (160-4643-3), OW 420-L (160-4643-1)

The continuing calibration verification (CCV) for analytical batch 96594 recovered outside control limits (82%) for NH<sub>3</sub>, due to suspected matrix interference after analyzing the samples several times. The data have been qualified and reported. (160-4643-2 DU), (160-4643-2 MS), OW 421-L (160-4643-2)

Batch 96594:

The sample was analyzed outside of hold time, but within 2X hold: OW 421-L (160-4643-2)

No other difficulties were encountered during the ammonia analysis. All other quality control parameters were within the acceptance limits.

#### CATION ANION BALANCE

Samples OW 420-L (160-4643-1), OW 421-L (160-4643-2), OW 202-L (160-4643-3) and DUP-1 (160-4643-4) were analyzed for Cation Anion Balance in accordance with Cation Anion Balance. The samples were analyzed on 12/30/2013.

No difficulties were encountered during the Cation Anion Balance analysis. All quality control parameters were within the acceptance limits.

# AMEC Environment & Infrastructure, Inc. Chain of Custody Form

CRP-25

Chain of Custody No.

AMEC Project Name

AMEC Project Number

COC Date

CRP-25

Clinch River SMR Project

6468131072

11/22/13

Prepared By: Kim Charles-Smith

Checked By: Kristen Lloyd

Transferred From: Site

Transferred To: Test America

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4643

SAMPLE IDENTIFICATION	SAMPLE TYPE	COLLECTED BY ORGANIZATION	COLLECTION DATE	INTENDED USE	REMARKS
OW 420-L-A	Water- 1000 ml	AMEC	11/22/13	TDS, Anions (Br, Cl, F, SO4, NO3, NO2)	Unpreserved
OW 420-L-B	Water - 500 ml	AMEC	11/22/13	Alkalinity	Unpreserved
OW 420-L-C	Water - 250 ml	AMEC	11/22/13	Metals	w/HNO3
OW 420-L-D	Water - 500 ml	AMEC	11/22/13	NH3	w/H2SO4
OW 421-L-A	Water- 1000 ml	AMEC	11/22/13	TDS, Anions (Br, Cl, F, SO4, NO3, NO2)	Unpreserved
OW 421-L-B	Water - 500 ml	AMEC	11/22/13	Alkalinity	Unpreserved
OW 421-L-C	Water - 250 ml	AMEC	11/22/13	Metals	w/HNO3
OW 421-L-D	Water - 250 ml	AMEC	11/22/13	NH3	w/H2SO4
OW 202-L-A	Water- 1000 ml	AMEC	11/22/13	TDS, Anions (Br, Cl, F, SO4, NO3, NO2)	Unpreserved
OW 202-L-B	Water - 500 ml	AMEC	11/22/13	Alkalinity	Unpreserved
OW 202-L-C	Water - 250 ml	AMEC	11/22/13	Metals	w/HNO3
OW 202-L-D	Water - 500 ml	AMEC	11/22/13	NH3	w/H2SO4
1. Relinquished by: <i>[Signature]</i>	1. Received by: <i>[Signature]</i>	2. Relinquished by: <i>[Signature]</i>	2. Received by: <i>[Signature]</i>	2. Date/Time	
3. Relinquished by: <i>[Signature]</i>	3. Received by: <i>[Signature]</i>	4. Relinquished by: <i>[Signature]</i>	4. Received by: <i>[Signature]</i>	4. Date/Time	
5. Relinquished by: <i>[Signature]</i>	5. Received by: <i>[Signature]</i>	6. Relinquished by: <i>[Signature]</i>	6. Received by: <i>[Signature]</i>	6. Date/Time	

Work to be performed in accordance with AMEC Work Instruction 64

Remarks/Freight Bill/Tracking No: Fed Ex Tracking 8043 7436 2703

Recipient: After signing for receipt, copy the form and forward to the AMEC Project Manager,

Final sample disposition:

Keep original form with the samples.

WTP Form 01A (Rev 0)

RCN CRP 0972-0





## Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 160-4643-1

Login Number: 4643

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

#### General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
F	MS/MSD Recovery and/or RPD exceeds the control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
$\alpha$	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica St. Louis

## Method Summary

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
310.1	Alkalinity	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
SM 1030F	Cation Anion Balance	SM	TAL SL

### Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

TestAmerica St. Louis



## Sample Summary

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-4643-1	OW 420-L	Water	11/22/13 00:00	11/23/13 14:30
160-4643-2	OW 421-L	Water	11/22/13 00:00	11/23/13 14:30
160-4643-3	OW 202-L	Water	11/22/13 00:00	11/23/13 14:30
160-4643-4	DUP-1	Water	11/22/13 00:00	11/23/13 14:30

TestAmerica St. Louis

# Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

Client Sample ID: OW 420-L

Lab Sample ID: 160-4643-1

Date Collected: 11/22/13 00:00

Matrix: Water

Date Received: 11/23/13 14:30

## Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	59000		100	68	ug/L		12/02/13 15:52	12/07/13 21:39	1
Iron	250		50	20	ug/L		12/02/13 15:52	12/07/13 21:39	1
Potassium	1800		100	42	ug/L		12/02/13 15:52	12/07/13 21:39	1
Magnesium	26000		50	5.6	ug/L		12/02/13 15:52	12/07/13 21:39	1
Manganese	33		2.0	0.25	ug/L		12/02/13 15:52	12/07/13 21:39	1
Sodium	1200		50	15	ug/L		12/02/13 15:52	12/07/13 21:39	1
Silicon	4200		250	18	ug/L		12/02/13 15:52	12/07/13 21:39	1
SiO2, Silica	9000		540	38	ug/L		12/02/13 15:52	12/07/13 21:39	1

## General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	5.0				meq/L			12/30/13 06:51	1
Total Cations	5.2				meq/L			12/30/13 06:51	1
Anion/Cation Balance	2.1				%			12/30/13 06:51	1
Percent Difference	2.1				%			12/30/13 06:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	270		5.0	3.5	mg/L			11/27/13 11:00	1
Nitrate as N	0.36		0.020	0.0040	mg/L			11/23/13 15:51	1
Nitrite as N	ND ^		0.020	0.0030	mg/L			11/23/13 15:51	1
Fluoride	0.31		0.10	0.010	mg/L			11/23/13 15:51	1
Chloride	2.1		0.20	0.020	mg/L			11/23/13 15:51	1
Bromide	ND		0.25	0.025	mg/L			11/23/13 15:51	1
Sulfate	14		0.50	0.050	mg/L			11/23/13 15:51	1
Alkalinity	230		5.0	0.54	mg/L			12/03/13 10:59	1
Bicarbonate Alkalinity as CaCO3	230		5.0	0.54	mg/L			12/03/13 10:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	0.54	mg/L			12/03/13 10:59	1
Ammonia	110 H ^		50	9.2	ug/L			12/23/13 18:20	1

Client Sample ID: OW 421-L

Lab Sample ID: 160-4643-2

Date Collected: 11/22/13 00:00

Matrix: Water

Date Received: 11/23/13 14:30

## Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	38000		100	68	ug/L		12/02/13 15:52	12/07/13 21:46	1
Iron	230		50	20	ug/L		12/02/13 15:52	12/07/13 21:46	1
Potassium	12000		100	42	ug/L		12/02/13 15:52	12/07/13 21:46	1
Magnesium	27000		50	5.6	ug/L		12/02/13 15:52	12/07/13 21:46	1
Manganese	10		2.0	0.25	ug/L		12/02/13 15:52	12/07/13 21:46	1
Sodium	12000		50	15	ug/L		12/02/13 15:52	12/07/13 21:46	1
Silicon	6000		1300	89	ug/L		12/02/13 15:52	12/07/13 22:13	5
SiO2, Silica	13000		2700	190	ug/L		12/02/13 15:52	12/07/13 22:13	5

## General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	4.6				meq/L			12/30/13 06:51	1
Total Cations	5.0				meq/L			12/30/13 06:51	1
Anion/Cation Balance	3.9				%			12/30/13 06:51	1
Percent Difference	3.9				%			12/30/13 06:51	1

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# Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

Client Sample ID: OW 421-L

Lab Sample ID: 160-4643-2

Date Collected: 11/22/13 00:00

Matrix: Water

Date Received: 11/23/13 14:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	230		5.0	3.5	mg/L			11/27/13 11:00	1
Nitrite as N	ND	^	0.020	0.0030	mg/L			11/23/13 18:20	1
Fluoride	0.58		0.10	0.010	mg/L			11/23/13 18:20	1
Chloride	2.6		0.20	0.020	mg/L			11/23/13 18:20	1
Bromide	ND		0.25	0.025	mg/L			11/23/13 18:20	1
Sulfate	8.3		0.50	0.050	mg/L			11/23/13 18:20	1
Alkalinity	210		5.0	0.54	mg/L			12/03/13 10:59	1
Bicarbonate Alkalinity as CaCO3	210		5.0	0.54	mg/L			12/03/13 10:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	0.54	mg/L			12/03/13 10:59	1
Ammonia	ND	H ^	50	9.2	ug/L			01/07/14 14:29	1

## General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1.6		0.40	0.080	mg/L			11/23/13 18:35	20

Client Sample ID: OW 202-L

Lab Sample ID: 160-4643-3

Date Collected: 11/22/13 00:00

Matrix: Water

Date Received: 11/23/13 14:30

## Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	23000		100	68	ug/L		12/02/13 15:52	12/07/13 21:52	1
Iron	19000		50	20	ug/L		12/02/13 15:52	12/07/13 21:52	1
Potassium	14000		100	42	ug/L		12/02/13 15:52	12/07/13 21:52	1
Magnesium	9900		50	5.6	ug/L		12/02/13 15:52	12/07/13 21:52	1
Manganese	160		2.0	0.25	ug/L		12/02/13 15:52	12/07/13 21:52	1
Sodium	280000		250	75	ug/L		12/02/13 15:52	12/07/13 22:33	5
Silicon	82000		13000	890	ug/L		12/02/13 15:52	12/09/13 20:01	50
SiO2, Silica	170000		27000	1900	ug/L		12/02/13 15:52	12/09/13 20:01	50

## General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	17				meq/L			12/30/13 06:51	1
Total Cations	16				meq/L			12/30/13 06:51	1
Anion/Cation Balance	-3.2				%			12/30/13 06:51	1
Percent Difference	-3.2				%			12/30/13 06:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	1100		5.0	3.5	mg/L			11/27/13 11:00	1
Nitrate as N	0.028		0.020	0.0040	mg/L			11/23/13 18:50	1
Nitrite as N	ND	^	0.020	0.0030	mg/L			11/23/13 18:50	1
Bromide	0.17	J	0.25	0.025	mg/L			11/23/13 18:50	1
Alkalinity	680		5.0	0.54	mg/L			12/03/13 10:59	1
Bicarbonate Alkalinity as CaCO3	600		5.0	0.54	mg/L			12/03/13 10:59	1
Carbonate Alkalinity as CaCO3	78		5.0	0.54	mg/L			12/03/13 10:59	1
Ammonia	580	H ^	50	9.2	ug/L			12/23/13 18:23	1

## General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	7.4		2.0	0.20	mg/L			11/23/13 19:05	20
Chloride	24		4.0	0.40	mg/L			11/23/13 19:05	20
Sulfate	93		10	1.0	mg/L			11/23/13 19:05	20

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# Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

Client Sample ID: DUP-1

Lab Sample ID: 160-4643-4

Date Collected: 11/22/13 00:00

Matrix: Water

Date Received: 11/23/13 14:30

## Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	59000		100	68	ug/L		12/02/13 15:52	12/07/13 21:59	1
Iron	290		50	20	ug/L		12/02/13 15:52	12/07/13 21:59	1
Potassium	1900		100	42	ug/L		12/02/13 15:52	12/07/13 21:59	1
Magnesium	26000		50	5.6	ug/L		12/02/13 15:52	12/07/13 21:59	1
Manganese	32		2.0	0.25	ug/L		12/02/13 15:52	12/07/13 21:59	1
Sodium	1300		50	15	ug/L		12/02/13 15:52	12/07/13 21:59	1
Silicon	4400		250	18	ug/L		12/02/13 15:52	12/07/13 21:59	1
SiO2, Silica	9400		540	38	ug/L		12/02/13 15:52	12/07/13 21:59	1

## General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	5.2				meq/L			12/30/13 06:51	1
Total Cations	5.2				meq/L			12/30/13 06:51	1
Anion/Cation Balance	-0.019				%			12/30/13 06:51	1
Percent Difference	-0.019				%			12/30/13 06:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	280		5.0	3.5	mg/L			11/27/13 11:00	1
Nitrate as N	0.25		0.020	0.0040	mg/L			11/23/13 17:20	1
Nitrite as N	ND	^	0.020	0.0030	mg/L			11/23/13 17:20	1
Fluoride	0.35		0.10	0.010	mg/L			11/23/13 17:20	1
Chloride	2.6		0.20	0.020	mg/L			11/23/13 17:20	1
Bromide	ND		0.25	0.025	mg/L			11/23/13 17:20	1
Sulfate	15		0.50	0.050	mg/L			11/23/13 17:20	1
Alkalinity	240		5.0	0.54	mg/L			12/03/13 11:00	1
Bicarbonate Alkalinity as CaCO3	240		5.0	0.54	mg/L			12/03/13 11:00	1
Carbonate Alkalinity as CaCO3	ND		5.0	0.54	mg/L			12/03/13 11:00	1
Ammonia	140	H ^	50	9.2	ug/L			12/23/13 18:25	1

TestAmerica St. Louis

# QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

## Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 160-88861/1-A

Matrix: Water

Analysis Batch: 90379

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 88861

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		100	68	ug/L		12/02/13 15:52	12/07/13 19:51	1
Iron	ND		50	20	ug/L		12/02/13 15:52	12/07/13 19:51	1
Potassium	ND		100	42	ug/L		12/02/13 15:52	12/07/13 19:51	1
Magnesium	ND		50	5.6	ug/L		12/02/13 15:52	12/07/13 19:51	1
Manganese	ND		2.0	0.25	ug/L		12/02/13 15:52	12/07/13 19:51	1
Sodium	ND		50	15	ug/L		12/02/13 15:52	12/07/13 19:51	1
Silicon	ND		250	18	ug/L		12/02/13 15:52	12/07/13 19:51	1
SiO2, Silica	ND		540	38	ug/L		12/02/13 15:52	12/07/13 19:51	1

Lab Sample ID: LCS 160-88861/2-A

Matrix: Water

Analysis Batch: 90379

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 88861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10000	10500		ug/L		105	80 - 120
Iron	10000	9560		ug/L		96	80 - 120
Potassium	10000	9740		ug/L		97	80 - 120
Magnesium	10000	9950		ug/L		99	80 - 120
Manganese	1000	968		ug/L		97	80 - 120
Sodium	10000	9770		ug/L		98	80 - 120
Silicon	5000	4590		ug/L		92	80 - 120

Lab Sample ID: 160-4625-A-3-B MS

Matrix: Water

Analysis Batch: 90379

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 88861

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	61000		10000	72900	4	ug/L		120	75 - 125
Iron	41	J	10000	10100		ug/L		100	75 - 125
Potassium	3400		10000	13700		ug/L		102	75 - 125
Magnesium	31000		10000	41900		ug/L		110	75 - 125
Manganese	21		1000	1040		ug/L		102	75 - 125
Sodium	22000		10000	32500		ug/L		108	75 - 125

Lab Sample ID: 160-4625-A-3-B MS

Matrix: Water

Analysis Batch: 90379

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 88861

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon	6100		5000	11300		ug/L		105	75 - 125

Lab Sample ID: 160-4625-A-3-C MSD

Matrix: Water

Analysis Batch: 90379

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 88861

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Calcium	61000		10000	73800	4	ug/L		129	75 - 125	1	20
Iron	41	J	10000	9730		ug/L		97	75 - 125	3	20
Potassium	3400		10000	13300		ug/L		98	75 - 125	3	20

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## QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

### Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 160-4625-A-3-C MSD

Matrix: Water

Analysis Batch: 90379

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 88861

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Magnesium	31000		10000	41000		ug/L		101	75 - 125	2	20
Manganese	21		1000	1010		ug/L		99	75 - 125	3	20
Sodium	22000		10000	31700		ug/L		100	75 - 125	2	20

Lab Sample ID: 160-4625-A-3-C MSD

Matrix: Water

Analysis Batch: 90379

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 88861

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silicon	6100		5000	11200		ug/L		103	75 - 125	1	20

### Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-87715/1

Matrix: Water

Analysis Batch: 87715

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			11/27/13 11:00	1

Lab Sample ID: LCS 160-87715/2

Matrix: Water

Analysis Batch: 87715

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	486		mg/L		97	90 - 110

Lab Sample ID: 160-4600-A-9 DU

Matrix: Water

Analysis Batch: 87715

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	290		287		mg/L		1	20

### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-91006/9

Matrix: Water

Analysis Batch: 91006

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.020	0.0040	mg/L			11/23/13 15:21	1
Nitrite as N	ND	^	0.020	0.0030	mg/L			11/23/13 15:21	1
Fluoride	ND		0.10	0.010	mg/L			11/23/13 15:21	1
Chloride	ND		0.20	0.020	mg/L			11/23/13 15:21	1
Bromide	ND		0.25	0.025	mg/L			11/23/13 15:21	1
Sulfate	ND		0.50	0.050	mg/L			11/23/13 15:21	1

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# QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 160-91006/10

Matrix: Water

Analysis Batch: 91006

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.400	0.397		mg/L		99	90 - 110
Nitrite as N	0.160	0.151	^	mg/L		95	90 - 110
Fluoride	1.00	0.982		mg/L		98	90 - 110
Chloride	2.00	1.93		mg/L		96	90 - 110
Bromide	2.00	1.98		mg/L		99	90 - 110
Sulfate	8.00	7.62		mg/L		95	90 - 110

Lab Sample ID: 160-4643-1 MS

Matrix: Water

Analysis Batch: 91006

Client Sample ID: OW 420-L

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.36		0.400	0.730		mg/L		92	90 - 110
Nitrite as N	ND	^	0.100	0.0705	^ F	mg/L		70	90 - 110
Fluoride	0.31		2.00	2.55	F	mg/L		112	90 - 110
Chloride	2.1		2.00	3.99		mg/L		96	90 - 110
Bromide	ND		2.00	1.95		mg/L		97	90 - 110
Sulfate	14		4.00	17.9		mg/L		99	90 - 110

Lab Sample ID: 160-4643-1 MSD

Matrix: Water

Analysis Batch: 91006

Client Sample ID: OW 420-L

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.36		0.400	0.730		mg/L		92	90 - 110	0	20
Nitrite as N	ND	^	0.100	0.0708	^ F	mg/L		71	90 - 110	0	20
Fluoride	0.31		2.00	2.56	F	mg/L		112	90 - 110	1	20
Chloride	2.1		2.00	4.00		mg/L		96	90 - 110	0	20
Bromide	ND		2.00	1.96		mg/L		98	90 - 110	1	20
Sulfate	14		4.00	17.8		mg/L		97	90 - 110	0	20

## Method: 310.1 - Alkalinity

Lab Sample ID: MB 160-89196/1

Matrix: Water

Analysis Batch: 89196

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	ND		5.0	0.54	mg/L			12/03/13 10:55	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	0.54	mg/L			12/03/13 10:55	1
Carbonate Alkalinity as CaCO3	ND		5.0	0.54	mg/L			12/03/13 10:55	1

Lab Sample ID: LCS 160-89196/3

Matrix: Water

Analysis Batch: 89196

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	400	369		mg/L		92	90 - 110

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# QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

## Method: 310.1 - Alkalinity (Continued)

Lab Sample ID: LLCS 160-89196/2

Matrix: Water

Analysis Batch: 89196

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	184		mg/L		92	90 - 110

Lab Sample ID: 160-4584-A-2 MS

Matrix: Water

Analysis Batch: 89196

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	300		20.0	316	4	mg/L		90	80 - 120

Lab Sample ID: 160-4584-A-2 DU

Matrix: Water

Analysis Batch: 89196

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	300		299		mg/L		0.3	20
Bicarbonate Alkalinity as CaCO3	300		299		mg/L		0.3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

## Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-94338/12

Matrix: Water

Analysis Batch: 94338

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND	^	50	9.2	ug/L			12/23/13 17:48	1

Lab Sample ID: LCS 160-94338/13

Matrix: Water

Analysis Batch: 94338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	500	523	^	ug/L		105	90 - 110

Lab Sample ID: 160-4584-A-4 MS

Matrix: Water

Analysis Batch: 94338

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	710	^	500	1280	F ^	ug/L		115	90 - 110

Lab Sample ID: 160-4643-1 MS

Matrix: Water

Analysis Batch: 94338

Client Sample ID: OW 420-L

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	110	H ^	500	709	^ F	ug/L		119	90 - 110

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# QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

## Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 160-4584-A-4 DU

Matrix: Water

Analysis Batch: 94338

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Ammonia	710	^	721	^	ug/L		2	20

Lab Sample ID: MB 160-96594/11

Matrix: Water

Analysis Batch: 96594

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND	^	50	9.2	ug/L			01/07/14 14:26	1

Lab Sample ID: LCS 160-96594/12

Matrix: Water

Analysis Batch: 96594

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	500	519	^	ug/L		104	90 - 110

Lab Sample ID: 160-4643-2 MS

Matrix: Water

Analysis Batch: 96594

Client Sample ID: OW 421-L

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	ND	H ^	500	458	^	ug/L		92	90 - 110

Lab Sample ID: 160-4643-2 DU

Matrix: Water

Analysis Batch: 96594

Client Sample ID: OW 421-L

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Ammonia	ND	H ^	ND	^	ug/L		NC	20

TestAmerica St. Louis

## QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

### Metals

#### Prep Batch: 88861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4625-A-3-B MS	Matrix Spike	Total/NA	Water	3010A	
160-4625-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
160-4643-1	OW 420-L	Total/NA	Water	3010A	
160-4643-2	OW 421-L	Total/NA	Water	3010A	
160-4643-3	OW 202-L	Total/NA	Water	3010A	
160-4643-4	DUP-1	Total/NA	Water	3010A	
LCS 160-88861/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-88861/1-A	Method Blank	Total/NA	Water	3010A	

#### Analysis Batch: 90379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4625-A-3-B MS	Matrix Spike	Total/NA	Water	6020A	88861
160-4625-A-3-B MS	Matrix Spike	Total/NA	Water	6020A	88861
160-4625-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	88861
160-4625-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	88861
160-4643-1	OW 420-L	Total/NA	Water	6020A	88861
160-4643-2	OW 421-L	Total/NA	Water	6020A	88861
160-4643-2	OW 421-L	Total/NA	Water	6020A	88861
160-4643-3	OW 202-L	Total/NA	Water	6020A	88861
160-4643-3	OW 202-L	Total/NA	Water	6020A	88861
160-4643-4	DUP-1	Total/NA	Water	6020A	88861
LCS 160-88861/2-A	Lab Control Sample	Total/NA	Water	6020A	88861
MB 160-88861/1-A	Method Blank	Total/NA	Water	6020A	88861

#### Analysis Batch: 90921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4643-3	OW 202-L	Total/NA	Water	6020A	88861

### General Chemistry

#### Analysis Batch: 87715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4600-A-9 DU	Duplicate	Total/NA	Water	160.1	
160-4643-1	OW 420-L	Total/NA	Water	160.1	
160-4643-2	OW 421-L	Total/NA	Water	160.1	
160-4643-3	OW 202-L	Total/NA	Water	160.1	
160-4643-4	DUP-1	Total/NA	Water	160.1	
LCS 160-87715/2	Lab Control Sample	Total/NA	Water	160.1	
MB 160-87715/1	Method Blank	Total/NA	Water	160.1	

#### Analysis Batch: 89196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4584-A-2 DU	Duplicate	Total/NA	Water	310.1	
160-4584-A-2 MS	Matrix Spike	Total/NA	Water	310.1	
160-4643-1	OW 420-L	Total/NA	Water	310.1	
160-4643-2	OW 421-L	Total/NA	Water	310.1	
160-4643-3	OW 202-L	Total/NA	Water	310.1	
160-4643-4	DUP-1	Total/NA	Water	310.1	
LCS 160-89196/3	Lab Control Sample	Total/NA	Water	310.1	
LLCS 160-89196/2	Lab Control Sample	Total/NA	Water	310.1	

TestAmerica St. Louis



# QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.  
Project/Site: Clinch River

TestAmerica Job ID: 160-4643-1

## General Chemistry (Continued)

### Analysis Batch: 89196 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 160-89196/1	Method Blank	Total/NA	Water	310.1	

### Analysis Batch: 91006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4643-1	OW 420-L	Total/NA	Water	300.0	
160-4643-1 MS	OW 420-L	Total/NA	Water	300.0	
160-4643-1 MSD	OW 420-L	Total/NA	Water	300.0	
160-4643-2	OW 421-L	Total/NA	Water	300.0	
160-4643-2 - DL	OW 421-L	Total/NA	Water	300.0	
160-4643-3	OW 202-L	Total/NA	Water	300.0	
160-4643-3 - DL	OW 202-L	Total/NA	Water	300.0	
160-4643-4	DUP-1	Total/NA	Water	300.0	
LCS 160-91006/10	Lab Control Sample	Total/NA	Water	300.0	
MB 160-91006/9	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 94338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4584-A-4 DU	Duplicate	Total/NA	Water	350.1	
160-4584-A-4 MS	Matrix Spike	Total/NA	Water	350.1	
160-4643-1	OW 420-L	Total/NA	Water	350.1	
160-4643-1 MS	OW 420-L	Total/NA	Water	350.1	
160-4643-3	OW 202-L	Total/NA	Water	350.1	
160-4643-4	DUP-1	Total/NA	Water	350.1	
LCS 160-94338/13	Lab Control Sample	Total/NA	Water	350.1	
MB 160-94338/12	Method Blank	Total/NA	Water	350.1	

### Analysis Batch: 96594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4643-2	OW 421-L	Total/NA	Water	350.1	
160-4643-2 DU	OW 421-L	Total/NA	Water	350.1	
160-4643-2 MS	OW 421-L	Total/NA	Water	350.1	
LCS 160-96594/12	Lab Control Sample	Total/NA	Water	350.1	
MB 160-96594/11	Method Blank	Total/NA	Water	350.1	

### Analysis Batch: 104463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4643-1	OW 420-L	Total/NA	Water	SM 1030F	
160-4643-2	OW 421-L	Total/NA	Water	SM 1030F	
160-4643-3	OW 202-L	Total/NA	Water	SM 1030F	
160-4643-4	DUP-1	Total/NA	Water	SM 1030F	

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